

**AWARENESS, INTEREST AND ATTITUDE OF GEOGRAPHY TEACHERS
TOWARD THE UTILIZATION OF SOCIAL MEDIA FOR TEACHING IN
SENIOR SECONDARY SCHOOLS IN NIGER STATE.**

BY

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MTECH/SSTE/FT/2018/9307

**A THESIS SUBMITTED TO THE POSTGRADUATE SCHOOL FEDERAL
UNIVERSITY OF TECHNOLOGY, MINNA, NIGERIA IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE
DEGREE OF MASTER OF TECHNOLOGY IN EDUCATIONAL
TECHNOLOGY**

FEBRUARY, 2023

DECLARATION

I hereby declare that this thesis titled: **“Awareness, Interest and Attitude of Geography teachers toward the utilization of social media for teaching in senior secondary schools in Niger State.”** Is a collection of my original work and it has not been presented for any other qualification anywhere. Information from other sources (published or unpublished) has been duly acknowledged.

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CERTIFICATION

The MTech titled: **Awareness, Interest and Attitude of Geography teachers toward the utilization of social media for teaching in senior secondary schools in Niger State** by YUNUSA, Zainab (MTech/SSTE/FT/2018/9307) meets the regulations governing the award of the degree of (MTech) of the Federal University of Technology, Minna and it is approved for its contribution to scientific knowledge and literary presentation.

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DEDICATION

This thesis is dedicated to God Almighty the one who has given me the privilege to add to knowledge and also to my husband and children for their endless support.

ACKNOWLEDGEMENTS

Glory to God the Almighty, the merciful and gracious, for His love unfailing, tender care, protection and sufficiency through all these years.

The completion of the researchers MTech study and research would not have been possible without the unreserved help of my supervisor Dr. A. Z. Evuti, for his scholarly advice, guidance and patience during this research work despite his tight schedule. I am eternally grateful for the opportunity to learn from his massive wealth of knowledge and the fatherly care he has shown me. I pray that God Almighty will reward him abundantly.

The researcher sincere appreciation goes to the Dean of SSTE Prof. A. I. Gambari, the Head of Department, Dr. C. S. Tukura, Late Prof. (Mrs.) C. C. Nsofor, Prof. T. O. Alabi, Prof. (Mrs.) E. A. Umeh, Dr. I. I. Kuta, Dr. A. Aniah, Dr. A. Z. Evuti, Dr. O. C. Falode and Mrs. Fati Ali for their tireless efforts in pointing out areas where there are errors and ensuring the right thing is done, may Almighty God bless you all. I am grateful to Dr. A. A. Yaki, for all your scholarly input, your heartfelt support during this research is well appreciated. I am thankful to the experts who validated the research instrument of this study, for their corrections to ensuring that the instrument is up to standard.

The researcher is grateful to God for my husband Mr. Adamu Ibrahim Lemu for his encouragement during the cause of this programme and also to my wonderful kids Ibrahim Adamu Lemu & Co for their concern and encouragement, may God in His majesty reward them in all ramifications (Amen). Special thanks to Stephen James a colleague who has tirelessly supported me in ensuring progress and orderliness in this work, may God bless and reward you abundantly (Amen).

ABSTRACT

This study assessed the Awareness, Interest and Attitude of Geography teachers toward the utilization of social media for teaching in senior secondary schools in Niger State. The study adopted a descriptive survey research design. A sample of 133 geography teachers was selected on the base on location, availability of good network and utilization of social media. The study was guided by five research questions and three research hypotheses. A researcher-designed structured questionnaire was used for data collection that was validated by four experts. The questionnaire was pilot tested and the data obtained were subjected to statistical analysis using Cronbach Alpha Correlation Formula and reliability coefficients of 0.78, 0.85 and 0.81 were obtained for Awareness, Attitude and Interest of teachers respectively. Descriptive statistics of Mean and Standard Deviation were used to answer the research questions and Independent Sample t-test to analyze hypothesis. Findings of the study revealed that teachers are not aware but interested in it use for teaching and learning with grand means of 2.36 and 3.66, geography teachers also have positive attitude in social media tools with the grand mean of 3.29. Independent samples t-test analysis showed the average ranks of male and female as 79.17 and 59.97 respectively, $p > 0.05$ indicated no significant difference in the mean response of male and female teachers' utilization of the selected social media tools, average ranks of male and female as 78.24 and 62.88 respectively, $p > 0.05$ indicated no significant difference in the level of interest of the selected social media tools by male and female geography teachers. Also, Independent samples t-test analysis reported that average rank of 68.87 and 92.03 for male and female respectively of the level of interest of social media tools with $p < 0.05$ indicated no significant difference between male and female teachers of the various schools. In light of the findings, it was recommended that Government, Educational Administrator, Stakeholders and the community at large should ensure the availability of Assistive Technology Tools in special education schools so that teaching and learning can be very effective and efficient. Special education teachers should be encouraged to use assistive technology tools during teaching activities to help students get use to them. Therefore, adequate facilities that will enable students to acquire adequate knowledge and mastery of the use of assistive technology tool should be provided by education stakeholders.

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CHAPTER ONE

1.0

INTRODUCTION

1.1 Background to the Study

ICT stands for “Information and communication technology”. It refers to technologies that provide access to information through telecommunication. It is similar to Information Technology (IT) but focuses primarily on communication technologies. This includes the internet, wireless networks, cell phones and other communication mediums. It means we have more opportunities to use ICT in teacher training programmes now days and improve quality of teacher for teach effectively. (Ratheeswari, 2018). According to UNESCO “ICT is a scientific, technological and engineering discipline and management technique used in handling information, its application and association with social, economic and cultural matters” (Rani, *et al.*, 2016).

ICTs are making dynamic changes in society. They are influencing all aspects of life. The influences are felt more and more at schools. Because ICTs provide both students and teachers with more opportunities in adapting learning and teaching to individual needs, society is, forcing schools aptly respond to this technical innovation. (Hernandez, 2017). The uses of ICT is making major differences in the learning of students and teaching approaches. Schools in the Western World invested a lot for ICT infrastructures over the last 20 years, and students use computers more often and for a much larger range of applications. Several studies reveal that students using ICT facilities mostly show higher learning gains than those who do not use. (Sharma, *et al.*, 2015). Furthermore, the use of ICTs in education also shifts the learning approaches. As put by Espino-Díaz *et al.* (2020), there is a common belief that the use of ICTs in education contributes to a more constructivist learning and an increase in activity and greater responsibility of students. This limits the role of the teacher to supporting, advising, and coaching students rather than merely transmitting knowledge. The gradual progress in using computers changes from learning about computers, to learning computers, and finally to learning with computers. (Hsu, *et al.*, 2018). Sjoer and Meirink (2016) says that change or improvement can happen at schools if teachers

understand themselves and understood by others. For instance, many teachers are currently not in a position to make informed judgments on ICTs to support their teaching goals. Clearly a variety of factors still do make using ICT in the curriculum problematic (Webb *et al.*, 2017). Because of this, the influence of ICT did not bring revolutionary changes at schools. For instance, the National ICT survey in the Netherlands shows that most primary-school students use computers less than once a week and there are still many secondary school teachers who do not use ICT at all (Drossel & Eickelmann, 2017). Most often, they use computers for drill-and practice and word processing.

In recent years however, there has been a growing interest to know how computers and internet can best be utilized to improve effectiveness and efficiency of education at all levels and in both formal and non-formal settings. As there is a shift of theories explaining learning processes, ICTs become handmaiden for learning activities. Alt (2018) description on the major roles, distinguished ICTs as an object for study, an aspect of a discipline or a profession, and a medium of instruction. As a medium of instruction, ICTs fit to realize and implement the emerging pedagogy of constructivism (Kwok & Yang 2017). Moreover, Alt (2018) differentiated between traditional learning setting and constructivist approaches. The former considers learning as transmission of knowledge to students, which is the sole responsibility of the teacher. On the other hand, the constructivist approach considers learning as authentic and learner centered. ICT, the computer for example is a great help in the constructivist approach, where one can design simulated and individualized learning environments to students. ICTs are exerting impacts on pedagogical approaches in the classrooms. Their contribution to changes in teaching practices, school innovation, and community services is considerable. A research review by Passey *et al.* (2016) suggests three significant concerns of consideration regarding ICTs impact on education. Firstly, student outcomes such as higher scores in school subjects or the learning of entirely new skills needed for a developing economy. Secondly, we should consider teacher and classroom outcomes such as development of teachers' technology skills and knowledge of new pedagogic approaches as well as improved attitudes toward teaching. Finally, one has to consider other outcomes such as increased innovativeness in schools and access of

community members to adult education and literacy. Emerging pedagogy is the name given to the new view of constructivist learning when compared to the relatively long existing behaviourist view of learning.

More so, Communication between people by ICT does not take place independently of face-to-face contacts (Fan, *et al.*, 2019). The relationship between face-to-face and ICT-mediated activities has long been discussed. Usually four possible relationships between face-to-face and ICT-mediated contact are distinguished: substitution, complementarity, neutrality and modification (Génois *et al.*, 2015). The substitution effect, meaning that increasing ICT-use decreases face-to-face contact (and travel), has attracted most attention, especially with regard to work or shopping activities (Konrad & Wittowsky 2018). Social interaction is influenced by the alter(s) with whom individuals interact (Redcay & Schilbach 2019). The geographical distance between people is an important factor in explaining social interaction behaviour with different communication modes. As social networks are becoming more geographically spread, ICTs are becoming more important because they provide opportunities to maintain contacts over longer distances through the use of social media. (Puura, *et al.* 2018).

Social media is the term often used to refer to new forms of media that involve interactive participation. (Ashley & Tuten, 2015). Often the development of media is divided into two different ages, the broadcast age and the interactive age. In the broadcast age, media were almost exclusively centralized where one entity—such as a radio or television station, Newspaper Company, or a movie production studio—distributed messages to many people. Feedback to media outlets was often indirect, delayed, and impersonal. Mediated communication between individuals typically happened on a much smaller level, usually via personal letters, telephone calls, or sometimes on a slightly larger scale through means such as photocopied family newsletters (Tang & Hew, 2019).

With the rise of digital and mobile technologies, interaction on a large scale became easier for individuals than ever before; and as such, a new media age was born where interactivity was placed at the center of new media functions. (Van & Longley, 2020).

One individual could now speak to many, and instant feedback was a possibility. Where citizens and consumers used to have limited and somewhat muted voices, now they could share their opinions with many. The low cost and accessibility of new technology also allowed more options for media consumption than ever before – and so instead of only a few news outlets, individuals now have the ability to seek information from several sources and to dialogue with others via message forums about the information posted. At the core of this ongoing revolution is social media. (Moro & Rita 2018).

The successful running of any learning experience depends on many things, one of which being effective communication between teachers and their students. If no proper communication between teacher and students is available, both teaching and learning will become difficult. For this reason, teachers need to continuously monitor students for understanding the students' problems, fear, or confusion will help faculty better understand students' learning difficulties. It helps students learn quickly. (Szeto, *et al.*, 2016). The Internet users, the majority of which are students, use social networks mostly to keep in touch with friends, colleagues, peers and family, it is important to explore the possible benefits that such networking tools can offer to modern education. (Abraham, *et al.*, 2019).

Social media tools are also effective ways to increase students' engagement. A student who hardly ever participates in class may get actively engaged in constructing his learning experience with his teachers, collaborating with his fellow colleagues, and may feel more comfortable to express himself and to share his resources and ideas on Facebook, Twitter, or YouTube. (Nanda & Kumar, 2021). Using tools such as Google Apps for education would enable students to have access to valuable learning resources regardless of time and place. Within the traditional classroom, providing students with additional learning materials can be very expensive and logistically complicated. However, using social media can enhance the learning experience. (Aljawarneh, 2020).

Social media platforms are ubiquitous nowadays, and have connected us in ways, many years ago, we could never have imagined. (Duffy & Chan, 2019). We share information and updates instantaneously with the networks of connections we've built, and are

subsequently flooded with updates from those same networks. The use of social media for teaching and learning makes work easy, effective and efficient for both the teacher and the learner. According to Baccarella *et al.* (2018) an average of 2.5 hours is spent daily on social networks and messaging. Thus, it is clear that social media is a very important part of people's lives thus, its awareness.

Social media awareness is a prerequisite for further use of social media. Awareness refers to knowing and understanding more about something that happens in the world or around someone. Rodriguez & Mccorkle (2020) identified a lack of awareness as one of the problems that contradicted the use of social media by geography teachers. Schäfer *ET AL.* (2019) states that social media awareness is the primary determinant of informal scientific communication. Effendi *et al.* (2020) made a significant contribution from the results of his research on the meaningful relationship between social media awareness and social media adoption for informal scientific communication. Bugshan (2019) states that media awareness has become a means of diffusion and improvement of information.

Interest is a phenomenon that emerges from individuals interacting with their environments (Figueiró, 2016). The intrinsic quality of interest lies in the positive interaction between a person and a task, which finds its expression in a state of interest and occurs independently of extrinsic outcomes. The intrinsic quality stems from stimulating task characteristics (task-intrinsic motivation) that facilitate an individual's motivation to engage in a task for its own sake (Gottfried, 2019), as well as from personal dispositional preferences for the task that the person brings to the situation.

Studies have provided evidence on the manner in which teachers' attitudes play a significant role in influencing their tendency to be in favor of or against using any form of social media or technology in class (Rezaei & Meshkatian, 2017). Prajapati *et al.* (2021) had defined attitude as the degree of positive or negative effect associated with some psychological object. By a psychological object, he means any symbol, phrase, slogan, person, institution, ideal or idea toward which people can differ with respect to positive or negative effect. Using the Theory of Planned Behavior as the basis of their study, Vermeulen *et al.* (2017) conducted a survey on Dutch teachers to observe their

usage of digital learning materials (DLM). They found that attitude was the one variable with the strongest predicting factor for the teachers' intention to use DLM. Further, regression analysis showed that attitude positively correlated with teachers' self-efficacy, previous usage of ICT, and to some extent, colleagues' usage of ICT. They also argued that teacher observation of colleagues with successful experiences in social media integration positively influenced their attitude and ultimately their real usage of the social media.

Gender is ascribed to the socio-cultural behaviours and features, duties, and parts attributed to being females and males in society, community, and environment (Gondo, *et al.*, 2020). Previous studies reported that females are lagging in the use of modern technologies (Ukwoma & Ngulube, 2021). Previous studies also said that male students were more prepared to use technologies Batane & Ngwako (2017) study shows that female students were better users of technology. Hence, the need to consider students' gender differences in the awareness, interest and attitude of geography teachers towards the utilization of social media in learning among senior secondary schools in Bosso Local Government Area, Minna, Niger State.

1.2 Statement of the Research Problem

The use of social media is now a global phenomenon and according to Sadiku *et al.* (2019), its usage and reliance by and among students is rapidly growing. Social media platforms are needed in academic environment like Senior Secondary Schools to leverage effective teaching process and for timely dissemination of information. However, its relevance to schools and the growth of schools cannot be overemphasized. Social media enables teachers in school settings to effectively disseminate timely, relevant and current information to their students. Teachers can also publicize in-house resources, new arrivals in various subjects and as well, make it available to students when demanded within a short possible time.

Despite the tremendous benefits of social media platforms for teaching in Senior Secondary Schools in Niger State, it has been observed that Geography teachers in Niger state Senior Secondary schools have little or no awareness, interest and bad

attitude towards the utilization of social media for teaching Falode *et al.*, 2020. The consequence of little or no awareness, interest and bad attitude towards the utilization of social media for teaching in Senior Secondary Schools in Niger State has led to low performance of Geography teachers, time wastage and continuous use of the old chalk and board method of teaching. This on the side of the students' has led to poor academic performances. Therefore, for this reason, this study therefore, assesses the awareness, interest and attitude of Geography teachers towards the utilization of social-media in learning among senior secondary schools in Niger State, Nigeria.

1.3 Aim and Objectives of the Study

The aim of this study is to assess the awareness, interest and attitude of Geography teachers towards the utilization of social media for teaching in senior secondary schools in Niger State and this was the following objectives:

1. Ascertain secondary school geography teachers' awareness on the utilization of social media for teaching in Niger State.
2. Examine secondary school geography teachers' interest level on the utilization of social media for teaching in Niger State.
3. Determine secondary school geography teachers' attitude level on the utilization of social media for teaching in Niger State.
4. Establish the benefits associated with the use of social media tools By Geography teachers of senior secondary schools in Bosso Local Government Area Minna.
5. Identify the challenges to effective utilization of social media tools amongst the senior secondary school teachers and recommends possible solutions to the identified problems.

1.4 Research Questions

The following research questions were raised to guide the study.

1. What is the level of awareness of Geography teachers towards the various available social media tools for learning among Senior Secondary Schools in Niger State?

2. What is the level of interest and attitudes of Geography teachers towards utilization of social media in teaching and learning process among senior secondary students in Niger State?
3. Are there specific reasons for utilization of social media tools by the Senior Secondary Schools in Niger State?
4. Which of the social media tools are mostly utilized for teaching and learning process by the Geography teachers in Niger State?
5. What benefits do Geography teachers of senior secondary schools of Niger State enjoy using social media?

1.5 Research Hypotheses

Ho1: There is no significant difference in the level of utilization of the selected social media tools by geography teachers

Ho2: There is no significant difference between the level of interest of the selected social media tools by geography teachers

Ho3: There is no significant difference between the attitude of teachers towards the use of the various social media tools.

Ho4: There is no significant difference between male and female geography teachers on social media tools mostly utilized for the teaching and learning process in Niger State

1.6 Significance of the Study

The findings of this study will be of great relevance to the following stakeholders in the educational sector and beyond; curriculum planners, school management, Geography teachers, future researchers, and the general public.

The curriculum planners are key stakeholders as far as the educational sector is concerned, because they play a vital role in ensuring the arrangement of relevant subjects, content and other activities that will benefit students and bring about the achievement of set goals. Therefore, this study will help curriculum planners to be better informed about different social-media and also plan better by putting into consideration its use as a means of teaching and learning to enhance better effective and efficient means of learning. This

will also lead to increased performance of students due to the utilization of social-media to facilitate teaching and learning.

The school management who are in charge of the smooth running of the school activities will see to the implementation of the outcome of this study. They will try to make policies that will create conducive environment for the use of social-media in the teaching and learning process. They will also see to the training of students who are not computer literate by making available necessary equipment's to enhance their quick learning process and also make available qualified teachers skilled in the areas of ICT. They monitor the process and ensure set goals are been achieved.

Geography teachers are said to be who are said to be the direct recipient of the outcome of the research work and direct link to the students. The outcome of this study will go a long way to put them to check by ensuring they also acquire necessary skills that will enable their use of social-media (for as many who are not) and assist them in inculcating better knowledge to the students. This study will also help them to lessen the use of talk and chalk method of teaching so they can mix it with the use of social-media so as to make teaching and learning more interesting. Via social-media, geography teachers can connect and also connect students to other teachers and professionals in their field who might have better and clearer view to certain concepts that has not been well understood by students.

Future researchers would also benefit greatly by easing their work of fact finding due to the use of social-media to connect to other researchers on areas of their research. This will enhance quick discovery of information and also its circulation. Through the use of social-media, young researchers will be able to travel round the world without necessarily moving from one part of the world to the other.

Geography students will be able to learn better because social media will be another means of teaching and learning besides the talk and chalk method. Student whose means of better comprehending concepts are through such platform will benefit greatly which will boost their performance academically. The use of social-media will help students

meet friends that will make them improve better than they are doing when they share ideas together about difficult concepts, concept that looks abstract and unclear areas.

Parents will also not be left behind because their wards will always go and meet them at home even after school hours. So therefore, their knowledge and better use of social-media will help them continue where the teacher stops or further reinforce what the teacher has done. Parents would be able to limit the use of social media in improper ways by their wards and ensure better usage.

Finally, the general public will also be aware about some beneficial use of social-media via the outcome of this study, and also be able to make most use of social-media instead of doing irrelevant things with it.

1.7 Scope of the Study

The scope of this study covers assessment of awareness, interest and attitude of Geography Teachers towards utilization of social media in learning among senior secondary students in Niger State. The study will last for 6 weeks.

1.8 Operational Definition of Terms

Assessment: The evaluation of the benefits of social-media in the improvement of teaching and learning process.

Awareness: The state of the awareness or non-awareness by Geography teachers of the use of social-media to improve teaching and learning process.

Interest: The enthusiastic factors that pushes Geography teachers to using social-media for teaching and learning process.

Attitude: The behavior shown by Geography teachers towards the use of social-media in the teaching and learning process.

Geography Teachers: These are trained persons in the field of Geography.

Utilization: This is the use of social-media by Geography teachers in the teaching and learning process.

Social Media: This is a platform that enhances communication between individuals on that group.

CHAPTER TWO

LITERATURE REVIEW

2.0

2.1 Conceptual Framework

This is the description of concepts and variables that are related to the area of study in order to give more clarifications and to bring to limelight the view of the researcher is described below in the framework. In the observation of Ludviga (2023), conceptual framework as a visual or written product, one that explains, either graphically or in narrative form, the key factors, concepts, or variables and the presumed relationships among them. The conceptual framework for this study therefore is based on assessment of awareness, interest and attitude of Geography Teachers towards utilization of social media in learning among senior secondary students in Niger State. In this study, interrelationship between the independent and the dependent variables revealed that the independent variable interacted greatly with the other variables which are shown in Figure 2.1 below. In the same vein the moderating variable (gender) interacted with all the two dependent variables which consist of awareness, attitude and interest.

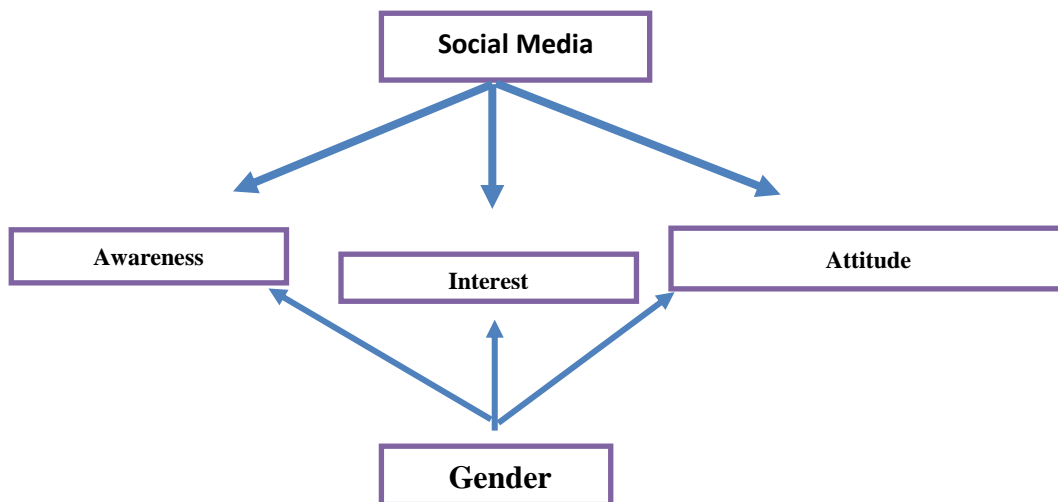


Figure 2.1 Schematic Diagram of Interrelationship between Independent and Dependent Variables

Source: Field Work (2023)

2.1.1 Concept of social media

While there are disputed claims as to who coined the term “social media,” the term appears to have emerged in the early 1990s in reference to emerging web-based communication tools that facilitated online interaction (Awoyemi *et al.* 2020). However, providing a single definition that encompasses all of the technologies and activities associated with social media is extremely difficult, in part because social media is not defined by any specific scope, format, topic, audience, or source. This potential expansive definition of social media is demonstrated by Lapoe *et al.* (2017), who notes that when considering the nature of social media theorists could reasonably adopt any of three forms of sociality as a focal point: a) cognition, b) communication, or c) cooperation.

Each of these views of what constitutes sociality directs analytical attention to different social processes and different types of media. A focus on cognition is concerned with shared knowledge and therefore media, such as newspapers, websites, or even television, which provides masses with access to similar information, would operate as social media. Foregrounding communication directs attention to social relations and interactions and therefore media such as email, chat, or discussion forums would all fit within the scope of social media. Lastly, cooperation deals with interdependent acts toward a communal goal and is reflected in media such as Wikipedia, or even certain massively-multiplayer role playing games (MMORPGs). Importantly, one’s definition of social media may differ based on their theoretical stance and analytical concerns, and definitions of social media need not necessarily be focused on internet-based media developed in recent decades. Despite the potential for broad definitions of social media, in practice most scholars and practitioners invoking social media are referring to a specific set of online offerings that have emerged over the past three decades – including blogs, social networking sites, and micro blogging.

The emergence of these technologies and the associated specific applications is often characterized as establishing Web 2.0, which refers to the presence of a class of web-based applications that offered all users the opportunity to write and contribute through posting content, and could be accessed through multiple devices (Antonius & Rich,

2013). In fact, some scholars eschew the term social media in favor of the construct Web 2.0 which can operate as an umbrella concept that encompasses a broader group of online applications that facilitate expression and interaction (Musil *et al.*, 2016). Specifically, scholars have called for distinctions between social media broadly, and more narrow terms such as social networks or social networking sites. For instance, Musil *et al.* (2016) argues that Twitter is a form of social media in that it facilitates user-generated public communication by non-professional actors, but differentiates Twitter from social networking sites like Facebook or LinkedIn where individuals commonly interact with people they know offline and following of activity is bi-directional.

Similarly, Kim *et al.* (2016) argues that there is value in distinguishing among sites that are used primarily for the purposes of individuals actively networking – social networking sites – and online with slight variations, these definitions of social media commonly focus on three attributes: 1) they are web-based, 2) they provides a means for individuals to connect and interact with content and other users, and 3) they provide the means for users to generate and distribute content on the respective platforms.

Secondly, scholars have created classifications that define social media in terms of different types of communication technologies. For example, Kaplan (2010) classified social media in terms of blogs, social networking sites, virtual social worlds, collaborative projects, content communities, and virtual game worlds. Alternatively, Smith *et al.* (2012) offers the categories of wikis, folksonomies, mashups, and social networking sites as distinct types of applications that fit within the broader framework of Web 2.0. Other scholars focus on definitions of singular social media types. Ellison and Vitak (2015) specifically distinguish social network sites as communication platforms that offer users unique profiles, public connections, and the ability to create and consume user-generated content (and do consider Twitter and YouTube social network sites).

Blogs, another type of social media technology, developed a unique form that included distinct entries in reverse chronological, whereas micro-blogging, a phenomenon largely driven by Twitter, founded in 2006, focuses on much shorter live updates of one's life, opinions, or reactions to current events or other media order. The uniting aspects of all of these types of social media technologies are that they create a way for individuals to

maintain current relationships, to create new connections, to create and share their own content, and, in some degree, to make their own social networks observable to others (Musil *et al.*, 2016). We do not seek to provide a singular, universal definition of social media here, nor do we aim to provide a distinct classification system of different social media types, platforms, or specific services. Instead, we argue that the ambiguity around social media should not be viewed by scholars as a source of frustration, but rather an avenue for ongoing analytical exploration. It offers opportunities to consider the extent to which differences in the features of technologies, the goals of users, or the context of use all serve to provide (or undermine) distinctions among social media. Ultimately, in the absence of explicit criteria most people defining social media default to the view Supreme Court Justice Potter Stewart adopted when struggling to define pornography: “I know it when I see it” (Alaimo & Kallinikos, 2017).

2.1.1.1 Below is a brief description of social Medias used in this study:-

❖ Face book

Face book began in 2004 as a school based social network at Havard University. It was created by Mark Zukerberg along with Edward Savenin. Face book is a social networking website and service where users can post comments, share photograph, play games, chat, stream life video and link to new or other networking contact on the web. (Salinda *et al.*, 2019) found that the primary usages of face book for educational purposes are communication, collaboration and sharing resources or materials. Besides the primary usage of face book for educational purpose, (Manca & Ranieri 2016). Identified distraction, ineffective collaboration and communication as particular problems of using face book in education.

❖ Twitter

Twitter is a widely used free social networking tool that allows people to share information, in a real-time news feed (Mistry 2011) through posting brief comments about their experiences and thoughts. Public messages sent and received via Twitter — or ‘tweets’ — are limited to no more than 140 characters and can include links to blogs, web pages, images, videos and all other material online. Despite the brevity imposed by this media tool, Twitter use is extensively used in a wide variety of circumstances and,

according to Mollett *et al.* (2011, p1), ‘thousands of academics and researchers at all levels of experience and across all disciplines already use Twitter daily’.

❖ **Skype**

Skype is a social media and an online tool for teaching and learning. Skype provides a lot of educational for classroom such that the students can connect with other students, increase their knowledge and internet with other peoples culture Hsu & Beasley (2019). This social media platform can be used to present speeches by guest speakers in the classroom.

❖ **LinkedIn**

LinkedIn has become one of the most popular and profitable social networking sites on the internet today. It was created in 2003 as a networking site for professionals to connect virtually, without having to be in the same physical location. Since going public in May 2011, LinkedIn has incorporated many new features, such as a newsfeed, user content, and the ability to follow professionals, improving user engagement and time spent on the site. The network currently has over 260 million users in over 200 countries, Cooper & Naatus (2014). LinkedIn has many capabilities that facilitate the type of networking that college students must engage in to find internships, jobs and make professional connections. Users post an equivalent to a resume on the site, including specific skills they possess. The website uses statistical techniques to connect or link users with potential contacts and relevant groups (Cooper & Naatus 2014).

❖ **Edmodo**

Edmodo is global education network that helps connect all learners with the people and resources needed to reach their full potential” (Musskopf & Barbosa, 2018). In other word, Edmodo is a full featured social learning platform designed to connect and collaborate within the educational environment. Edmodo is easily installed on computers, laptops and android. It is the social media network which collaborates and connect, share content and get access homework, school notices and grades. The teachers use Edmodo as an online blackboard and inbox to post polls, quizzes, and assignment guidelines and invite student to submit finished assignment (Olofu & Olofu, 2021). For the student, edmodo can collaborate their project, asking questions and working together.

Cauley (2015) from “A guide to Explain it all” (IT Babble.com) in Monalisa and Ardi (2013) stated that one of the educational website that takes the ideas of social network and makes it appropriate for a classroom is Edmodo (Khusna & Puspitasari 2020). Edmodo helps students and teachers to connect one and another by sharing ideas, problem, and useful tips. By using Edmodo, students can get help from the entire class, and teachers can assign and grade work. In addition, Edmodo allows parents to join and to check the progress in a study of their children. Inappropriate content and spam cannot reach Edmodo because teachers can identify everything that is posted on Edmodo.

❖ **TED-Ed**

TED-Ed is a free educational website for teachers. As an extension of TED (technology, entertainment and design) this site allows users to spread ideas to generate learning. Search for a video and “flip” it to create a customized lesson for your students (Danielsen & Drange 2022).

❖ **WordPress**

WordPress is an open source Content Management System (CMS), which allows the users to build dynamic websites and blog, Vivekavardhan (2016). WordPress is the most popular blogging system on the web and allows updating, customizing and managing the website from its back-end CMS and components.

❖ **Blackboard**

Blackboard provides powerful and easy-to-use systems for educational instruction, communication, and assessment. In the last three years, Blackboard has marketed two major product lines: the Blackboard Commerce Suite and the Blackboard Academic Suite. The core of the Academic suite is the Blackboard Learning System, the course management system for classroom and online educational assistance (Alokluk, 2018).

❖ **Wikispace**

Wikispace are software-based hyper-textual web pages that support content creation, revision, and redistribution by internet users (Karasavvidis, 2017). According to Al Helal, and Mokhtar (2018) Wikispace are websites on which content can be created, edited, and shared by users. Wikispace first created by Ward Cunningham in 1995 as a user-friendly

editing tool that allows publishing the output on the internet (Cheng, 2019). In addition, Lutaaya *et al.* (2018) states that Wikispaces are collaborative platforms designed to encourage content and information sharing. However, the popularity of Wikispaces has begun to attract the attention of educators, who expect that Wikispaces will facilitate not only communication but also the collaborative finding, shaping, and sharing of knowledge, all of which are essential properties in an educational context.

Wikispaces is a social writing platform for education. Wikispaces make it incredibly easy to create a classroom workspace where teacher and students can communicate and work on projects alone or in teams. Wikispaces divided into two type, they are Wikispaces for education and Wikispaces for everyone else. Wikispaces for education is used for educational circles such as teachers, students, parents, libraries, schools, colleges and Universities. Wikispaces for education has two features, namely Wikispaces Classroom and Wikispaces Campus.

❖ **Plurk**

Plurk is a free social networking and micro-blogging service that allows users to send updates (otherwise known as plurks) through short messages or links, which can be up to 360 text characters in length (as of December 28, 2016, immediately prior to which the limit was 210, which was increased from the original limit of 140).

Updates are then shown on the user's home page using a timeline, which lists all the updates received in chronological order, and delivered to other users who have chosen to receive them. A unique feature of its timeline is horizontal scrolling which is unlike any other popular social networking or micro-blogging websites like Twitter or Facebook, where users can see more posts running horizontally across the screen, with previous plurks to the right. Each of the threads shows timestamps below the timeline frame, and a counter for the number of responses; a thread can have as many as 300 to a thousand responses. Users can respond to other users' updates from their timeline through the Plurk.com website, by private or instant messaging, or by text messaging via compatible third party applications.

2.1.2 The type and use of social media in education

The social media has been used widely in educational settings (Evans, 2014). The use of social media has transformed classroom, change the interaction between teacher and student (Zheng *et al.*, 2018). The emerging of social media in classroom activity should be followed by the innovation in learning process (Prestridge, 2019). One form of social media used in learning is the website. Website can be used to communicate interactively by students and teachers or instructors who are more effective in the education and teaching process (Saulsberry *et al.*, 2020). This learning can optimize the teaching and learning process because it is no longer bound by time and space. In addition, website-based learning can be used as a provisioning advice and training on ICT utilization. This can maximize the ability of students to grasp, because teaching material is not only limited to text, but can be in the form of images, videos, or other interesting media. For teachers/lecturers/instructors, the use of the website can facilitate monitoring of student learning activities (Saulsberry *et al.*, 2020). Moreover, it can be used as a means of developing interactive teaching materials (Anwariningsih & Ernawati, 2013).

The next social media is a blog. Blog features that contain document text, images, media and other supporting features can be accessed easily through an internet browser. Generally, a blog contains personal notes or journals. Blogs in learning can be used as interactive media outside the classroom (Chawinga, 2017). For example, a teacher at a school can create a blog where the contents of the blog contain teaching material taught by the teacher. Furthermore, students can be invited to access the blog, students are allowed to fill in the comment menu on the blog, so that communication occurs between the teacher and students. On the comments menu, students can write proposals, comments and share about the teaching system in the school, so the school and teachers can improve their performance as expected by students (Liou *et al.*, 2019). In addition, the teacher can compile and resume learning material then put it in a blog. This really helps speed up teaching because students don't need to take notes anymore on the board. This can also help improve teacher creativity in presenting teaching materials through blogs, both in terms of content and presentation. With blogs the teacher can learn and improve the ability to make a scientific or written work. This is important because one of the demands for teachers is to produce scientific papers. Blog can also be used as a means

of disseminating the results of research, training, workshops and various other scientific activities (Nuraini, *et al.*, 2020). Facebook is the most widely used social media in the world. The application, pioneered in 2006 by Mark Zuckerberg, was originally only designed to allow students in the same class to see a list of classmates. But apparently it developed into an extensively network and can be used for various things, including teaching and learning. Facebook can be used as an alternative in controlling and delivering material in distance learning. This can build new online communities and carry out a variety of positive and beneficial activities (Karapanos, 2016). The online community is certainly very useful for students. One of the benefits of online or online communities is exchanging information and expanding networks (Deng *et al.*, 2013).

Social media has a very big role to develop the skills possessed (Awasthi, 2020). As we know, the best talents can be found quickly through social media. For example, a child who can sing very well, record it with video, upload the video to social media, and share the video with his friends and the public can help him be found by leading producers and invite him to record to make an album or invite him to take part in the search event talent.

Social media is available in various forms. This allows students to explore creativity. For example, students who have the ability to write will create a personal blog and deepen their writing skills. As social media, blogs provide space for students or anyone to express their thoughts, views, or opinions about certain issues. Some social media have limited space to write complete words. For example, Twitter, which has no more than 280 characters (since 2017), makes students have to express their ideas by abbreviating words. Often, abbreviations also use mixed languages, English and Indonesian. This certainly can have an impact on students' writing ability related to the words used (Nuraini *et al.*, 2020).

Students who actively using social media can reduce their attention to learning material (Flanigan & Babchuk, 2015). This is because students are too busy checking the latest status of others and then giving comments. This distracted attention can disrupt the learning process and have an impact on students' ability to concentrate which later leads to a drop in academic achievement (Garmah, 2022).

When interacting with other people in cyberspace, there is a lot of information that needs to be questioned. Inaccurate information and its distribution with no responsibility, is one form of ethical violations on social media (Kumar & Nanda, 2019). The more time spent interacting with others through social media, the less time they have to search for and obtain the truth of information obtained during interactions. The flood of hoaxes on social media is an example of ethical violations in social media (Kwahk & Park, 2018).

Humans are social creatures and therefore need to socialize and interact with others to survive. Social media exists as a modern communication media that allows students or anyone to interact with others from all over the world (Nuraini, *et al.*, 2020). However, the more time spent socializing and interacting in cyberspace makes the less time that is used to socialize and interact with other people in the real world. He will find it difficult to read body language in communication which is always inherent when communicating face to face (Kuhnke, 2016). As a result, he becomes less able to communicate effectively in face-to-face communication. Social media allows students to make friends with anyone. Having a large number of friends is fun, but not so if you make friends in cyberspace. Many fake accounts are scattered in cyberspace and this is what students need to be aware of. There are so many cases of introductions in cyberspace that lead to death or other crimes (Nuraini, *et al.*, 2020). The fun of looking for friends and chatting makes students become unaware and not careful about the bad possibilities that can happen.

The presence of social media in the universe of communication between people has had a major impact on patterns of communication between people, especially interpersonal communication. In other words, social media influences individual patterns of interaction and this is also an example of the effect of media in individual interactions (Hudson, *et al.*, 2016). Social media is effective in helping shy students to communicate with other students or others. However, this can have an impact on communication skills face to face. If shy students often use social media to interact and express themselves, this can make them feel isolated in the real world and can even increase communication anxiety for fear of meeting other students or people (Nuraini, *et al.*, 2020).

Something that is excessive certainly will not have a good impact. Likewise, with excessive use of social media. The use of social media without limits and without remembering time can make students become addicted. Being addicted to using social media is one of the negative impacts of social media (Purba, 2020). One of the activities that can cause addiction is to check social media frequently to find out the latest information or news. This can distract students in the learning process and other activities in the real world. Addiction to social media can also be detrimental to health. Excessive use of social media by students can interfere with student health. Students who access social media continuously regardless of time can cause eye irritation, back pain and can even cause death from sitting in the same position for hours.

The influence of social media in the latest world of education is to become a harassment tool (Nagle, 2018). Besides being able to be used as a learning medium for students, social media is also often abused by students for online harassment or cyberbullying of other students. A survey of two hundred and five students told their experiences with cyberbullying as well as traditional intimidation. Students with disabilities are at special risk to become victims of cyberbullying (Litwiller & Brausch, 2013). Other cases of the use of social media by students with disabilities are negative motivations. Some students with hearing impairments have access to inappropriate websites. Some deaf students do online interaction without filtering online friends. The case of deaf students missing became a serious issue in 2016-2019. The highest case is more than 74% of cyberbullying cases in deaf students on social media. They often get bullying because of communication limitations; verbal and non-verbal. The cases that occur prove the supporting role of friends, parents and education are needed (Litwiller & Brausch, 2013). Harassment done through social media or done directly can have a very psychological impact on the victim and can even cause death.

2.1.3 Factors affecting social media and learning

This section explores some of the factors affecting the success and use of social media in school education.

2.1.3.1 Social media and academic performance

An initial study by Harrison *et al.* (2019) showed that students use social media for various academic activities such as research, communication, collecting evidence and so on. In spite of this, research shows that the use of social media does not translate to students' academic success. For example, Balakrishnan *et al.* (2017) found that Facebook could distract students, especially when the learning tasks are deemed less important. A similar sentiment was shared by Ali *et al.* (2017). The popularity of social media usage among students for academic activities and its relation to negative implications on academic performance implies that a vacuum exists in current knowledge about how social media is perceived and used by students and academics.

2.1.3.2 Abuse of social media, public disclosure of personal information, and privacy concerns

One of the reasons for the privacy concerns is plausibly the abuse of social media by students. Such abuses may range from cyberbullying, stalking, and infringement of privacy (Bitherman & Frempong-Kore, 2021). Privacy issues may result in apprehension towards the use of social media in education (Chugh & Ruhi, 2018). For example, Manca and Ranieri (2016) found privacy to be one of the factors that inhibit the use of social media for educational purposes. On the other hand, research has shown that students perceive academics with high self-disclosure in social media as more credible (Chen & Carliner, 2021). Interestingly, the same study also found that academics who portray themselves as strict and formal in class, yet display a friendly and informal social media personality, confuse students. There are however, academics, parents, and students who believe that academics should not be deemed as friends with students, and that there should be a clear line drawn between faculty and students (Balakrishnan *et al.*, 2017). While existing research affirms that privacy concerns, cyberbullying, and public disclosure of information influence students' perceptions of the use of social media in higher education, little is known about how they affect people of different cultures and norms. The question remains: Do these factors influence all students generally, or are some cultures more tolerant of these factors compared to others?

2.1.4 Social media and its effect on actual study time

Another reason that may attribute to the lower academic performance of social media users could merely be that social media distracts them from actual study. Interviews with some academics show that many perceived time spent on social media as wasted time which could be better spent on actual study (Balakrishnan *et al.*, 2017). In addition, Janković *et al.* (2016) discovered that students who were pressed for time tend to sacrifice learning time over Facebook time. Manca and Ranieri (2016) reveal that most students and academics originally intended for social media to be primarily used as a communication tool. It is therefore pertinent to know if the use of social media for communication and socialization affect students' actual study time. More importantly, if students initially intend for social media to be used for communication, will their priorities and intention change over time as they become buried in their academic work?

2.1.5 Social media and its perceived ease of use

Another factor that may affect students' use of social media is the perceived ease of use of these sites. Compared to other complicated e-learning sites, social media are arguably deemed rather user friendly. The perceived ease of use of social media has been suggested as a contributing factor to its popularity for educational purposes, and contributes to group communication success as well (Balakrishnan *et al.*, 2017). Considering that there are over 198 social media providers listed by Wikipedia (Lin *et al.*, 2021) it is important to examine if users' experience in using social media will determine its success and popularity in higher education. However, few researches have looked at how social media's perceived ease of use affects online learning's success (Balakrishnan *et al.*, 2017).

2.1.6 Social media and cultural factors

Cultural factors may also affect the use of social media for online learning. Many studies exist in the area of culture and its effects on learning. Some researchers reported that cultural differences between western and Asian students affect teaching philosophies, approaches and strategies (Johnson & Christensen, 2019). Cultural norms affect the way students think, making it a vital influencing factor in their self-regulated learning process. For example, a study by Ali *et al.* (2018) showed that Japanese students learn by applying

more memorization as opposed to Australian students. Similarly, Ho (2019) study of Australian and Asian students showed that Australians are more motivated to excel by competition while Asians are motivated by their social standards and expectations. Research shows that culture has an impact on how social media is perceived and used. A study by Sills *et al.* (2016) for example, showed that culture has an impact on how users describe and represent themselves on social media sites. The same study also reported that culture influences how users express themselves and communicate on social media. Interestingly, culture was also found to be among factors that influence how online learners perceive the quality of instructions (Panigrahi, 2018). Chen and Carliner (2021) also urged online instructional designers to consider culture when designing materials for online learning.

2.1.7 Geography teaching and learning in Nigeria

The teaching and learning of geography in Nigeria started in the second half of the 19th century which was a primary school subject. When secondary and university education started in 1859 and 1948 respectively, geography was included in the subjects of study. According to Ajapa (2015), geography teaching in Nigerian schools was dominated by British influence, both in personnel and philosophy. The textbooks were the same as those used in British schools and regional geography was the main focus. However, in the wake of national independence, there was a steady growth of geography in Nigeria as indigenous geographers such as Clayton and Kumar (2019) began criticizing the fundamental objectives, content and methods of school geography, which they found inadequate for the needs of Nigerian children.

The geographic studies of North America, the British Isles and South East Asia were removed and there was an emphasis of study on the home region, with most of the teachers being Nigerians. As the country struggled towards relevant education and vocational independence, new education policies were formulated. Geography became a senior secondary subject, with a little of it infused in social studies being taught in the junior secondary schools. It was also an elective to be chosen in place of history or literature in English. This relegation of geography was perhaps the beginning of its difficulties in Nigeria. Furthermore, Nigerian geographers such as Bolter & Robey (2020)

agreed that geography, unlike professional disciplines as engineering, medicine and law did not directly lead to a profession even though it made valuable contributions to individual and national development. The unprofessional status of geography results in its relegation in Nigeria, with the emphasis on professional training in the country.

In addition, several other factors have been attributed to its unpopularity among Nigerian students; Ajaps (2015) identifies them as the wide scope of the subject, poor results in school certificate geography examinations, geography being unrelated to their future career and poor teaching. As a geography teacher in Nigeria, it is easy to understand these problems. The geography curriculum, for example, is saddled with far too many current and environmental issues, in addition to obsolete content and many other items, which need to be removed for better focus and effectiveness. This, coupled with poor teaching and the lack of passion students bring to class because it is not related to their future 'professional' careers, eventually results in poor results in the school certificate examination. Poor geography teaching has been attributed to lack of appropriate teaching qualifications Machingura (2016) and lack of teaching materials (Abadi, 2017). Based on a study conducted in 15 secondary schools in Northern Nigeria, Mohammed (2014) has recommended the need to make geography more interesting since she found that lack of interest was a major problem affecting the teaching and learning of geography in the schools she surveyed. Providing the necessary teaching facilities and qualified teachers can improve geography's appeal.

Geography seems to be the most difficult subject to teach in Nigerian secondary schools. Shittu *et al.* (2015) opined that the study of geography from its inception was through verbal description of geographic features, which made the study very abstract and quite uninteresting. The teaching of geography in Nigeria has also been focused on the theoretical aspect, to the detriment of scientific and experimental approaches. These discourage open questions, inquiry and active participation of students and makes geography classes difficult and boring (Farrow *et al.*, 2020). Ajaps (2015) also showed that students were just made to learn geography concepts in the abstract form and were subjected to too much imagination of geographic features instead of learning through practical observations and this is still the situation today. Hwang *et al.* (2015) emphasized

the importance of relevant instructional materials and the need to diversify the strategy for teaching geography. Google can serve a very useful purpose here if employed appropriately and its prospects are discussed in the ensuing section.

2.1.8 Teachers Attitude towards social media

Teachers' attitudes are paramount for the successful integration of technology in schools Arkorful *et al.* (2021). Jiang *et al.* (2018) argue that earlier experiences highly influence teachers' attitudes and beliefs. It seems relevant to try to change student teachers' attitudes and beliefs towards technology in education, following Freire *et al.* (2018) who say that these are defined even before the future teachers start their education, in order to avoid resistance to technology in their teaching.

Two main groups of barriers have been defined for technological integration Carver (2016). First of all, the barriers that are external to teachers, which have been called first-order barriers, and that are "resources, training and support." Secondly, the internal barriers, which have been called second-order barrier, consist of "attitudes and beliefs, knowledge and skills." After important efforts to overcome first-order barriers and having observed persistent difficulties for innovative integration all over the world, currently second-order barriers are considered crucial (Kim *et al.*, 2013).

2.1.9 Geography teachers utilization of social media

Social media is not a passing fad—it is a new, versatile way of both information gathering and production. It is broadly defined as "networked tools that emphasize the social aspect of the Internet for communication, collaboration and creative expression" (Aifan 2015). Although many courses have online components (e.g. WebCT or other learning management systems), it is arguable that we as educators are not taking advantage of mainstream (i.e. applications and sites that are not education specific) social media to its full potential in the classroom. This short paper offers an outline of a seminar discussing the uses of social media—such as web logs and Twitter—in the university geography classroom. Lessons learned in the geography context can be extrapolated to many other disciplines.

Woodward and Kimmons, (2019) discuss the use (or alternatively, the avoidance) of social media platforms from the instructor's perspective. This is a useful article as it is the instructor who ultimately makes the decision about whether students will be using social media for the purpose of his or her course. The factors affecting an instructor's choice to use social media in the classroom include: current use of social media platforms and personal readiness; pressure to use social media in the classroom by others (peers, employers, students); expected benefits; and perceived risks of use. The consequences of using social media in the classroom can be measured by looking at the perceived student satisfaction and student learning outcomes.

2.1.10 Social media and Nigeria education

Many teachers are still apprehensive about using new technologies for instruction in Nigeria. The use of Google especially needs to be promoted in the country because of the vast amount of information that can be found through it, which can bring fun to geography classes. But teachers have been found to be apprehensive about improving and modifying instruction by incorporating new technologies (Sofowora & Egbedokun, 2010). Lack of appropriate skills has also been proffered as a reason for the low utilization of ICT among Nigerian geography teachers. In a survey of technological application in teaching geography in Nigerian secondary schools, Sofowora and Egbedokun (2010) found that even though 55% of geography teachers in a western state of Nigeria had access to computers, majority of them do not have the prerequisite ICT knowledge and skills needed. The Internet was not included in the ICT facilities surveyed and it is widely known that, with the exception of a few private schools, Nigerian secondary schools do not have Internet facilities. Therefore, the use of Google and other Internet facilities would be at the teachers' or students' personal costs, and most likely in their homes. Modern day students are Internet savvy: most of their activities involve using the Internet. Yet, this phenomenon is not universal because majority of secondary school students from the third world nations especially, cannot operate computers, much less use the Internet (Nganji, *et al.*, 2010). Many higher institutions in Nigeria are creating Internet-friendly environments for students' learning but this does not seem to be happening in secondary schools. Many secondary school students, especially those in urban areas, have smart phones and are connected to the internet but mostly for social

networking and there has not been sufficient research on whether they use the internet to supplement their education as noted (Shittu *et al.*, 2015). This is one of the enquiries of this study: do geography teachers and students who have access to the Internet and Google employ these for educational purposes? Shittu conducted a study to test the technology acceptance model (TAM) by exploring students' attitude and behavioural intention on adoption of Internet for learning among students in a Nigerian university. TAM states that user acceptance of any technology is a function of perceived ease of use, perceived usefulness and user's attitude towards the technology itself. The researchers included "facilitating condition" as a fourth factor in the model because this is perhaps the most important in the Nigerian context. Acceptance is dependent on availability, even though availability does not guarantee usage.

Even though they found facilitating condition to be statistically insignificant in influencing students' attitude to adopt the Internet for learning, I argue here that this is a fundamental factor and this qualitative study will explore that. Perceived ease of use and usefulness were found to be statistically significant however. The benefits of the Internet and Google as teaching and learning tools have been widely documented but to realize these benefits, teachers and students must use these tools. Omodara and Aboderin (2022) investigated the use of the Internet and computer among secondary school teachers and students in Southwest Nigeria (Ondo state). They found access rates to the Internet and computer by both teachers and students to be around average, even though teachers reported use of school cyber café while students reported use of mobile phones. The study also reported that the use of Internet and computer had contributed to personal cognitive interests rather than enhancing the teaching and learning activities in the secondary schools studied. This serves as a distraction and will be explored further in the subsequent section.

2.1.10.1 *Relevance of Social Media as an Educational Tool in Geography*

This is useful as it indicates how students now 'learn on demand,' and this can be useful when thinking about how social media can fit into a course. A Personal Learning Environment is the student's 'place' of learning—an environment of self-directed and informal learning, involving both the production and use of material from the Internet.

Using social media would allow learners to collaborate, share results, contribute to the collective knowledge of their class, and derive their own meaning from material. Faculty may use Twitter to stimulate student engagement in the classroom, Wiki software as collaborative projects, and blogs as assessments of understanding. Students benefit from using social media in the classroom by taking charge of their learning. However, the drawback (or requirement) is that students must be able to engage independently and self-motivate.

Dabbagh *et al.* (2015) also indicate a framework for using social media in class. In brief:

1. Encourage students to privately use social media (blogs, wikis) to enable goal creation and greater self-direction in learning (journals and social bookmarking)
2. Encourage students to interact and collaborate, (wikis, sharing, blog commenting), fostering informal learning and social behaviour
3. Encourage students to collect and synthesize information from above to reflect (and perhaps be assessed) on their overall learning experience.

2.1.10.2 *The influence of social media in education*

The use of social media in the world of education is now increasing to support learning. This is because social media has the characteristics of learning media such as easily accessible and interactive (Ahern *et al.*, 2016). There are several positive and negative influences on the use of social media in education. Social media helps students gain and add new knowledge. Through social media, students can search and explore various kinds of information needed to support the learning process (Domingo & Garganté, 2016). In addition, social media can also help students to improve their ability to absorb various information available.

Social media helps students get to know and learn technology (Akram & Kumar, 2017). Social media was originally born as a result of the development of communication and information technology. The development of technology requires students to get to know and study technology more deeply. This is because students often use technology so that

they inevitably have to know and master technology better in order to be able to assist in the next learning process (Skinner, 2016).

The presence of communication and information technology in the world of education affects the learning methods applied. Now more and more universities or tutoring using online learning methods or e-learning (Tait, 2014). This is clearly a new breakthrough to help students in the learning process. The presence of technology is a savior for classes with heterogeneous students. Technology-based learning presents the principle that no one is left behind. Education is considered to be friendly for all students. Associated with new methods in the learning process, learning through social media gives students full control over learning activities. This is due to the social media-based learning process that is very closely related to the learning process of students independently or commonly known as self-regulated learning Nuraini, *et al.* (2020). The power that students have over learning activities allows students to manage their own media exposure and messages conveyed through social media.

Social media allows students to interact with each other or interact with teachers or other experts to gain new knowledge or discuss. This can be done anytime and anywhere because various forms of social media can be used on computers or smartphones. Social media in the world of education can help students to form new communities. Social media is used by students in general to make friends with those who have similar thoughts, hobbies, and interests. This can build new online communities and carry out a variety of positive and beneficial activities (Raut & Patil, 2016). The online community is certainly very useful for students. One of the benefits of online or online communities is exchanging information and expanding networks (Lantz-Andersson *et al.*, 2018).

Social media has a very big role to develop the skills possessed (Namaziandost & Nasri, 2019). As we know, the best talents can be found quickly through social media. For example, a child who can sing very well, record it with video, upload the video to social media, and share the video with his friends and the public can help him be found by leading producers and invite him to record to make an album or invite him to take part in the search event talent.

Social media is available in various forms. This allows students to explore creativity. For example, students who have the ability to write will create a personal blog and deepen their writing skills. As social media, blogs provide space for students or anyone to express their thoughts, views, or opinions about certain issues. Some social media have limited space to write complete words. For example, Twitter, which has no more than 280 characters since 2017, makes students have to express their ideas by abbreviating words. Often, abbreviations also use mixed languages, English and Indonesian. This certainly can have an impact on students' writing ability related to the words used (Nuraini, *et al.*, 2020).

Students who actively using social media can reduce their attention to learning material (Abbas *et al.*, 2019). This is because students are too busy checking the latest status of others and then giving comments. This distracted attention can disrupt the learning process and have an impact on students' ability to concentrate which later leads to a drop in academic achievement (Burdick-Will, 2018). When interacting with other people in cyberspace, there is a lot of information that needs to be questioned. Inaccurate information and its distribution with no responsibility, is one form of ethical violations on social media (Chiauzzi & Wicks, 2019). The more time spent interacting with others through social media, the less time they have to search for and obtain the truth of information obtained during interactions. The flood of hoaxes on social media is an example of ethical violations in social media (Nuraini *et al.*, 2020).

Humans are social creatures and therefore need to socialize and interact with others to survive. Social media exists as a modern communication media that allows students or anyone to interact with others from all over the world (Tait, 2014). However, the more time spent socializing and interacting in cyberspace makes the less time that is used to socialize and interact with other people in the real world. He will find it difficult to read body language in communication which is always inherent when communicating face to face (Freire *et al.*, 2018). As a result, he becomes less able to communicate effectively in face-to-face communication. Social media allows students to make friends with anyone. Having a large number of friends is fun, but not so if you make friends in cyberspace. Many fake accounts are scattered in cyberspace and this is what students need to be

aware of. There are so many cases of introductions in cyberspace that lead to death or other crimes (Chiauzzi & Wicks, 2019). The fun of looking for friends and chatting makes students become unaware and not careful about the bad possibilities that can happen.

The presence of social media in the universe of communication between people has had a major impact on patterns of communication between people, especially interpersonal communication. In other words, social media influences individual patterns of interaction and this is also an example of the effect of media in individual interactions (Hudson, *et al.*, 2016). Social media is effective in helping shy students to communicate with other students or others. However, this can have an impact on communication skills face to face. If shy students often use social media to interact and express themselves, this can make them feel isolated in the real world and can even increase communication anxiety for fear of meeting other students or people (Nuraini *et al.*, 2020).

Something that is excessive certainly will not have a good impact. Likewise, with excessive use of social media. The use of social media without limits and without remembering time can make students become addicted. Being addicted to using social media is one of the negative impacts of social media (Zivnuska, *et al.*, 2019). One of the activities that can cause addiction is to check social media frequently to find out the latest information or news. This can distract students in the learning process and other activities in the real world. Addiction to social media can also be detrimental to health. Excessive use of social media by students can interfere with student health. Students who access social media continuously regardless of time can cause eye irritation, back pain and can even cause death from sitting in the same position for hours.

The influence of social media in the latest world of education is to become a harassment tool (Zivnuska, *et al.*, 2019). Besides being able to be used as a learning medium for students, social media is also often abused by students for online harassment or cyberbullying of other students. A survey of two hundred and five students told their experiences with cyberbullying as well as traditional intimidation. Students with disabilities are at special risk to become victims of cyberbullying (Hudson, *et al.*, 2016). Other cases of the use of social media by students with disabilities are negative

motivations. Some students with hearing impairments have access to inappropriate websites. Some deaf students do online interaction without filtering online friends. The case of deaf students missing became a serious issue in 2016-2019. The highest case is more than 74% of cyberbullying cases in deaf students on social media. They often get bullying because of communication limitations.

2.1.10.3 Influence of teachers' attitude on students' academic performance

Studies have shown that teachers exert enormous influence on students and thus determine to a very large extent their academic performance. Several authors argue in favour of teacher qualification, teaching methods, communication skills, gender and age as the main teacher characteristics that determine students' academic performance. While these factors are considered very crucial, Ekperi *et al.* (2019) conducted a study on teachers' attitude as an indisputable determinant of students' academic performance since "attitude is everything". Some studies have found a correlation between teachers' attitude and students' interest in learning. Moreover, personality traits of the teachers are more powerful and influential than the course content or instructional strategies used in the classroom. Kurgat and Gordon (2014) opines that teachers have a positive attitude towards the subject, thus, poor performance could be attributed to other factors other than teacher attitudes. Araromi and Salman (2020) in their study also says poor government attitude, lack of job satisfaction, poor remuneration and delayed salary as factors that affects teacher's attitude.

2.1.11 Dangers of social media

Despite the merits of Google, it is important to highlight the dangers Internet search tools like Google pose to education. According to Newman & Gough (2020), academic research involves three steps: finding relevant information, assessing the quality of that information and using appropriate information either to try to conclude, uncover or argue about something. The Internet is very useful for the first step, a little useful for the second and not useful at all for the third. Yet, it is common to find it being used for all three steps, especially in Nigeria. Thus, it is important to emphasize to Google users (especially students) that the Internet contains a variety of information that ranges from scientific facts to personal opinions. Therefore, after the first step of information

retrieval, the source must be scrutinized and further searches carried out to confirm the authenticity of the information being revealed. This is especially important if it is not an academic source. The third step requires critical thinking and judgment, independent of Google and the Internet, but this step seems to be diminishing in Nigeria's education system especially. The popularity of Google is encouraging laziness, poor scholarship and compliant thinking, as Burrell *et al.* (2022) reported. She went on to state that poor quality online materials are used as an avoidance strategy to dismiss important scholarly work that can be found on library shelves. Libraries are a good reference for information because the materials there are usually from authentic sources and authors and the quality has been checked. Scholarly thinking is also encouraged with the use of libraries, where the scholar searches out information from an array of options and has to put them all together bit by bit. But this process appears to be too tedious for the Google-age scholars and clicking is replacing thinking. This assertion is supported by Ajaps (2015) who wrote that search engines such as Google are so easy and immediate that many young people faced with a research assignment just Google their way through the Internet rather than struggle through the hoops of a more traditional library environment. Furthermore, a 2001 study by Strover, *et al.* (2020) revealed that 71% of American students relied mostly on the Internet for major assignments at school, 24% on library and only 4% on both Internet and library. The situation is worse in Nigeria, with more dependence on the Internet, due to poorly equipped libraries and limited access to them. However, as Brabazon (2016) recommends, students need to actually move between the digital and analogue: the un-refereed web and scholarly databases in libraries. Furthermore, Gillis and Krull (2020) reported that over 20 per cent of their students found that access to computers and the Internet actually hindered the completion of assignments. These teachers were therefore concerned with the ethical implications of digitization. Thus, Laari, *et al.* (2021) have advised that incorporating Google as an educational tool requires inculcation of certain skills like critical thinking, research and evaluation due to the increasing volumes of information from different sources that have to be sorted through.

2.2 Theoretical framework

Theory is a way to explain some observed phenomenon. Expressed as abstract thoughts or general subject principles. Theories help make sense of the world or research findings.

2.2.1 Behaviourism theory

Behaviourism is based on the idea that knowledge is independent and on the exterior of the learner (Widmann *et al.*, 2019). In a behaviourist's mind, the learner is a blank slate that should be provided with the information to be learnt. Through this interaction, new associations are made and thus learning occurs. Learning is achieved when the provided stimulus changes behaviour. A non-educational example of this is the work done by Pavlov. Through his famous "salivating dog" experiment, Pavlov showed that a stimulus (in this case ringing a bell every time he fed the dog) caused the dog to eventually start salivating when he heard a bell ring. The dog associated the bell ring with being provided with food so any time a bell was rung the dog started salivating, it had learnt that the noise was a precursor to being fed (Stevens-Fulbrook (2020)).

Behaviourism involves repeating actions, and this will help students who are constantly engaged in the use of social media for learning to gain mastery of it and its tools thereby making learning interesting and enjoyable for them-selves. This makes social media to be a part of teaching and learning process for these students that is when they come to the learning environment and it is time to learn, the behavior expected of the students is to get the equipment for it social media and connect online and start the processes (teaching and learning) by checking out the stimulus sent by the teacher and responding appropriately (Werbach & Hunter (2020)).

2.2.2 Cognitivism theory of learning

In contrast to behaviourism, cognitivism focuses on the idea that student's process information they receive rather than just responding to a stimulus, as with behaviourism. There is still a behaviour change evident, but this is in response to thinking and processing information (Çeliköz *et al.* (2019)). Cognitive theories were developed in the early 1900s in Germany from Gestalt psychology by Wolfgang Kohler. In English,

Gestalt roughly translates to the organization of something as a whole, that is viewed as more than the sum of its individual parts Phenomenology *et al.* (2022).

Cognitivism has given rise to many evidence based education theories, including cognitive load theory, schema theory and dual coding theory as well as being the basis for retrieval practice. In cognitivism theory, learning occurs when the student reorganizes information, either by finding new explanations or adapting old ones. This is viewed as a change in knowledge and is stored in the memory rather than just being viewed as a change in behaviour. Cognitive learning theories are mainly attributed to Jean Piaget (Biwer *et al.*, 2021).

This theory goes a long way to assist students think over the information given by reorganizing it to finding a more preferable meaning to it, and then interpreting it based on the meaning derived from it. This kind of learning goes beyond the exterior mode of behavior to becoming part and parcel of the learners.

2.3 Empirical studies

The empirical studies are presented below:

Petrarca *et al.* (2022) in their study examined how teacher-student communication through social network technologies may support student resilience during an ongoing war (i.e., the 2014 Israel-Gaza war). Based on student responses from open-ended surveys (N = 68), five content categories of emotional support were identified: caring, reassuring, emotion sharing, belonging, and distracting. The mere existence of continuous online contact with teachers also contributed to resilience perceptions. Interviews with 11 secondary school teachers revealed three main purposes for this communication: (a) delivering emotional support to students, (b) monitoring their distress; and (c) maintaining civilized norms. While this study is aimed at ensuring students resilience supported, the current study is focused at ensuring learning takes place through social media.

Adetayo *et al.* (2022) conducted a study on the interest of the millennial generation towards the use of social media devices (SMDs) says has increasingly become a source of concern to academics in Nigerian. A deviation from the planned academic culture,

distraction and divided attention among the millennial's, occasioned by their engrossment in SMDs, necessitated this study. The study was carried out in four Nigerian universities; two federal and two state, with four research questions and five hypotheses guiding the study. The population comprised of 3,960 three hundred level (third year) students from both the federal and state universities. A stratified random sampling based on gender and individual consent was employed. The instrument used for data collection, developed by the researchers was titled "Attitude of the Millennial Generation towards Social Media Usage". The questionnaire was trial tested and the reliability co-efficient for the four sections were; A = 0.80; B = 0.92, C= 0.82, D=0.84. Data were analyzed using mean, standard deviation and rank for research questions and an independent samples t-test was used to test the null hypotheses. The results showed that the millennials have a positive attitude towards the usage of SMDs for social activities but a negative attitude for using these devices for academic purposes. While the earlier study focused on interest, the current study is on awareness, attitude and interest.

Avwiri and Ewurufe (2021) The purpose of this study was to check the awareness and use of mobile devices in the teaching and learning of physics among undergraduate's students of the University of Port Harcourt Rivers State, Nigeria. The study is a descriptive survey design. A sample of 140 final year undergraduate physics students was used for the study. The instrument used for the study was a validated questionnaire. The reliability of the instrument was tested using Cronbach alpha method and a reliability coefficient index of 0.85 was obtained. Mean and percentage were used to answer the three research questions for the study. The findings revealed that Undergraduate students use different types of phones, and also use mobile devices as social media for activities such as online charting, learning, submitting assignments to gather relevant school material, get useful information anytime and anywhere for academic purposes. It was therefore recommended that every student should own an android phone to source for information. Phone manufacturers should produce more portable mobile devices. If possible, the school authority should provide free and uninterrupted data for students to access the internet. While the earlier study focuses on checking the awareness and use of mobile devices by physics students, the current study focuses on awareness, attitude and

interest of geography teachers towards the utilization of social media for learning process.

Supardi *et al.* (2021) carried out a study aimed to analyze the contribution of Information and Communications Technology (ICT) basic skills to student social media utilization activities. Quantitative research was determined as a method with regression analysis. A total of 144 students selected randomly participated in this research. The research instrument used a five-scale questionnaire, consisting of 32 items of ICT skill instruments and 20 items for social media utilization instruments. The results showed a high level of ICT students' basic skills and social media use activities. There is a contribution of basic ICT skills to student social media utilization activities. The higher of the basic skill of ICT causes the higher the level of activity utilization of their social media. Research recommendations suggest efforts to improve students' basic ICT skills.

Adetayo and Williams-Ilemobola (2021) The emergence of social media has sparked a lot of interest in academic libraries especially in the area of adoption. However, there appears to be limited knowledge on whether librarians' generation differs in the adoption levels of social media specifically in the Southwestern, Nigeria. In a bid to carrying out this focus, this study adopted the descriptive survey design. The population comprised seventy-nine (79) librarians from eight academic libraries. The total enumeration sampling technique was used to study all respondents for the study. A self-structured questionnaire was the instrument used for data collection. Data gathered were analysed using descriptive (frequency, percentage & mean) and inferential statistics (ANOVA). The results indicate that there is a significant difference between the generations (Baby boomers, Generation X, Generation Y, Generation Z) with respect to their adoption of social media, but that no significant differences were found between the generations and social media adoption for library services. The study concluded by noting that social media can be adopted by librarians across different generations. Library administrators should acknowledge these differences and formulate their social media strategy accordingly when designing plans on social media in Southwestern, Nigeria. While the earlier study aimed at knowing the adoption level of social media by librarians in

southwest Nigeria, the current study focuses on utilization of social media for learning process.

Olagbaju and Popoola (2020) carried out study on attempting to improve the quality of instruction through social media-supported audio-visual resources in teaching reading comprehension. Pretest, posttest, control group, quasi-experimental research design was adopted for the study and participants were randomly selected from intact Grade 11 classes in two educational provinces in the Gambia. Data were analyzed using inferential statistics, results show a significant main effect of treatment on students' interest and achievement in reading comprehension. There were recommendations on how to support language instruction using social media. While the earlier study aimed at improving the quality of instructions through the social media, the current study focuses on utilization of social media for learning.

Agbo *et al.* (2020) in their study examines the role of social media in computing education based on the use of WhatsApp social media group. Additionally, the study explores how social media usage by students influences their perceived learning outcomes. Given these aims, the study formulated four research hypotheses and tested using Partial Least Square Structural Equation Modelling. With the participants of three hundred and thirteen (n=313) students, the study found a positive relationship between social media usage for computing education and perceived learning outcomes. In addition, the study found a linear relationship between communication in group and perceived learning outcomes. Finally, the study revealed that social media positively relates to tie strength, and that tie strength influences in-group communication. While the earlier study is aimed at examines the role of social media in computing education based on the use of WhatsApp, the current study is focused on utilization of social media by geography teachers for learning.

Prestridge *et al.* (2019) says with the permeation of the Internet in teachers' personal and professional lives, teachers are going online to connect, share ideas and expand their learning opportunities. This qualitative study focuses on the use of digital applications that leverage opportunities for teachers in the design phase, that is, at the time they are developing and curating curriculum materials and designing learning sequences within

their discipline areas before implementation in the classroom. Data drawn for this paper are part of a research project examining ICT-expert teachers' approaches to their ongoing online professional learning. Semi-structured interviews of internationally recognized ICT experts, specifically from Australia, Europe and the United States, are the main data source. The findings suggest that each teacher leveraged their online social media as their first approach or starting point within their design activities, with a curiosity to investigate the pedagogical application of a 'new' tool. These teachers looked first to the expertise of the colleague for their recommendation of the tool, engaging in little pedagogical reasoning before implementation. Additionally, elaboration of the term 'sharing' is provided for deeper understandings of the ways in which teachers engage in their professional learning networks. While the earlier study is targeted towards the use of digital application, the current study focuses on social media utilization.

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The study of Mfaume (2019) is aimed to determined teachers' awareness of the educational benefits of the device, their use and barriers towards their educational use.

The study was qualitative in nature, using a sample of twenty one (21) teachers who were purposefully selected from three secondary schools. Data were sought through semi-structured interviews and were thematically analyzed. The findings revealed that teachers are well informed of the benefits, but they hardly utilize it for educational purposes. Lack of knowledge and skills, a negative attitude, lack of awareness of the ICT policy, age and low motivation emerged as key barriers. In light of the findings, the study concluded that the government's commitment to integrate the device in the promotion of quality education has not yet moved beyond policy statements. Thus, a concerted effort is needed to train teachers on pedagogical utilization of the device. While the earlier study is focused on teachers' awareness of the educational benefits of the device, their use and barriers, the current study is on awareness, attitude and interest of social media utilization.

Shittu *et al.* (2019) carried out a study aimed to investigate the effect of technology supported instructional platforms on undergraduate students' attitude in Educational Technology. The study adopted a quasi-experimental research design. The target population was selected from second year educational technology students. Simple random sampling technique was used to select three out of the five public universities offering educational technology in Nigeria. From the selected universities, experimental and control groups of respondents were purposively selected. In the experimental group, there were 180 respondents while in the control group, there were 120 respondents who were purposively selected to participate in the study owing to characteristics of interest. Data gathered were analyzed using both descriptive and inferential statistics. The results revealed that a significant difference exists in the mean attitude response score of the experimental group one and control group ($P < 0.05$ level of significance ($P = .033$)). There was also a significant difference between experimental group two and control group in their attitude response towards educational technology after teaching them with technology supported instructional platforms and lecture method ($P < 0.05$ level of significance ($P = .024$)). Therefore, the study recommends they should be incorporated into the major teaching strategies for Educational Technology courses in public universities in Nigeria. While the former study is on effect of technology supported instructional platforms, the latter is on social media utilization.

Koontz *et al.* (2018) in their study report social media (SoMe) utilization trends at an academic radiology department, highlighting differences between trainees and faculty and between Baby Boomers versus Generation X and Millennials. An anonymous online survey regarding SoMe utilization and SoMe-based educational curriculum was distributed to all radiologists (trainees and faculty) in our department. Regular chi-square, ordered (Mantel-Haenszel) chi-square, and Fischer exact tests were performed. The survey instrument was sent to 172 radiologists with a 65% completion rate (N = 112). Eighty-three percent (n = 92) of the respondents use SoMe, with Facebook (67%, n = 75), YouTube (57%, n = 64), Instagram (26%, n = 29), and Twitter (21%, n = 23) as the most commonly used platforms. Eighty-one percent (n = 91) use SoMe for 30 minutes or less per day. Thirty-five percent (n = 39) reported previously using SoMe for educational purposes, although 66% (n = 73) would be willing to join SoMe for educational activities. The faculties are more likely than trainees to avoid using SoMe (30% vs 9%, $P < 0.03$). Trainees are more likely than faculty to find an electronic case-based curriculum valuable (95% vs 83%, $P < 0.05$) and are willing to spend more time on cases ($P < 0.01$). Baby Boomers are less interested in joining SoMe for educational activities than Generation X and Millennials (24% vs 73%, $P = 0.0001$). Generation gaps between trainees and faculty, as well as between Generation X and Millennials versus Baby Boomers, exist with regard to the use of SoMe, which may be underutilized in radiology education. While this study aimed at knowing the social media utilization trends at an academic radiology department, the current study focuses on utilization of social media for learning in senior secondary school.

Onwuachu (2018) carried out a study on the incorporation of personal mobile phones and social media in teaching and learning of Office Technology and Management Education Subjects. The study also discussed the developments that accelerate the use of social media and mobile phones in teaching and learning, which includes using social media to share news about scientific and other development. The need to incorporate the use of personal mobile phones and social media in teaching and learning of OTME subjects were equally discussed. Guidance on how to use, and challenges of using these devices in classroom setting were also enumerated. Based on these, suggestions were offered, that OTME educators should embrace new technologies and "meet" students where they are,

in order to carry them along in this speedy advancing technological era. While the earlier study is on the incorporation of personal mobile phones and social media in teaching and learning of Office Technology and Management Education Subjects, the current study focuses on the aware, interest and attitude of geography teachers towards the utilization of social media for learning among Senior Secondary Students in Bosso Local Government Area.

Salloum *et al.* (2018) conducted a study on the ground of established research termed the Unified Theory of Acceptance and Use of Technology (UTAUT). The findings of this research are employed to confirm the factors of utilizing social networking media for e-learning in the United Arab Emirates higher education context. The quantitative data has been acquired based on the survey method. The sample of this current investigation is students and instructors from two different universities in the higher education sector of the United Arab Emirates. The predictive behavior of the anticipated stimulants for the research model was analyzed using the Structural Equation Modelling. The findings of this study are useful to comprehend the factors that drive the Emirati students to embrace certain perceptions of social media technology in the higher education context. While the earlier study is on the ground of established research termed the Unified Theory of Acceptance and Use of Technology (UTAUT) in the Arab Emirates higher education context, the current research is on Senior Secondary Students in Bosso Local Government Area, Minna Nigeria.

Almobarraz, (2018) conducted a study to explore the perceptions, attitudes and experiences of undergraduate students related to the use of YouTube as an information resource to support their learning. The use of YouTube by professors for course activities is also examined. Design/methodology/approach – Quantitative research design based on a survey method was used by using a questionnaire tool. The collected data were analyzed using frequency and simple percentage. The sample comprises undergraduate students from the College of Computer and Information. Findings – The general results reveal that the use of YouTube in the classroom influences student engagement. Students' understanding of the importance of YouTube was determined in this study. However, professors do not seem to have positive attitudes towards incorporating

YouTube into course activities. Originality/value – The application of social media tools in Saudi Arabia is unclear because of the lack of studies that focus on the use of video-sharing websites by university students. This paper is the first of its kind conducted to explore the use of YouTube in the academic environment as an information resource to support university courses. While the earlier study is on perceptions, attitudes and experiences, the current study is focused on awareness, attitude and interest.

Agbo *et al.* (2021) in their study examined students' perceptions of how social media can be used to support teaching and learning in Nigerian Universities using Federal University of Technology, Minna as a case study. Three research questions and three null hypotheses guided the study. The population was made up of 550 final year students of the School of Science and Technology Education out of which a total of 155 students were randomly selected for the study. The study was a qualitative research which involved the use of questionnaire as instrument for data collection. The instrument was validated by three experts in Information and Communication Technology. The reliability coefficient index computed for the instrument was 0.81 using Cronbach Alpha formula. The data were analyzed using mean and Spearman Correlation Coefficient. The findings revealed among others that students are aware of social media tools that can be used to perform academic tasks such as Images and photographs, document creation and presentations; while students also classified Communication, Videos and instant messaging as the most familiar, frequent and important academic activities carried out on social media platform. Furthermore, the results showed no significant correlation between gender and awareness; gender and frequency; gender and importance. Awareness was highly correlated to the frequency and moderately correlated to the importance. Frequency was highly correlated to the importance. Consequently, it was recommended among others that since awareness of social media platforms roughly translated into actual usage, more enlightenment campaign should be carried out by the university Community to encourage students on the use of these social media platforms. While the earlier study considered student's perception in a University setting, the current study considered Awareness, attitude and interest in a senior secondary school setting.

Sahara *et al.* (2018) in their research on the Utilization of Social Media *Vlog* to Enhance Creativity Students in Project Based Learning says Indonesia's 2030 Sustainable Development Goals (SDG's) in the education sphere are to ensure inclusive and equitable quality of education and to enhance lifelong learning opportunities for all. The indicator of the realization of the goal is by improving the quality of education and equity of education. On the other hand, in 2018, YouTube social media occupies the most used social media in Indonesia. The most widely used vlog feature in YouTube social media is on the rise and becoming a trend, but it tends to be content with the theme of negative things especially in adolescence that should be a productive age as a learner. Utilization of social media especially (vlog) to increase creativity and multiple understanding of science representation of learners in project-based learning become one of solution as well as innovation to achieve goal of SDG's Indonesia 2030 which examined by using descriptive-correlational method and qualitative analysis technique. So it is found that the ideas mentioned above have a positive contribution, especially for the enhancement of creativity and multiple understanding of students' science representation, generally for the achievement of destination of SDG's Indonesia 2030. While the earlier research is on the Utilization of Social Media *Vlog* to Enhance Creativity Students in Project Based Learning, the current study is on learning and in Nigeria.

Habes *et al.* (2018) conducted a study to highlight the impact of social media on students in the higher educational universities and its impact on the students' academic performance. The study focuses on the researchers' observation and follow-up of these sites; the impact of these sites on the audience by relying on Facebook applications in the Middle East and the world. The researchers employed a comparative and experimental approach to measure the impact of Facebook and providing the results by relying on the recommendations and outputs concluded by scientific studies published in refereed journals. The study indicated that a large number of university students are using social media with more focus on Facebook, which in turn negatively affect their academic results. While the former study focused on the impact of social media on students, the later study is on utilization of social media for learning.

Thunman and Persson (2017) in their study inquire into how teachers manage boundaries between home and work domains when using Facebook as a work tool to communicate with pupils. Group interviews were conducted with secondary teachers from three schools about their use of Facebook and their experiences of boundary work. The empirical material was inductively categorized according to the main practices deployed by the teachers and interpreted with the help of boundary theory. The findings are presented according to three main practices – virtual, physical, and communicative – which the teachers adopt to integrate and segment home and work domains using Facebook. While the earlier study is aimed at managing boundaries between home and work domains when using Facebook, the current study focuses on utilization of this social medias’ to enhance learning.

Jabai (2017) Secondary School Teachers’ attitude towards the use of social media as a platform for educational purposes in Nigeria. The main aim of the study is to investigate secondary school teachers’ attitude towards use of social media as a teaching platform. The study makes use of quantitative methodology. 112 teachers within the country’s capital city- Abuja participated as respondents to the distributed questionnaires. Findings reveal that teachers are familiar with at least two social media platforms namely Facebook and Youtube and frequent users of the aforementioned platforms as well. However, the least frequent and familiar sites are LinkedIn and Slide share. The general attitude of the teachers are positive towards social media usage. Age and gender had no effect to teachers’ general attitude towards social media. While the earlier study aimed at teachers’ attitude toward the use of social media for educational purposes, the current study focuses on awareness, attitude and interest of geography teachers towards the utilization of social media.

Nagaraja *et al.* (2016) conducted a study aimed at examining the use of social media among the Student Teachers of Regional Institute of Education, Mysore to know the awareness and use of social media and to determine how actively student teachers are using social media and getting advantage from it. The study used survey method and a well structured questionnaire was designed and the random sampling technique was used for data collection. The questionnaire was handed over personally by researchers to 150

UG and PG student teachers and 148 filled questionnaires were received back. The analysis of the data collected is presented in the form of tables and charts followed by its interpretation. Majority of student teachers prefer social media to find useful information/resources and students agree that the social media tools are very much useful in pursuing their academic activities. While the earlier study aimed at examining the use of social media among the Student Teachers of Regional Institute of Education, the current study focuses on utilization of social media by geography teachers for learning purposes.

Omolara, and Adebukola (2015) in their study on Teachers' Attitudes: A Great Influence on Teaching and Learning of Social Studies Students' attitude towards Social Studies outlined poor government attitude, lack of job satisfaction, poor remuneration and delayed salary as factors that affects teacher's attitude. While the earlier study aimed at teachers' attitude, the current study focuses on teachers' awareness, attitude and interest.

Shittu *et al.* (2015) in their study carried out a confirmatory factor analysis was conducted to measure student readiness towards the use of social media in some selected universities in Nigeria. The participants of the study comprises of 700 hundred students from four universities in south-western Nigeria. A survey instrument was developed for the purpose of the study. The internal consistent and the validity of the instrument was established. The reliability of the instrument indicated 0.80, 0.84 and 0.70 Cronbach alpha values on each three construct respectively. A factor analysis with Varimax Rotation conducted revealed a three factor measurement scale on students' readiness and these are (Readiness, Willingness, and Awareness). A confirmatory factor analysis was conducted which confirm the three factors. Based on the result from the data analysis, the hypotheses of the study revealed a statistical relationship between the three constructs extracted. The study showed that there is no significant difference between male and female student readiness to use social media for learning. The study recommends the imperative deployment of social media for leverage teaching and learning among the present generation of students in the population sample for the study. It also provides an empirical measurement scale for ascertaining student readiness to use social media platform for learning in future. While the earlier study considered the variables

(Readiness, Willingness, and Awareness) in western Nigeria, the current study is on Awareness, attitude and interest in Niger State Nigeria.

The study conducted by Kurgat and Gordon (2014) on the effects of teacher characteristics and attitudes on student achievement in KCSE economics examination adopted a field based survey. The study was conducted in secondary schools offering economics in the Rift Valley Province of Kenya. Simple Purposive Sampling was used to get the representative sample for the study. The representative sample constituted all the fourth form students of economics in all the secondary schools in the Rift valley province of Kenya, inspectors of schools in districts where economics was being offered and teachers from the schools where the subject was offered. A total of 187 students, 32 teachers and 4 district inspectors took part. Data was collected from the sample using questionnaire. The data collected was analyzed using Excel software program. Basic statistical techniques were used to analyze various items in the questionnaire. These include calculating the averages frequencies, percentages and totals. These statistical techniques were used to make comparisons in the various data collected. The study concludes that teachers have a positive attitude towards the subject, thus, poor performance could be attributed to other factors other than teacher attitudes. While the earlier study aimed at teachers' characteristics and attitudes, the current study focuses on geography teachers awareness, attitude and interest in the utilization of social media for learning purposes.

Etuk *et al.* (2013) conducted a study to find out the relationship between how students perceive their teachers' in respect of knowledge of Mathematics content, communication ability, use of appropriate teaching strategies and teachers' classroom management skills and students' attitude towards mathematics. The population of the study comprised all the second year students in senior secondary schools in Oron Education Zone. The study sample consisted of 640 students selected through cluster and simple random sampling techniques. Two instruments – Students' Perception of Teacher Characteristics Questionnaire (SPTCQ) and Students' Attitude towards Mathematics Questionnaire (SATMQ) were developed and administered on the respondents. A trial test of 50 students using split-half reliability test was carried out which yielded reliability

coefficients of 0.86 and 0.94 for SPTCQ and SATMQ respectively. Pearson Product Moment Correlation and t-statistics were used to answer the research questions and test the hypotheses respectively. Findings show that the way students' perceive their teachers' in terms of knowledge of mathematics contents, communication ability, teaching methods and classroom management skills has a significant relationship with students' attitude towards mathematics. When the students' perception of their teachers' characteristics is low, students' attitude towards mathematics tends to be negative. While the former study is aimed at finding out relationship, the latter is focused on utilization.

Aniemeka (2013) in their study to examine how computer mediated communication in particular; social media is employed for entrepreneurship education in Nigeria, says social media is a burgeoning phenomenon that characterizes many professional and non-professional environments in the world today and brings new opportunities of interaction to education. This dissertation examines the global integration of social media in pedagogy and how this incorporation specifically strengthens and augments the quality of teaching and learning in Africa. The purpose of the research is to examine how computer mediated communication in particular; social media is employed for entrepreneurship education in Nigeria. The research identified four Nigerian universities from a stratified sampling who formed the test group that was interviewed for the study. The thesis employed the philosophy of critical realism in order to answer the research question, and employed a qualitative methodology consisting of structured interviews and focus group discussion. Data obtained from the email interviews indicate that educational background and aptitude influence the use of social media in entrepreneurship education. Moreover, the research indicates the use of online social networks could play important role in university teaching in Nigeria. The findings allay concerns that distributed learning could be separate and separable from the face-to-face experience of conventional pedagogy, and identifies major shift in teacher education globally and how learners are demanding more, thus making a small contribution to the under-researched area of social media and entrepreneurship education in Africa. It concludes that while the internet has been praised as an instructional tool, it is also a strong contrivance for transforming the teaching-learning process in new and powerful ways. These may be of interest to the Nigerian Federal Ministry of Education, the National Universities Commission in Nigeria,

Nigerian universities and education in Africa in general. While the earlier study aimed at examining how computer mediated communication and social media is employed for entrepreneurship education in Nigeria, this current study focuses on utilization of social media alone for learning process.

Camilia (2013) This paper surveyed students' social networking sites usage and how it affects them. It examines the role which frequent use of social networking sites play in their studies. These days most of the students and young adults in Nigerian tertiary institutions are mostly and always engrossed in the social networking site usage. Have you thought of what they might be doing there? Questionnaires were designed and sent out to 600 respondents of the different tertiary institutions in Mubi Educational zone, Adamawa state, Nigeria. A Polytechnic, a State University and a State College of Health Technology were used for the study. Out of the 600 questionnaires distributed, 536 were completely filled and returned giving a return rate of 89%. The data collected were analyzed using frequencies; percentages and graph representations while the hypothesis was tested using chi square (χ^2). The hypothesis that the frequent use of social networking sites by student of tertiary institutions in Mubi, Adamawa state Nigeria has no effect on their studies was accepted at 5% level of significance. It was recommended that students should learn to manage their time properly and teachers should use social networking sites to promote teaching-learning process. While the earlier study aimed at checking students' social networking sites and how it affects them, the current study focuses on the utilization of social media by geography teachers for learning purpose.

Mohammed and Suleiman (2013) This study examined the level of awareness and utilization of social media by HND II students of Mass Communication in Nuhu Bamalli Polytechnic, Zaria. Social Media are online communication systems with complex techniques that enable interactivity, sharing, conversation and linkages by users. The development of ICT and GSM technology in Nigeria has made social media very popular among students of tertiary institutions. The study employed the survey method of communication research. It found out that the students acquire knowledge of Social Media through course mates, friends and conventional mass media. In addition, the utilization is influenced by the perceived social status and enlightenment level of the

students. The paper also argues that social media affect the academic performance of the students both positively and negatively. The paper concludes that governments and managements of tertiary institutions should provide adequate guidance on access and enlightenment to students about the potentials of social media. It further recommends that students should strike a balance between using Social Media and the pursuit of academic excellence. While the earlier study aimed at examining the level of awareness and utilization of social media by HND II students of Mass Communication in Zaria, the current study focuses on awareness, attitude and interest of geography teachers utilization of social media for learning process in Minna, Niger State.

Mohammed and Suleiman (2013) in their paper, an attempt was made to determine the level of lecturers' attitude to social network media, the factor which is paramount to accessibility and usability need of the learners in open and distance learning. Population of the study comprised of lecturers in distance learning Universities in Nigeria. Out of this population, 80 samples were selected using stratified random sampling from all the schools of the Universities. Also, 50 of these lecturers came from single mode University while, the remaining 30 were from dual mode university. The instrument used to obtain data was a self-designed questionnaire with a reliability coefficient of 0.75 using test-retest method. Three research questions and one hypothesis guided the study. Descriptive (Mean, Frequency count and percentages) were used to analyse the research Questions. The hypothesis formulated was analyzed with t-test statistical analysis. It was discovered that the general attitudes of lecturers towards social network media were positive. It was therefore recommended that awareness programme that promote attitude towards social network media should be organized, for ODL lecturers to increase their interest in their participation in good accessibility and usability exercise in ODL. Also, ODL lecturers should be given training that is e-learning oriented in social network media through workshop and conferences to further improve their contribution to accessibility and usability needs of the learners. While the earlier study is aimed at determining the level of lecturers' attitude to social network media, the current study focuses on social media utilization.

Player-Koro (2012) There are a lot of information and communication technology (ICT) tools for education, but the motivation to use those varies from teacher to teacher. In this paper we present results of an international survey on teachers' use of ICT tools in education. The purpose of the survey was to find out what motivates teachers to use ICT tools in the context of teaching. The survey also intended to reveal which tools are used as well as the needs and requirements that are not covered by the existing tools. Most of the 45 respondents suggested that the integration of tools depends on how well they fit into the learning and teaching process and how easy it is to integrate them. The first category of indicated influencing factors comprises human factors like the teachers' skills, attitudes and opinions towards the tools. The second category is about intrinsic values including teachers' satisfaction, level of interest, joy and entertainment. The third category of influencing factors consists of user requirements towards ICT tools such as usability, level of interactivity, adaptability and meeting learning requirements. There are also issues related to limited teacher-student interaction. This study suggests that teachers should be more involved in designing ICT tools for education. It is also indicated that gamified ICT tools could be promising to enhance the intrinsic motivation for teaching and learning processes. While the earlier study aimed at examining what motivates teacher's to use ICT in the context of teaching, the current study focuses on teacher's awareness, attitude and interest of social media utilization for learning process.

Yusuf and Balogun (2011) in their study examined empirically student-teachers' competence and attitude towards information and communication technology. Gender influence on their competence and attitude were also examined. Participants were 382 student-teachers (181 males and 201 females) from the Faculty of Education, University of Ilorin, Nigeria. The data collected through a questionnaire were analysed using percentages, means, and chi-square statistics. Findings revealed that majority of the student-teachers have positive attitude towards the use of ICT and they are competent in the use of few basic ICT tools. Overall, no significant difference was established between male and female student-teachers' attitudes and use of ICT. The implication is that the student-teachers lacked the necessary competence in the full integration of ICT in the curriculum. This underscores the need to improve the ICT contents of teacher education programs in universities in developing nations. While the earlier study is aimed at

student-teachers' competence and attitude towards ICT, the current study focuses on utilization of social media for learning.

From all the reviewed empirical studies in this research, certainly none was undertaken that covers teachers awareness, attitude and interest of social media utilization for learning in Bosso Local Government area of Minna Niger State Nigeria.

2.4 Summary of Literature Reviewed

This chapter reviewed the awareness, interest and attitude of geography teachers towards the utilization of social media for teaching. Specifically, the chapter was able to discuss in detailed the concept of social media, examples of some selected social media, their educational advantages, and types and use of social media in education. Some other concept reviewed include factors affecting social media and learning: social media and academic performance, abuse of social media, public disclosure of personal information and privacy concerns, social media and it effect on actual study time, social media and it perceived ease of use, social media and cultural factors, geography teaching and learning in Nigeria, teachers attitude towards social media, geography teachers utilization of social media, social media and Nigeria education, relevance of social media as an educational tool in geography, the influence of social media in education, influence of teachers' attitude on students' academic performance, and dangers of social media.

This study took a theoretical backup from the Behaviourism theory of learning which is a theory that explains how knowledge is independent and is on the exterior of the learner. The use of social media by geography teachers can only be said to have been achieved if the information provided as to its operation stimulate changes of behaviour in them. This study also adopted the Cognitivism theory of learning which is an idea that is in contrast with behaviourism. Cognitivism theory focuses on the idea that students process information they receive rather than just responding to a stimulus. There is still a behaviour change evident, but this is in response to thinking and processing information.

The reviewed literature revealed that studies have been conducted on teacher-student communication through network technologies, interest of the millennial generation towards the use of social media devices, awareness and use of mobile devices for teaching physics, contribution of ICT basic skills to student social media utilization

activities, quality of instruction through social media-supported audio-visual resources, role of social media in computing education based on the use of WhatsApp, awareness of educational benefits of the device, their use and barriers, etc.

There are three literature gaps noted in the reviewed literature: there were lack of much literature on interest, no literature on social media utilization that particularly talked about geography teachers and also there were lack of literatures that combined the three variables in a study. This research fills these gaps in the reviewed literature by assessing geography teachers' awareness, interest and attitude of geography teachers towards the use of social media for teaching. The literature reviewed lays the basis for this research and concludes with an identification of the research gaps. Hence, this study is intended to fill these research gaps and extend the body of existing knowledge by assessing the awareness, interest and attitude of geography teachers towards the utilization of social media for teaching in senior secondary schools in Niger State.

CHAPTER THREE

3.0 RESEACH METHODOLOGY

3.1 Research Design

The research design was adopted for this study is descriptive survey design. The survey method was used because it enabled the researcher to gather large amount of information which focused on the assessment of the Awareness, Interest and Attitude of Geography Teachers towards the Utilization of Social-Media for teaching in Senior Secondary Students in Niger State.

3.2 Population of the Study

The population of the study comprises of all the (222) Geography Teachers in secondary schools in Niger State. The target population of this study is 133 Geography Teachers.

Table 3.1 showing the breakdown of Geography Teachers' total population in Niger State

LOCATION	POPULATION
URBAN	138
RURAL	84
TOTAL	222

3.3 Sample and Sampling Techniques

The sample size for this study is 133, this sample size is base on schools location (that is the location of schools makes it easier for geography teachers to be able to access power for their phones and other gargets), availability of good network (so as to be able to connect to the net) and utilization of social media (that is schools whose geography teachers utilizes social media before now).

3.4 Research Instruments

A well-structured questionnaire was used for data collection in this research work. The researcher designed questionnaire titled “Awareness, Interest and Attitude of Geography Teachers towards Social Media Utilization” (AIAGTSMU). The questionnaire consisted of Section A, B, C, D, and E. Section A has to do with the demographic information about the respondents. Sections B consist of items that examined Awareness of some selected social media tools by geography teachers; Extent of use of social media by geography teachers; Level of geography teachers interest of social media utilization to enhance teaching and learning; and Attitude of geography teachers toward the utilization of social media to enhance teaching and learning.

3.5 Validity of Research Instrument

To determine the face and content validity of the research instrument in this study, one expert from Educational Technology department Federal University of Technology Minna, two social media experts, one Educational Psychologist and a teacher expert in Geography; reviewed the questionnaire in order to determine the appropriateness, content coverage, in terms of accountability, adequacy and relevance to the stated objectives. Their comments, suggestions and corrections were used to produce the final draft of the instrument.

3.6 Reliability of the Instrument

The reliability of the instrument was determined by carrying out a pilot study on Geography teachers from one secondary school in Chanchaga Local Government Area Minna. Letter of permission was sorted submitted to the school authorities and after acceptance, the researcher visited the school with the questionnaires and then orientate the geography teachers on how to go about filling it. After they all did, the researcher retrieved the questionnaires. The questionnaire was analyze using Cronbach alpha. A reliability coefficient of 0.78 for Awareness, 0.85 for Attitude and 0.81 for Interest was gotten from a total of five teachers from Bahago Secondary School, Chanchaga (as shown in appendix B) which are not part of the target population.

3.7 Method of Data Collection

The researcher collected an introductory letter from the Educational Technology Department, Federal University of Technology, Minna. The researcher presented the letter to the authorities of Niger State Ministry of Education to seek permission to have access to the teachers for the research. Once the permission was granted, as the researcher visits each urban school respondents was briefed on the study's objectives and how to fill the questionnaires to ensure that valid data were collected. Thereafter, the researcher administered the questionnaires on respondents. In order to ensure compliance and return of all the copies of instruments that was administered, the researcher waited for the period of administration of instrument and ensure retrieval of the completed questionnaires. The researcher collected the filled and completed copies of the questionnaires.

3.8 Method of Data Analyses

The data obtained was analyzed using descriptive and inferential statistics. Mean and standard deviation were used to answer the research questions. For hypotheses testing, independent t-test was used with the aid of Statistical Package for Social Sciences (SPSS version 20.0). All hypotheses were tested at 0.05 level of significance.

CHAPTER FOUR

RESULT AND DISCUSSION

4.0

4.1 Results

The study investigated the awareness, interest, and attitude of Geography teachers towards the utilization of social media in learning among senior secondary schools in Bosso Local Government Area, Nigeria. To answer the research questions that guided this study, data were collected using an ordinal scale instrument and were analysed using and the findings were presented based on research questions and the formulated hypotheses.

Research Questions

The following research questions were raised to guide the study.

4.1.1 Research Question 1: What is the level of awareness of Geography teachers towards the utilization of various available social media tools for teaching and learning process among Senior Secondary Schools in Niger State?

To answer this research question, the mean rank was used and the result is presented in Table 4.1

Table 4.1: Awareness of Geography teachers towards the utilization of various available social media

Social Media Tools	N	Mean	Std. Deviation	Rank	Decision
Blackboard	148	3.24	0.901	1	Aware
Twitter	148	2.99	0.922	2	Aware
Facebook	148	2.89	0.801	3	Aware
Plunk	148	2.61	1.104	4	Aware
WordPress	148	2.57	0.711	5	Aware
Wikispaces Classroom	148	2.47	0.812	6	Not Aware
Linkedin	148	2.10	0.400	7	Not Aware
TED-Ed	148	1.76	0.725	8	NotAware
Skypee I	148	1.60	0.777	9	Not Aware
Edmodo	148	1.41	0.559	10	Not Aware
Grand Mean Rank		2.364			Not Aware

Table 4.1 shows the mean rank awareness of Geography teachers towards the utilization of various available social media tools for teaching and learning process among Senior Secondary Schools in Niger State. The findings indicated that Blackboard is the most aware utilized social media tools by the teachers with the highest mean of 3.24 and rank first. Twitter, Facebook, Plunk, and WordPress are also used by the respondents and were rank 2nd, 3rd, 4th, and 5th, respectively. On the contrary, the table shows that the respondents in this population were not aware of Wikispaces Classroom, Linkedin, TED-Ed, Skypee I and Edomodo for teaching and learning mean response and standard

deviation of the social media networking site platform available for learning. The decision means of 2.50 and above is considered to be aware, while the mean of below 2.50 is not aware. Therefore, the grand mean 2.364 shows that the Geography Teachers were not aware of social media tools utilized for teaching and learning process among the senior secondary schools in Niger State.

4.1.2 Research question 2: What is the level of interest of Geography teachers towards the utilization of social media in the teaching and learning process among senior secondary students in Niger State?

To answer this research question, the mean and standard deviation were used and the result is presented in Table 4.2

Table 4.2: Interest of Geography teachers towards the utilization of social media

Social Media Tools	N	Mean	Std. Deviation	Rank	Decision
Plunk	148	4.62	0.487	1	Interested
Wikispaces Classroom	148	4.59	0.494	2	Interested
Linkedin	148	4.04	0.627	3	Interested
WordPress	148	4.02	1.264	4	Interested
Skypee I	148	4.01	0.751	5	Interested
Facebook	148	3.92	1.248	6	Interested
Edmodo	148	3.57	1.535	7	Interested
TED-Ed	148	3.44	0.859	8	Interested
Twitter	148	2.46	0.759	9	Not Interested
Blackboard	148	1.93	0.908	10	Not Interested
Grand Mean Rank		3.662			

Table 4.2 shows the mean rank interest of Geography teachers towards the utilized of various available social media tools in teaching and learning process among Senior Secondary Schools in Niger State. The findings indicated that Plunk is the most interested social media utilized by the teachers with the highest mean of 4.64 and rank first. Wikispaces Classroom, Linkedin, WordPress, Skypee I, Facebook, Edmodo, and TED-Ed are also utilized by the respondents and were rank 2nd, 3rd, 4th, 5th, 6th 7th and 8th respectively. On the contrary, the table shows that the respondents in this population were not interested in utilizing Twitter and Blackboard for teaching and learning mean response and standard deviation of the social media networking site platform available

for teaching and learning. The decision means of 2.50 and above is considered to be aware, while the mean rank of below 2.50 is not aware. Therefore, the grand mean rank 3.662 shows that the Geography Teachers were interested in social media tools for teaching and learning process among the senior secondary schools in Niger State.

4.1.3 Research question 3: What is the level of attitudes of Geography teachers towards the utilization of social media tools by the Senior Secondary Schools in Niger State?

To answer this research question, the mean and standard deviation were used and the result is presented in Table 4.3

Table 4.3: Attitudes of Geography teachers towards the utilization of social media

Social Media Tools	N	Mean	Std. Deviation	Rank	Decision
WordPress	148	4.59	.494	1	Positive Attitude
Blackboard	148	4.39	.612	2	Positive Attitude
Plunk	148	3.84	1.167	3	Positive Attitude
TED-Ed	148	3.81	1.220	4	Positive Attitude
Wikispaces Classroom	148	3.40	.707	5	Positive Attitude
Edmodo	148	3.15	1.145	6	Positive Attitude
Twitter	148	2.84	.700	7	Positive Attitude
Linkedin	148	2.72	.941	8	Positive Attitude
Skypee I	148	2.14	1.172	9	Negative Attitude
Facebook	148	2.01	1.181	10	Negative Attitude
Grand Mean Rank		3.29			

Table 4.3 shows the mean rank attitude of Geography teachers towards the utilized of various available social media tools in teaching and learning process among Senior Secondary Schools in Niger State. The findings indicated that respondents have most positive attitude on WordPress social media utilized by the teachers with the highest mean rank of 4.59 and rank first. Blackboard, Plunk, TED-Ed, Wikispaces Classroom, Edmodo, Twitter, and LinkedIn, are also utilized by the respondents and were rank 2nd, 3rd, 4th, 5th, 6th 7th and 8th respectively. On the contrary, the table shows that the respondents in this population were having negative attitude utilizing Skype I and Facebook for teaching and learning mean response and standard deviation of the social media networking site platform available for teaching and learning. The decision means rank of 2.50 and above is considered to have positive attitude, while the mean of below 2.50 is considered to have negative attitude. Therefore, the grand mean rank 3.29 shows that the Geography Teachers have positive attitude in social media tools towards teaching and learning process among the senior secondary schools in Niger State.

4.1.4 Research question 4: Which of the social media tools are mostly utilized for the teaching and learning process by the Geography teachers in Niger State?

To answer this research question, the mean rank was used and the result is presented in Table 4.4

Table 4.4: Geography teachers' utilization of social media

Social Media Tools	N	Mean	Std. Deviation	Rank	Decision
Blackboard	148	3.46	0.610	1	Utilized
Facebook	148	3.19	1.078	2	Utilized
WordPress	148	2.82	0.878	3	Utilized
Twitter	148	2.67	0.794	4	Utilized
Plunk	148	2.38	1.026	5	Not Utilized
Skypee I	148	2.21	0.758	6	Not Utilized
TED-Ed	148	2.03	0.888	7	Not Utilized
Edmodo	148	1.92	0.944	8	Not Utilized
Linkedin	148	1.82	0.873	9	Not Utilized
Wikispaces Classroom	148	1.51	0.675	10	Not Utilized
Grand Mean Rank		2.401			

Table 4.4 shows the mean rank of Geography teachers towards mostly utilized social media tools in teaching and learning process among Senior Secondary Schools in Niger State. The findings indicated that respondents mostly utilized Blackboard social media by the teachers with the highest mean rank of 3.46 and rank first. Facebook, WordPress, and Twitter are also utilized by the respondents and were rank 2nd, 3rd, and 4th respectively. On the contrary, the table shows that the respondents in this population do not utilized Plunk, Skypee I, TED-Ed, Edmodo, Linkedin and Wikispaces Classroom social media for teaching and learning mean rank response and standard deviation of the social media networking site platform available for teaching and learning. The decision means rank of

2.50 and above is considered to have utilized the social media tools, while the mean of below 2.50 is considered to have not utilized the social media tools. Therefore, the grand mean rank 2.401 shows that the Geography Teachers have not utilized social media tools towards teaching and learning process among the senior secondary schools in Niger State.

4.2 Testing of Research Hypotheses

4.2.1 Hypotheses One

Ho1: There is no significant difference in the level of utilization of the selected social media tools by geography teachers' male and female

Table 4.5: T-test of male and female utilization of selected social media tools

Variables	N	Mean Rank	df	U-value	Sum Rnaks	p-value
Male	112	79.17			8867.00	
			146	1493.000		0.015
Female	36	59.97			2159.00	
Total	148					

$p < 0.05$

Table 4.5 presents the result of a Mann-Whitney U-test that was conducted to test the null hypotheses that level of utilization of the selected social media tools by geography male and female teachers. Male geography teachers had an average rank of 79.17 with the sum ranks of 8867.00, while female geography teachers had an average rank of 59.97 with the sum rank of 2159.00. The results of the analysis were in the expected direction the $p < 0.05$ level of significant, the null hypothesis which stated no significant difference was rejected. Therefore, there is significant difference in the level of utilization of the selected social media tools by geography male and female teachers.

4.2.2 Hypotheses Two

Ho2: There is no significant difference between male and female Geography teachers in the level of interest of the selected social media tools

Table 4.6: T-test of male and female level of interest of selected social media tools

Variables	N	Mean Rank	df	U-value	Sum Ranks	p-value
Male	112	78.24			8762.50	
			146	1597.50		0.057
Female	36	62.88			2263.50	
Total	148					

p>0.05

Table 4.6 presents the result of a Mann-Whitney U-test that was conducted to test the null hypotheses that level of interest of the selected social media tools by geography male and female teachers. Male geography teachers had an average rank of 78.24 with the sum ranks of 8762.50, while female geography teachers had an average rank of 62.88 with the sum rank of 2263.50. The results of the analysis were in the expected direction the $p > 0.05$ level of significant, the null hypothesis which stated no significant difference was not rejected. Therefore, there is no significant difference between the level of interest of the selected social media tools by geography male and female teachers.

4.2.3 Hypotheses three

Ho3: There is no significant difference between the attitude of male and female teachers towards the use of the various social media tools.

Table 4.7: T-test of male and female attitude towards the selected social media tools

Variables	N	Mean Rank	df	U-value	Sum Ranks	p-value
Male	112	68.87			7713.00	
			146	1385.00		0.004
Female	36	92.03			3313.00	
Total	148					

p<0.05

Table 4.7 presents the result of a Mann-Whitney U-test that was conducted to test the null hypotheses that level the attitude of male and female teachers towards the use of the various social media tools. Male geography teachers had an average rank of 68.87 with the sum ranks of 7713.00, while female geography teachers had an average rank of 92.03 with the sum rank of 3313.00. The results of the analysis were in the expected direction the $p < 0.05$ level of significant, the null hypothesis which stated no significant difference was rejected. Therefore, there is significant difference between the level of attitude of male and female teachers towards the use of the various social media tools

4.2.4 Hypotheses four

Ho4: There is no significant difference between male and female geography teachers on social media tools mostly utilized for the teaching and learning process in Niger State

Table 4.8: T-test difference of male and female mostly used social media

Variables	N	Mean Rank	df	U-value	Sum Ranks	p-value
Male	112	67.89			7604.00	
			146	1276.00		0.001
Female	36	95.06			3422.00	
Total	148					

p<0.05

Table 4.8 presents the result of a Mann-Whitney U-test that was conducted to test the null hypotheses on social media tools mostly utilized for the teaching and learning process between male and female geography teachers in Niger State. Male geography teachers had an average rank of 67.89 with the sum ranks of 7604.00, while female geography teachers had an average rank of 95.06 with the sum rank of 3422.00. The results of the analysis were in the expected direction the $p < 0.05$ level of significant, the null hypothesis which stated no significant difference was rejected. Therefore, there is significant difference between male and female geography teachers on social media tools mostly utilized for the teaching and learning process in Niger State.

4.3 Summary of the Findings

From the data collected, computed, analyzed and interpreted in this study, the findings are summarized as follow:

1. Geography Teachers were not aware of social media tools utilized for teaching and learning process among the senior secondary schools in Niger State.
2. Geography Teachers were interested in social media tools for teaching and learning process among the senior secondary schools in Niger State.
3. Geography Teachers have positive attitude in social media tools towards teaching and learning process among the senior secondary schools in Niger State.
4. Geography Teachers have not utilized social media tools towards teaching and learning process among the senior secondary schools in Niger State.

4.4 Discussion of Findings

In research question 1 finding from this study on Geography teachers' level of awareness towards the utilization of social media tools for teaching and learning process among Senior Secondary Schools in Niger State indicates that Geography teachers' are not aware of utilizing social media tools for teaching and learning in secondary schools, this contradict the findings of Mfaume (2019) whose findings revealed that the teachers were more informed of the utilization of social media tools for teaching and learning. Lack of knowledge and skills, a negative attitude, lack of awareness of the ICT policy, age and low motivation emerged as key barriers in the utilization of social media. In light of the findings, the study concluded that the government's commitment to integrate the device in the promotion of quality education has not yet moved beyond policy statements. Thus, a concerted effort is needed to train teachers on pedagogical utilization of the device. Also, Agbo *et al.* (2021) supported the findings of Mfaume (2019) whose findings revealed that students were more informed on the use of social media for academic activities.

Hypothesis 1 shows there is significant difference in the level of utilization of the selected social media tools by geography male and female teachers.

In research question 2 the findings on the interest of utilizing social media in teaching Geography by Geography teachers indicates positive interest towards the use in teaching and learning. The findings indicated that Plunk is the most interested social media utilized by the teachers with the highest mean of 4.64 and rank first. Wikispaces Classroom, LinkedIn, WordPress, Skype I, Facebook, Edmodo, and TED-Ed are also utilized by the respondents and were rank 2nd, 3rd, 4th, 5th, 6th 7th and 8th respectively. On the contrary, the table shows that the respondents in this population were not interested in utilizing Twitter and Blackboard for teaching and learning mean response and standard deviation of the social media networking site platform available for teaching and learning. The decision means of 2.50 and above is considered to be aware, while the mean rank of below 2.50 is not aware. Therefore, the grand mean rank 3.662 shows that the Geography Teachers were interested in social media tools for teaching and learning process among the senior secondary schools in Niger State. In Hypothesis 2 there is no

significant difference between the level of interest of the selected social media tools by geography male and female teachers.

In research question 3 the findings indicated that respondents have most positive attitude on the social media utilization by the teachers. Adetayo *et al.* (2022) supported the findings of the present study, whose findings showed that the millennials have a positive attitude towards the usage of SMDs for social activities but a negative attitude for using these devices for academic purposes. The third hypothesis which states the attitude of Geography teachers towards the utilization of social media stated no significant difference in the attitude of male and female students towards the utilization in the teaching and learning of Geography among male and female teachers in secondary schools. Etuk *et al.* (2013) whose findings was in support of Adetayo *et al.* (2022) that the way students' perceive their teachers' in terms of knowledge of mathematics contents, communication ability, teaching methods and classroom management skills has a significant relationship with students' attitude towards mathematics. When the students' perception of their teachers' characteristics is low, students' attitude towards mathematics tends to be negative. The finding showed there is a significant difference between male and female geography teachers on social media tools mostly utilized for the teaching and learning process in Niger State, there is significant difference between the level of attitude of male and female teachers towards the use of the various social media tools.

Hypothesis 3: there is significant difference between the level of attitude of male and female teachers towards the use of the various social media tools

The findings in Research question 4 indicated that respondents mostly utilized Blackboard social media by the teachers with the highest mean rank of 3.46 and rank first. Facebook, WordPress, and Twitter are also utilized by the respondents and were rank 2nd, 3rd, and 4th respectively. On the contrary, the table shows that the respondents in this population do not utilized Plunk, Skype I, TED-Ed, Edomodo, Linkedin and Wikispaces Classroom social media for teaching and learning mean rank response and standard deviation of the social media networking site platform available for teaching and learning. The decision means rank of 2.50 and above is considered to have utilized the social media tools, while the mean of below 2.50 is considered to have not utilized the

social media tools. Therefore, the grand mean rank 2.401 shows that the Geography Teachers have not utilized social media tools towards teaching and learning process among the senior secondary schools in Niger State.

CHAPTER FIVE

5.0 CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

Based on the findings from the analysis of the data collected for this study, the following conclusions are made:

- ❖ Geography teachers were not aware of utilizing social media platform for teaching and learning.
- ❖ Geography teachers show high level of interest towards the utilization of social medial platform for teaching and learning.
- ❖ Geography teachers indicate positive attitude towards the utilization of social media platforms towards teaching and learning.
- ❖ Geography teachers do not utilized social media platform for teaching and learning

5.2 Recommendations

Based on the findings of this study, the following recommendations are made:

- ❖ School administrators should ensure that seminars, lectures and trainings are organized for geography teachers to increase their level of awareness about social media.
- ❖ Governments and educational stakeholders should help to encourage geography teachers pick interest in the utilization of social media tools for teaching by providing enabling environment and other necessary things needed by the teachers.
- ❖ Geography teachers should be encouraged by government and other educational stakeholders to have a positive attitude towards the use of social media by making available more practical ways to ensure this.
- ❖ Seminars, symposium, lectures etc will further open up teachers understanding to the benefits of utilizing social media for teaching.

5.3 Contributions of the Study to Knowledge

The study has contributed to knowledge in the following ways:

- ❖ If Geography teachers' have no awareness, interest and attitude towards the use of social media in teaching and learning of Geography in secondary schools, the students' performance may not have improved tremendously. The students' will feel discourage on how the subject will be taught.
- ❖ Geography teachers with positive attitude in the use of social media in teaching Geography will integrate different methods of teaching during teaching process for better understanding.
- ❖ The awareness of Geography teachers in the use of social media will arouse the interest of the students towards learning Geography.
- ❖ Geography teachers' interest in the use of social media in teaching and learning Geography enable professional knowledge and skill to bring about effective teaching and learning and thereafter results in effective use of social media implementation.

5.4 Suggestions for Further Studies

The following suggestions were made for further studies in this area.

1. Replication of the study using other parts of the states or Local Government Area to determine the use of Social media and attitude of Geography teachers' to the social media implementation in secondary schools.
2. Studies can be carried out to investigate the perception and attitude of both Geography teachers and students on social media implementation in secondary school or in any other science subject.

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APPENDIX A

Awareness

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	5	100.0
	Excluded ^a	0	.0
	Total	5	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.781	5

Interest

Reliability

[DataSet5]

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	5	100.0
	Excluded ^a	0	.0
	Total	5	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.851	5

Attitude

Reliability

Scale: ALL VARIABLES

Case Processing Summary

		N	%
Cases	Valid	5	100.0
	Excluded ^a	0	.0
	Total	5	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics

Cronbach's Alpha	N of Items
.812	5

APPENDIX B



**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF EDUCATIONAL TECHNOLOGY**

Dear Sir/Madam,

Instrument Validation Form

The bearer is a student of the above named University and Department. She/he is conducting a research and you have been selected as one of those with requisite expertise to validate his/her instrument. Kindly grant him/her all necessary assistance to make the exercise a success.

Your competency and expertise was considered as factors that will serve to improve the quality of his/her research instrument. We therefore crave for your assistance in validating the instrument. The completion of the form serves as evidence that the student actually validated the instrument

Thanks for your anticipated assistance.

GENERAL
Dept of Educational Technology
Fed. University of Technology

15 NOV 2021

P.M.B. 65 Minna, Niger State

Sign:

Dr. C.S. Tukuru

Head of Department (Signature, Date & Official Stamp)

Student's Surname *Y. LINDSA* *ZARONS* Other Names *LENN*

Registration Number *AT/ED/SS/11/2019* Programme *AT: T.E.H*

Title of the Instrument *Awareness, Interest and attitude of Geography Teachers towards social media utilization (AIAGITSAU)*

ATTESTATION SECTION

Summary of the Remark on the Instrument *The instrument is good and appropriate for the interested study.*

I hereby attest that the above named student brought his instrument for validation

Name of Attester *Dr. Anthony Anidi*

Designation *Senior Lecturer (SL)*

Name and Address of Institution *Federal University of Technology, Minna*

Phone Number *08036153265* E-Mail *anthonyanidi@futm.ac.ng*

Please comment on the following

1. Appropriateness of the instrument for the purpose it's design for.....
The instrument is appropriate for the purpose of the study.
2. Clarity and simplicity for the level of the language used.....
The language employed is simple and clear for the respondents.
3. Suability for the level of the targeted audience.....
The instrument is good for the targeted audience.
4. The extent in which the items cover the topic it meant to cover.....
The items have covered the topic its meant to cover.
5. The structuring of the Questionnaire.....
Good
6. Others (grammatical errors, spelling errors and others).....
Nil
7. General overview of the Instrument.....
Satisfactory

Suggestions for improving the quality of the Instrument

1.
2.
3.
4.
5.

Name of Validator: Dr. ANITHA ANSARI
Area of Specialization: Educational Technology
Name of Institution: FET, MANWA Designation: Senior Lecturer
Signature: [Signature] Date: 02-12-2021

Thank You



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF EDUCATIONAL TECHNOLOGY

Dear Sir/Madam,

Instrument Validation Form

The bearer is a student of the above named University and Department. She/he is conducting a research and you have been selected as one of those with requisite expertise to validate his/her instrument. Kindly grant him/her all necessary assistance to make the exercise a success.

Your competency and expertise was considered as factors that will serve to improve the quality of his/her research instrument. We therefore crave for your assistance in validating the instrument. The completion of the form serves as evidence that the student actually validated the instrument

Thanks for your anticipated assistance.

GENERAL
Dept of Educational Technology
Fed. University of Technology

Dr. C.S. Tukuru

15 NOV 2021

P.M.B. 65 Minna, Niger State

Sign: [Signature]

Head of Department (Signature, Date & Official Stamp)

Student's Surname: YUNUSA ZAINAB Other Names: LEMU

Registration Number: MTECH/STET/12018/9307 Programme: M.TECH

Title of the Instrument: Awareness, interest and attitude of Geography Teachers towards social media utilization (AMATSAM)
ATTESTATION SECTION

Summary of the Remark on the Instrument: This is an improved version of the existing Questionnaire assisted by me on 18/11/2020

I hereby attest that the above named student brought his instrument for validation

Name of Attester: Dr. D.C. Fada

Designation: Lecturer

Name and Address of Institution: F.U.T. Minna

Phone Number: E-Mail: facstaff@futa.edu.ng

Please comment on the following

1. Appropriateness of the instrument for the purpose it's design for... *Not bad but can be improved upon*
2. Clarity and simplicity for the level of the language used... *Clear and simple*
3. Suability for the level of the targeted audience... *Suitable*
4. The extent in which the items cover the topic it meant to cover... *Adequately*
5. The structuring of the Questionnaire... *Not bad subject to improve and printed out*
6. Others (grammatical errors, spelling errors and others)... *Minimal*
7. General overview of the Instrument... *Improved changed and my suggestions will improve it for the*

Suggestions for improving the quality of the Instrument

1. I suggest you consult literature further on
2. logical/ relevant statement in instrument
3. and attached
4. Also be consistent in the choice of
5. positively/negatively worded statements

Name of Validator... *Dr. O. C. Faleke*

Area of Specialization... *Educational Technology*

Name of Institution... *FUT, Minna* Designation... *Lecturer*

Signature... *Jalany* Date... *26/11/2021*

Thank You

APPENDIX C



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF EDUCATIONAL TECHNOLOGY

Dear Sir/Madam,

Instrument Validation Form

The bearer is a student of the above named University and Department. She/he is conducting a research and you have been selected as one of those with requisite expertise to validate his/her instrument. Kindly grant him/her all necessary assistance to make the exercise a success.

Your competency and expertise was considered as factors that will serve to improve the quality of his/her research instrument. We therefore crave for your assistance in validating the instrument. The completion of the form serves as evidence that the student actually validated the instrument

Thanks for your anticipated assistance.

Dr. C.S. Tukur

GENERAL
Dept of Educational Technology
Fed. University of Technology
15 NOV 2021
P.M.B. 65 Minna, Niger State
Sign. [Signature]

Head of Department (Signature, Date & Official Stamp)

Student's Surname YINUSA ZAINAB Other Names LEATU

Registration Number M.TECH/ET/2018/2027 Programme M.TECH

Title of the Instrument

ATTESTATION SECTION

Summary of the Remark on the Instrument The instrument to a great extent okay.

I hereby attest that the above named student brought his instrument for validation

Name of Attester Mal. Mustafa Toyaku

Designation Teacher

Name and Address of Institution Govt. Girls' Day Senior College, Bida, Road Minna

Phone Number 0726470857 E-Mail mustafatoyaku2@gmail.com

Please comment on the following

1. Appropriateness of the instrument for the purpose it's design for. *All right but can be improved as per*
2. Clarity and simplicity for the level of the language used. *Clear and simple*
3. Suitability for the level of the targeted audience. *Suitable*
4. The extent in which the items cover the topic it meant to cover. *Above average*
5. The structuring of the Questionnaire. *Above average but subject to improvement*
6. Others (grammatical errors, spelling errors and others). *Very minimal*
7. General overview of the Instrument. *Seen many ways for improvement and my suggestions can be used for that*

Suggestions for improving the quality of the Instrument

I suggest you should be consistent in the

Name of Validator. *Mr. Muntal's Tejaku*

Area of Specialization. *Geography Education*

Name of Institution. *G.G.D.S.S. Bessa, B.S. Dist. Assam* Designation. *Teacher*

Signature. *Muntal's* Date. *10-01-2022*

Thank You

APPENDIX D



FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF EDUCATIONAL TECHNOLOGY

Dear Sir/Madam,

Instrument Validation Form

The bearer is a student of the above named University and Department. She/he is conducting a research and you have been selected as one of those with requisite expertise to validate his/her instrument. Kindly grant him/her all necessary assistance to make the exercise a success.

Your competency and expertise was considered as factors that will serve to improve the quality of his/her research instrument. We therefore crave for your assistance in validating the instrument. The completion of the form serves as evidence that the student actually validated the instrument

Thanks for your anticipated assistance.

GENERAL
Dept of Educational Technology
Fed. University of Technology

15 NOV 2021

P.M.B. 65 Minna, Niger State

Sign: [Signature]

Dr. C.S. Tukur

Head of Department (Signature, Date & Official Stamp)

Student's Surname... YINUSA

Other Names... ZAINAB

Registration Number... M.TECH/17/2009/1307, Programme... MASTER of Edu Technology

Title of the Instrument... Awareness, Interest and attitude of Geography Teachers towards social media utilization.

ATTESTATION SECTION

Summary of the Remark on the Instrument... This is okay for your research work

I hereby attest that the above named student brought his instrument for validation

Name of Attester... DR. MUHAMMAD IBRAHIM SAKI

Designation... SENIOR LECTURER

Name and Address of Institution... DEPT. OF COUNSELLING, P.O. TBUL

Phone Number... 08071573250, E-Mail... mksamuel@yahoo.com

Please comment on the following

1. Appropriateness of the instrument for the purpose it's design for. *The instrument is appropriate for the purpose it was designed to achieve*
2. Clarity and simplicity for the level of the language used. *The language used was clear and simplified*
3. Suitability for the level of the targeted audience. *The instrument is suitable for the targeted audience*
4. The extent in which the items cover the topic it meant to cover. *Very high*
5. The structuring of the Questionnaire. *The instrument is well structured according to the questionnaire*
6. Others (grammatical errors, spelling errors and others). *Very minimal*
7. General overview of the Instrument. *Very ok*

Suggestions for improving the quality of the Instrument

1. *Other common forms of Social Media that*
2. *forms used by students should be*
3. *included for wider coverage*
4.
5.

Name of Validator *DR. MOHAMMED IRATHOMI RAEI*
Area of Specialization *EDUCATIONAL PSYCHOLOGY*
Name of Institution *Dept. of LEARNING PSY, IPB* Designation *SENIOR LECTURER*
Signature *M. Irathomi* Date *11/01/2022*

Thank You

APPENDIX E

**DEPARTMENT OF PLANNING RESEARCH AND STATISTICS
NIGER STATE MINISTRY OF EDUCATION, MINNA
NUMBER OF GEOGRAPHY TEACHERS IN PUBLIC SENIOR SECONDARY SCHOOLS BY SECTOR & LGA**


S/N	NAME OF SCHOOL	TOWN	LGA	LOCATION (URBAN OR RURAL)	SECTOR	AVAILABLE GEOGRAPHY TEACHERS
1	DENDO SECONDARY SCHOOL, AGAIE	Agaié	Agaié	Rural	JS & SS	2
2	MALLAM MUHAMMADU BABA DAY SECONDARY SCHOOL	Agaié	Agaié	Urban	JS & SS	2
3	MUHAMMADU BELLO DAY SECONDARY SCHOOL	Tagaji	Agaié	Rural	JS & SS	1
4	COLLEGE OF ART & ISLAMIC STUDIES, BIDA	Bida	Bida	Urban	JS & SS	1
5	DAY SECONDARY SCHOOL EYAGI, BIDA	Bida	Bida	Urban	JS & SS	3
6	GOVERNMENT COLLEGE BIDA	Bida	Bida	Urban	JS & SS	3
7	GOVERNMENT DAY SECONDARY SCHOOL BANMA	Bida	Bida	Urban	JS & SS	1
8	GOVERNMENT GIRLS DAY SECONDARY SCHOOL	Bida	Bida	Urban	JS & SS	2
9	GOVERNMENT MODEL SCIENCE COLLEGE, BIDA	Bida	Bida	Urban	JS & SS	5
10	GOVERNMENT SCIENCE COLLEGE (BTC) BIDA	Bida	Bida	Urban	JS & SS	3
11	GOVERNMENT GIRLS SCIENCE COLLEGE BIDA	Bida	Bida	Urban	SS ONLY	2
12	GOVERNMENT SECONDARY SCHOOL, BABANNA	Babanna	Borgu	Rural	JS & SS	1
13	GOVERNMENT SECONDARY SCHOOL NEW BUSSA	New-Bussa	Borgu	Urban	SS ONLY	1
14	ALHAJI MOHAMMED MUSA KIGERA SCIENCE COLLEGE, NEW-BUSSA	New-Bussa	Borgu	Urban	SS ONLY	2
15	ABDULLAHI DADA SECONDARY SCHOOL MAIKUNKELE	Maikunkele	Bosso	Urban	JS & SS	1
16	DAY SECONDARY SCHOOL MAIKUNKELE 'A'	Maikunkele	Bosso	Urban	JS & SS	2
17	GOVERNMENT ARMY DAY SECONDARY SCHOOL	Chanchaga	Bosso	Urban	JS & SS	4
18	BOSSO SECONDARY SCHOOL MINNA	Shango	Bosso	Urban	JS & SS	5
19	HILLTOP MODEL SECONDARY SCHOOL	Maitunbi, Minna	Bosso	Urban	JS & SS	4
20	NIGER STATE SCHOOL FOR SPECIAL EDUCATION MINNA	Bosso	Bosso	Urban	JS & SS	1
21	DAY SECONDARY SCHOOL MAITUMBI MINNA	Maitunbi, Minna	Bosso	Urban	JS & SS	3
22	SHEIKH MUHAMMAD SANBO CAIS TUDUN FULANI MINNA	Tudun-Fulani, Minna	Bosso	Urban	JS & SS	5
23	DAY SECONDARY SCHOOL GBADA GIDAN-MONGORO	Mongoro	Bosso	Rural	JS & SS	2
24	GOVERNMENT DAY SECONDARY SCHOOL BEJI	Beji	Bosso	Rural	JS & SS	2
25	DAY SECONDARY SCHOOL SHATA	Shatta	Bosso	Rural	JS & SS	1
26	MARYAM BABANGIDA GIRLS SCIENCE COLLEGE, BOSSO	Bosso-Minna	Bosso	Urban	SS ONLY	4
27	DAY SECONDARY SCHOOL LIMAWA	Limawa	Chanchaga	Urban	JS & SS	1
28	WOMAN DAY COLLEGE	Minna	Chanchaga	Urban	JS & SS	2
29	ZARUMAI MODEL SCHOOL, MINNA	Minna	Chanchaga	Urban	JS & SS	4
30	GOVERNMENT GIRLS SECONDARY SCHOOL (OLD AIRPORT) MINNA	Minna	Chanchaga	Urban	JS & SS	7
31	AHMADU BAHAGO SECONDARY SCHOOL MINNA	Minna	Chanchaga	Urban	JS & SS	5

32	FR. O'CONNELL SCIENCT. COLLEGE, MINNA	Minna	Chanchaga	Urban	JS & SS	4
33	GOVERNMENT GIRLS SCIENCE COLLEGE, BOSSO ROAD	Minna	Chanchaga	Urban	JS & SS	2
34	GOVERNMENT DAY SCIENCE COLLEGE, TUNGA	Tunga	Chanchaga	Urban	JS & SS	6
35	GOVERNMENT DAY SECONDARY SCHOOL ENAGI	Enagi	Edati	Rural	JS & SS	1
36	DAY SECONDARY SCHOOL GBANGBAN	Gbangban	Edati	Rural	JS & SS	1
37	GOVERNMENT SECONDARY SCHOOL GONAGI	fazhi	Edati	Rural	JS & SS	1
38	GOVERNMENT DAY SECONDARY SCHOOL GBODOTI	Gbodoti	Edati	Rural	JS & SS	1
39	DAY SECONDARY SCHOOL KATAMBA BOLOGI	Katamba-Bologi	Edati	Rural	JS & SS	1
40	GOVERNMENT DAY SECONDARY SCHOOL SAKPE	Sakpe	Edati	Rural	JS & SS	1
41	GOVERNMENT GIRLS SECONDARY SCHOOL, LEMU	Lemu	Gbako	Urban	JS & SS	1
42	GOVERNMENT DAY SECONDARY SCHOOL BATAKO	Batako	Gbako	Rural	JS & SS	1
43	GOVERNMENT SECONDARY SCHOOL, LEMU	Lemu	Gbako	Urban	JS & SS	1
44	DAY SECONDARY SCHOOL, GBADAFU	Gbadafu	Gbako	Rural	JS & SS	1
45	DAY SECONDARY SCHOOL, EDOZHIGI	Edozhigi	Gbako	Rural	JS & SS	1
46	GOVERNMENT DAY SECONDARY SCHOOL, KABO	Kabo	Gurara	Rural	JS & SS	1
47	GOVERNMENT DAY SECONDARY SCHOOL GAWU-BABANGIDA	Gawu-Babangida	Gurara	Urban	JS & SS	2
48	GOVERNMENT DAY SECONDARY SCHOOL LAMBATA	Lambata	Gurara	Urban	JS & SS	1
49	GOVERNMENT DAY SECONDARY SCHOOL DIKO	Diko	Gurara	Urban	JS & SS	3
50	GOVERNMENT SCIENCE COLLEGE IZOM	Izom	Gurara	Urban	SS ONLY	3
51	GOVERNMENT DAY SECONDARY SCHOOL BAKEKO	Bakeko	Katcha	Rural	JS & SS	1
52	GOVERNMENT DAY SECONDARY SCHOOL CHECHE	Cheche	Katcha	Rural	JS & SS	1
53	DAY SECONDARY SCHOOL KATAEREGI	Kataeregi	Katcha	Rural	JS & SS	2
54	GOVERNMENT DAY SECONDARY SCHOOL KATCHA	Katcha	Katcha	Rural	JS & SS	1
55	GOVERNMENT SECONDARY SCHOOL KANSANAGI	Kansanagi	Katcha	Rural	JS & SS	1
56	GOVERNMENT SECONDARY SCHOOL BADEGGI	Badeggi	Katcha	Rural	JS & SS	1
57	ISLAMIC EDUCATION CENTRE KATCHA	Katcha	Katcha	Rural	SS ONLY	1
58	GOVERNMENT GIRLS DAY SECONDARY SCHOOL	Kontagora	Kontagora	Urban	JS & SS	2
59	MUAZU IBRAHIM COMMERCIAL SECONDARY SCHOOL	Kontagora	Kontagora	Urban	JS & SS	2
60	DAY SECONDARY SCHOOL UNGUWAN NASSARAWA	Kontagora	Kontagora	Urban	JS & SS	1
61	GOVERNMENT DAY SECONDARY SCHOOL KONTAGORA	Kontagora	Kontagora	Urban	JS & SS	1
62	NAGWAMATSE COLLEGE OF ARTS AND ISLAMIC STUDIES	Kontagora	Kontagora	Urban	JS & SS	1
63	GOVERNMENT GIRLS SCIENCE UNITY COLLEGE	Kontagora	Kontagora	Urban	JS & SS	2
64	GOVERNMENT SCIENCE COLLEGE, KONTAGORA	Kontagora	Kontagora	Urban	JS & SS	3
65	GOVERNMENT BOYS DAY SECONDARY SCHOOL LAPAI	Lapai	Lapai	Urban	JS & SS	1
66	GOVERNMENT GIRLS DAY SECONDARY SCHOOL LAPAI	Lapai	Lapai	Urban	JS & SS	1
67	MUHAMMADU KOBO SECONDARY SCHOOL LAPAI	Lapai	Lapai	Urban	JS & SS	2
68	GOVERNMENT SECONDARY SCHOOL GULU	Gulu	Lapai	Rural	JS & SS	1
69	UMARU BAGO SECONDARY SCHOOL SHAKU	Shaku	Lapai	Rural	JS & SS	1

70	GOVERNMENT SCIENCE COLLEGE, GULU	Gulu	Lapai	Rural	SS ONLY	2
71	COLLEGE OF ARTS & ISLAMIC SCHOOL SANTALI	Santali	Lavun	Rural	JS & SS	1
72	DAY SECONDARY SCHOOL KUTIGI	Kutigi	Lavun	Urban	JS & SS	2
73	DAY SECONDARY SCHOOL DABBAN	Dabban	Lavun	Rural	JS & SS	1
74	DAY SECONDARY SCHOOL JIPAN	Jipan	Lavun	Rural	JS & SS	1
75	DAY SECONDARY SCHOOL BATATI	Batati	Lavun	Rural	JS & SS	1
76	COMMUNITY TECHNICAL & COMMERCIAL COLLEGE, VUNCHI	Vunchi	Lavun	Rural	JS & SS	2
77	GOVERNMENT SENIOR SECONDARY SCHOOL JIMA	Jima	Lavun	Rural	JS & SS	1
78	ARMY DAY SCIENCE COLLEGE, BIDA	Bida	Lavun	Urban	JS & SS	2
79	GOVERNMENT SCIENCE COLLEGE DOKO	Doko	Lavun	Rural	JS & SS	2
80	JUSTICE IDRIS LEGBO SCIENCE COLLEGE KUTIGI	Kutigi	Lavun	Urban	SS ONLY	3
81	GOVERNMENT DAY SECONDARY SCHOOL NASSARAWA KAINJI	Nassaraw-Kainji	Magama	Rural	JS & SS	1
82	COMPREHENSIVE SECONDARY SCHOOL IBETO	Ibeto	Magama	Rural	JS & SS	1
83	DAY SECONDARY SCHOOL SALKA	Salka	Magama	Rural	JS & SS	1
84	DAY SECONDARY SCHOOL GULBIN BOKA	Gulbin-Boka	Mariga	Rural	JS & SS	1
85	DAY SECONDARY SCHOOL MARIGA	Mariga	Mariga	Rural	JS & SS	1
86	DAY SECONDARY SCHOOL BOBI	Bobi	Mariga	Rural	JS & SS	1
87	GOVERNMENT SCIENCE COLLEGE KOTONKORO	Kotonkoro	Mariga	Rural	JS & SS	1
88	GOVERNMENT DAY SECONDARY SCHOOL SAHO RAMI	Saho-Rami	Mashegu	Rural	JS & SS	1
89	GOVERNMENT DAY SECONDARY SCHOOL IBBI	Ibbi	Mashegu	Rural	JS & SS	1
90	DAY SECONDARY SCH KABOJI	Kaboji	Mashegu	Rural	JS & SS	1
91	EMIRATE SECONDARY SCHOOL MASHEGU	Mashegu	Mashegu	Rural	JS & SS	1
92	DAY SECONDARY SCHOOL, RABBA	Rabba	Mokwa	Rural	JS & SS	1
93	GOVERNMENT SECONDARY SCHOOL, GBARA	Gbara	Mokwa	Rural	JS & SS	1
94	GOVERNMENT SECONDARY SCHOOL, KPAKI	Kpaki	Mokwa	Rural	JS & SS	1
95	GOVERNMENT SECONDARY SCHOOL, KUDU	Kudu	Mokwa	Rural	JS & SS	1
96	HAKIMI ALIYU DAY SECONDARY SCHOOL, MOKWA	Mokwa	Mokwa	Urban	JS & SS	1
97	GOVERNMENT VOCATIONAL TRAINING CENTRE, JEBBA-NORTH	Jebba-North	Mokwa	Rural	JS & SS	1
98	DAY SECONDARY SCHOOL FUKA	Fuka	Munya	Rural	JS & SS	1
99	DAY SECONDARY SCHOOL DANDAUDU	Dandaudu	Munya	Rural	JS & SS	1
100	ABUBAKAR DADA SENIOR SECONDARY SCHOOL	Paiko	Paikoro	Rural	JS & SS	3
101	GOVERNMENT GIRLS SECONDARY SCHOOL KAFFIN KORO	Kaffin-Koro	Paikoro	Rural	JS & SS	2
102	DAY SECONDARY SCHOOL KWAKUTI	Kwakuti	Paikoro	Rural	JS & SS	1
103	DAY SECONDARY SCHOOL KAFFIN KORO	Kaffin-Koro	Paikoro	Rural	JS & SS	2
104	SENIOR SECONDARY SCHOOL GABADNA	Gabadna	Paikoro	Rural	JS & SS	1
105	DAY SECONDARY SCHOOL GWAM	Gwam	Paikoro	Rural	JS & SS	1
106	SENIOR SECONDARY SCHOOL MADAKA	Madaka	Rafi	Rural	JS & SS	1
107	DAY SECONDARY SCHOOL TUNGAN BAKO	Tungan-Bako	Rafi	Rural	JS & SS	1

108	GOVERNMENT SCIENCE COLLEGE, KAGARA	Kagara	Rafi	Urban	SS ONLY	3
109	GOVERNMENT GIRLS SCIENCE COLLEGE, TUNGA MAGAJIYA	Tungan-Magajiya	Rijau	Rural	JS & SS	2
110	DAY SECONDARY SCHOOL SHAKWATU	Shakwatu	Shiroro	Rural	JS & SS	1
111	GOVERNMENT DAY SECONDARY SCHOOL ERENA	Erena	Shiroro	Rural	JS & SS	1
112	DAY SECONDARY SCHOOL CHIRI	Chiri	Shiroro	Rural	JS & SS	1
113	WOMEN DAY COLLEGE KUTA	Kuta	Shiroro	Urban	JS & SS	1
114	DAY SECONDARY SCHOOL PINA	Pina	Shiroro	Rural	JS & SS	1
115	DAY SECONDARY SCHOOL SHIRORO NEPA	Shiroro	Shiroro	Rural	JS & SS	1
116	DAY SECONDARY SCHOOL, TUMTUM-KUTA	Tumtum-Kuta	Shiroro	Urban	JS & SS	2
117	DAY SECONDARY SCHOOL KOBWA KUTA	Kubwa-Kuta	Shiroro	Rural	JS & SS	1
118	BODO SECONDARY SCHOOL KUTA	Kuta	Shiroro	Rural	JS & SS	1
119	GIRLS DAY ESCONDARY SCHOOL, KUTA	Kuta	Shiroro	Urban	JS & SS	1
120	GOVERNMENT SECONDARY SCHOOL ALLAWA	Allawa	Shiroro	Rural	JS & SS	1
121	GOVERNMENT SCIENCE COLLEGE KUTA	Kuta	Shiroro	Urban	JS & SS	2
122	DAY SECONDARY SCHOOL GWADA	Gwada	Shiroro	Urban	JS & SS	1
123	COMMUNITY SECONDARY SCHOOL, SULEJA	Suleja	Suleja	Urban	JS & SS	1
124	GOVERNMENT DAY SECONDARY SCHOOL KWAMBA	Kwamba	Suleja	Urban	JS & SS	1
125	GIRLS DAY SECONDARY SCHOOL	Suleja	Suleja	Urban	JS & SS	1
126	GOVERNMENT SCIENCE COLLEGE SULEJA	Suleja	Suleja	Urban	JS & SS	2
127	GOVERNMENT MODEL SCIENCE COLLEGE	Suleja	Suleja	Urban	JS & SS	2
128	GOVERNMENT DAY SECONDARY SCHOOL GAURAKA	Gauraka	Tafa	Urban	JS & SS	1
129	GOVERNMENT DAY SECONDARY SCHOOL SABON WUSE	Sabon-Wuse	Tafa	Rural	SS ONLY	1
130	GOVERNMENT DAY SECONDARY SCHOOL, LOKOGOMA	Lokogoma	Wushishi	Rural	JS & SS	1
131	GOVERNMENT SECONDARY SCHOOL, WUSHISHI	Wushishi	Wushishi	Urban	JS & SS	1
132	GOVERNMENT SECONDARY SCHOOL AKARE	Akare	Wushishi	Urban	JS & SS	1
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SOURCE: ANNUAL SCHOOL CENSUS (ASC) 2020/2021 REPORT


 Sign...
 DIRECTOR PRS
 MINISTRY OF EDUCATION
 MINNA, NIGER STATE
 Date... 16/11/2022

APPENDIX F

**FEDERAL UNIVERSITY OF TECHNOLOGY, MINNA
SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION
DEPARTMENT OF EDUCATIONAL TECHNOLOGY**

Awareness, Interest and Attitude of Geography Teachers towards Social Media Utilization” (AIAGTSMU)

Dear Respondents,

The researcher is a postgraduate student of the above named institution conducting a research on Social-media for teaching. The researcher is carrying out a research on “Awareness, Interest and Attitude of Geography Teachers towards the Utilization of Social-Media for teaching in Senior Secondary Schools in Niger State” in your school. The information you supply will be treated with utmost confidentiality. Please assist the researcher with the necessary information that will guide and make the research work acceptable.

Instruction: This questionnaire has four sections (A, B, C, D & E). Please read the items in each of these sections and tick (✓) where appropriate.

SECTION A: PERSONAL DATA

- 1. Name of School.....
- 2. Gender: Male () Female ()

SECTION B

Please tick (✓) in the right column by indicating the awareness of each of the following Social-media Tools.

Use the key provided below

A: Aware

NA: Not Aware

Table 1.1: Awareness of some selected Social-media Tools

S/N	ITEMS	A	NA
1	Facebook		
2	Twitter		
3	LinkedIn		
4	Skype		
5	Edmodo		
6	TED-Ed		
7	WordPress		
8	Blackboard		
9	Wikispaces Classroom		
10	Plurk		

SECTION C

Please tick () in the right column by indicating your rate of use of the following social media.

Use the key provided below

U: Utilize

NU: Not Utilize

MU: Mostly Utilize

PU: Partially Utilize

Table 1.2: Use of Social-media Tools

S/N	ITEMS	U	NU	MU	PU
1	Facebook				
2	Twitter				
3	LinkedIn				
4	Skype				
5	Edmodo				
6	TED-Ed				
7	WordPress				
8	Blackboard				
9	Wikispaces Classroom				
10	Plurk				

SECTION D

Please tick () the right column by indicating your Interest of Social-media tools.

Use the key provided below

SA: Strongly Agree

A: Agree

UD: Undecided

D: Disagree

SD: Strongly Disagree

Table 1.3: Interest of Social-media tools

S/N	STATEMENT	SA	A	UD	D	SD
1	I prefer using social-media to pass knowledge to my students.					
2	I detest using any form of social-media for teaching.					
3	I like being on social media platforms.					
4	I usually get data just to be on social media.					
5	I enjoy engaging my students on social media for learning purpose.					
6	I can remember when last I accessed any social media.					
7	I am an advocate of using social media for teaching.					
8	I do not like social media because of the distraction it causes.					
9	Social media exposes one to new ideas					
10	It is always possible to download materials					

SECTION E

Please tick like this (✓) in the right column by indicating your Attitude towards the use of Social-media Tools.

Use the key provided below

SA: Strongly Agree

A: Agree

UD: Undecided

D: Disagree

SD: Strongly Disagree

Table 1.4: Attitude towards the use of Social-media Tools

S/N	STATEMENT	SA	A	UD	D	SD
1	I end up getting distracted when using social-media.					
2	I am always reluctant to act when I hear of social-media.					
3	I am enthusiastic about social-media					
4	I detest seeing students use social media for anything.					
5	I usually find excuses for not using social-media.					
6	I prefer social-media for chatting than for					

	teaching.					
7	I uses social-media to have access to information					
8	Social-media exposes me to new ideas					
9	Everybody has access to media					
10	Do we have access to media in villages?					