The relationship between social media and academic performance: The case of high school students in a Nigerian private school

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(Student's Number: 205520409)

Submitted

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Doctor of Philosophy

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The

> relationship between social media and academic   **16**
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Nigerian private school By Roselyn Lebari Ngelale

> **Submitted in fulfilment of the requirements for the   210**
> **degree of Doctor of** philosophy (Curriculum studies)
> **University of** KwaZulu-Natal **School of Education**

Studies Edgewood Campus 2018 Chapter 1: Background to the Study

> **The single biggest problem facing education** in Nigeria   **113**
> **today is that our digital immigrant instructors, who**
> **speak an outdated language (that of the pre-digital age), are**
> **struggling to teach a population that speaks an entirely new**
> **language**

(Weiss & Hanson-Baldauf, 2008). 1.1 Introduction Many decades ago,
what students took to school for academic activities was tablets of wood

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Declaration of originality

I, Roselyn Lebari Ngelale declare that this study: "The relationship between social media and academic performance: The case of high school students in a Nigerian private school" is my own work, and that all sources I have used or quoted have been indicated and duly acknowledged by means of complete references.

Roselyn L. Ngelale

University of KwaZulu-Natal

Faculty of Education

2018

Dedication

This study is dedicated to the Almighty GOD, my heavenly father in whom I am complete, for without HIM I can do nothing.

Acknowledgements

Abstract

This research explores in detail the relationship between social media and academic performance of students, using a case study approach with a sample of 12 Nigerian students.

This study was driven by the perception that students immersed themselves in social media activities to the detriment of their academic function. The qualitative data generated from emic accounts of participants revealed three factors that may address the inconsistencies found in previous studies. The first is tied to the longstanding historical and socio-cultural practices of schools that informs curricula definition of academic activities. The traditional definition of academic activity is narrow, and disregards digital natives' definition of what is considered to be academic activity, thus hindering their performance. Academic performance is a relative concept; if the curriculum defines academic activity in an inclusive way, then there is a positive relationship, but if it excludes learning areas that participants find on social media and consider relevant, there is no relationship. Therefore, the relationship between social media and academic performance depends basically on the philosophy of each school and how they choose to define, interpret and implement academic activities from which academic performance is derived. Secondly, the data revealed that participants regarded a combination of both social media context and academic context as yielding more academic benefit than a single one. However, it is only when the academic instruction supports students' needs that the academic gap between both contexts is bridged. Thirdly, participants reported that social media enabled them to learn more, know more, think deeper, do more and achieve more, making them more able to adapt their knowledge and be efficient in solving academic problems.

A major concept that surfaced in the data is personal effort. Participants all attributed their academic success to hard work, meeting teachers, researching books and social media and that neither social media nor traditional settings on their own contributed to their good grades. This suggests that academic performance depends mainly on an individual student's mind-set, intrapersonal values, skills and interests. In the game of soccer, the field does not produce goals. Rather, it is the ability of players to collaborate, coordinate, perceive and utilise available spaces to their advantage. The same goes for the relationship between students' social media usage and their academic performance. This means that the value that students place on their academic activities has a significant influence on how they use social media.

13 January 2017

Mrs Roselyn L Ngelale 205520409
School of Education
Edgewood Campus

Dear Mrs Ngelale

Protocol reference number: HSS/1496/016D
Project title: An exploration of the relationship between students' social media use and academic performance: The case of high school students in a Nigerian private school.

Full Approval – Expedited Application
This letter serves to notify you that your application in connection with the above has now been granted full approval.

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project; Location of the Study, Research Approach/Methods must be reviewed and approved through an amendment /modification prior to its implementation.   Please quote the above reference number for all queries relating to this study. Please note: Research data should be securely stored in the discipline/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

....
Dr Shenuka Singh (Chair)

/px

cc Supervisor: Prof Nyna Amin
cc Academic Leader Research: Dr SB Khoza
cc School Administrator: Ms B Bhengu-Mnguni, Mbalenhle Ngcobo, Philisiwe Ncayiyana, and Tyzer Khumalo

18 August 2017

Mrs Roselyn L Ngelale 205520409
School of Education
Edgewood Campus

Dear Mrs Ngelale

Protocol reference number: HSS/1496/016D
Project title: An exploration of the relationship between students' social media use and academic performance: The case of high school students in a Nigerian private school.

Full approval notification- Amendment application

This letter serves to notify you that your application for an amendment dated 8 June 2017, has now been approved as follows.

1.   **For face-to-face interviews using a sample in the already approved protocol.**

Any alterations to the approved research protocol i.e. Questionnaire/Interview Schedule, Informed Consent Form, Title of the Project, Location of the Study must be reviewed and approved through an amendment /modification prior to its implementation.   In case you have further queries, please quote the above reference number. PLEASE NOTE: Research data should be securely stored in the school/department for a period of 5 years.

The ethical clearance certificate is only valid for a period of 3 years from the date of issue. Thereafter Recertification must be applied for on an annual basis.

Best wishes for the successful completion of your research protocol.

Yours faithfully

Dr Shamila Naidoo (Deputy Chair)

/px

cc Supervisor: Prof Nyna Amin
cc Academic Leader Research: Dr SB Khoza
cc School Administrator: Philisiwe Ncayiyana and Tyzer Khumalo

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List of Abbreviations and Acronyms

As: Alphas

ACC: Anterior Cingulated Cortex

ACI: Anterior Cingulated insula

ADHD: Attention Deficit Hyperactivity Disorder

AP: Academic Performance

B: Betas

CA: Conversation Analysis

CBT: Computer Based Test

EI: emotional intelligence

FCT: Federal Capital Territory

GPA: Grade Point Average

IES: Internet Effect Scale

IQ: Intelligence Quotient

JAMB: Joint Admission and Matriculation Board

NSSE: National Survey of Student Engagement

NABTEB: National Business and Technical Examination Board

NECO: National Examination Council

PCs: Personal computers

PPT: paper and pencil test

SS3: Senior Secondary School 3

SE: SRL: Self-efficacy for self-regulatory learning

SE: AA: Self-efficacy for academic achievement

SM: Social Media

SSC: Sixth Sense Corrector

VO2: Volume of Oxygen

TRN: Thalamus Reticular Nucleus

WASSCE: West African Senior School Certificate Exanimation

WAEC: West African Examinations Council

Editing Certificate

Anita Kromberg

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PO Box 30043, Mayville, Durban 4058

EDITING CERTIFICATE

Roselyn Lebari Ngelale: The relationship between social media and academic performance: The case of high school students in a Nigerian private school.

I confirm that I have edited the thesis and the references for clarity, language and layout. The appendices were not edited.

I returned the Word document to the student with track changes, so the correct implementation of the changes in the text and references is the responsibility of the student.

I am a freelance editor specialising in proofreading and editing academic documents.

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BA (Psychology and Sociology), University of Pretoria, 1977

Advanced University Diploma in Adult Education (AUDIS), University of KwaZulu-Natal, 1985

Advanced University Diploma in Information Science (AUDAE), University of KwaZulu-Natal, 1995.

Anita Kromberg

22 March 2018.

Chapter 1: Background to the Study

The single biggest problem facing education in Nigeria today is that our digital immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language (Weiss & Hanson-Baldauf, 2008).

1.1 Introduction

Many decades ago, students took tablets of wood known as slate, and chalk to school for academic activities. Years later, students took with them "books and a tablet of blank paper" (Sizer, 1996, p.28). Currently, with the wide reach of the internet coupled with the speed of change accompanying the emergence of social media, technology has reached our academic institutions so that students of ages 8 to18 years old now go to school with smartphones and electronic tablets (Rideout, Foehr & Roberts, 2010). The recent proliferation of smartphones, tablets and their applications designed for novel interactions, proves that we are living in a time of 'techno-social' reality.

The world, as we know, is a giant hologram consisting of component parts known as nations that are now linked together by social media through another holographic system called the internet. The interconnectedness between nations has bridged the education and communication gap that existed prior to the emergence of social media to the extent that whatever is defined as academic knowledge in one part of the universe is holographically linked and relayed as identical images and information across the entire universe through social media within seconds (Kehoe, 1987), and students capture this information irrespective of where they are in the hologram within minutes on their smartphones. This interconnectedness has helped make social media devices very popular among secondary school students in Nigeria, which they use in a variety of ways and for various purposes. Students attach great value to social media technologies and are very conversant with the use of mobile computing devices, so have integrated them into their daily activities (Gikas & Grant, 2013). In general terms, when students and the social media meet, the result is an unending experience that makes them inseparable. Students are attached to their smartphones to the extent that it seems they can no longer function efficiently without it.

They go everywhere with it including the classroom and do almost everything from emailing, Skype, tweeting, taking pictures, watching videos and listening to music on YouTube. Amidst all of these, what is not known is whether the smartphones are 'smarter' than

students or are students smart enough to use the smartphone for the enhancement of their academic performance. Given its scale of acceptance, accessibility and minimal cost, social media promises a great deal of academic benefit as it does the thinking and correction for students. At best, "it is the opening to a new and richer culture, one that has instant global reach and enormous flexibility" (Sizer, 1996, p.28). Because they are constantly on social media (Kelm, 2011), the implications for students are profound as it is gradually reshaping what they learn, how they learn and when they choose to learn. Students see the social media as providing an opportunity to be independent as well as to explore their world and to know more as it provides access to just about everything imaginable and unimaginable. Whereas some students may not use social media for educational purposes, some perceive social media as a revolutionary platform, poised to redefine academic practices (Lewis, Pea & Rosen, 2010; Downes, 2008; Ezeah, Osogwa & Obiorah, 2013). It is also believed that these technologies are capable of making knowledge available to all, and of bringing all to knowledge through specialised connective nodes (Siemens, 2004). The potential of these tools to enhance academic performance is enormous (Hughes, 2009; Nellison, 2007), and Nigerian students are yet to be aware of such affordance (Micaiah, 2014). Social media content with ubiquitous communication capabilities create an opportunity for students to engage meaningfully in their academic functions. However, are Nigerian students aware of these opportunities? Since these technologies are evolving rapidly, are teachers equipped to keep up with the trend to be able to understand how to guide their students towards using social media for their academic gains? This qualitative study[1] is aimed at understanding the ambivalences of whether students use social media for academic purposes only, for socialising and entertainment only or both.

1.2 The problem

The popularity of, and reliance on, emergent computer-mediated communication technologies such as instant messaging, blogs, and social networks have arguably widened students' access to academic knowledge[2]. Students now learn better when they use multiple media channels (Mayer & Moreno, 2003), engaging a range of tools to support and extend cognitive memory (Vygotsky, 1978). In general, the learning pattern of Nigerian secondary school education, as is the case everywhere in the world, has changed considerably since the emergence of social media. A survey conducted by Micaiah (2014) reveals that the vast majority of Nigerian social

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[1] When I say "study", I am also referring to research as both concepts are used interchangeably throughout the study.

[2] Concepts such as 'academic knowledge', 'academic activities' and 'academic learning' are used interchangeably to mean the same thing.

media users are younger than 40 years old. Statistics available from the study shows that 45% of Nigerian students use social media. Social media has become what Nigerian students do (Kelm, 2011), making social network sites the most popular online destination in recent years (Jayarathna & Fernando, 2014). Students' engagement with social media is dominated by increased interpersonal communication by means of a device, and less of face-to-face contact. The interactivity can be seen as an addiction (Young, 2004) and therefore is beginning to raise concerns about how students are replacing physical communication skills with virtual communication. The problem that this research investigates is whether Nigerian students are using social media to support their academic function or not.

As a teacher and administrator, I grapple with the understanding of why students attach such importance to their cellular phones at the expense of their academic tasks. Feeling that I am losing control over students who disrupt class proceedings with their phones sending and receiving messages or chatting in the middle of a serious class activity, I have on several occasions seized and confiscated my students' phones. They would rather risk punishment and expulsion than to leave their phones at home. This category of students I presume do not take class activities seriously as they prefer to sit in groups, concentrating on their phone, interacting less with teachers and peers. Olufunminiyi (2015) and Ajanaku (2016) note that students are losing socio-physical communication skills in favour of 'behind-the-screen' communication, as verbal communication skills are gradually being replaced by non-verbal communication. Writing, critical thinking, comprehension and calculating skills are gradually giving way to surf, cut and paste, with automatic spelling correction depriving our students of the critical benefit of writing and spelling skills. These conditions are viewed by Akasike (2014), Ajanaku (2016) and Olufunminiyi (2015) as detrimental to students who engage with social media constantly. Pasek, More and Hargittai (2009) argue that social media has contributed tremendously towards the enhancement of students' academic performance, but Ajanaku (2016) contends that students' engagement with social media is causing them to gradually lose vital academic skills. The entire argument is phenomenal and certainly an academic problem.

Knowledge has increased exponentially as reflected in the curriculum, putting pressure on students to learn more than previous generations. As a result, students are taking every possible measure, including using social media learning, to broaden their knowledge and enhance their academic performance. Because knowledge is infinite and time is not, social media adoption by students appears to be a change in the right direction. Unfortunately, this development has been criticised by parents, teachers, school managers and the general public. Deep anxiety lies at the centre of our nation's education system as people of the pre-digital era

commonly referred to as digital immigrant (Prensky, 2001a) seem frustrated that a vast majority accuse social media of being responsible for the nation's academic woes. An unprecedented drop in students' performance in their final examinations has produced tension among all stakeholders and every Nigerian (Olupohunda, 2014). We are all apprehensive about the cause and effect of such performance on national development.

Obi and Ewuzie reported in Business Day (2014) that stakeholders decry the perennial poor performance in the West African Examination Council (WAEC) exams, resulting in Adesulu (2014b) asking publicly: "who should be blamed for the mass failure in public exams?" In the ensuing debate, parents expressed that the schools are negligent, but the schools blamed the government for poor funding. The government blamed teachers; teachers blamed students, and students blamed the examining body. The examining body blamed the society yet the issue remained unsolved (Olupohunda, 2014). While parents have often been blamed for lack of interest in their children's general activities, class size (Fenollar, Roman, &Cuestas, 2007; Arias & Walker, 2004) has also been blamed for students' poor academic performance. Some attribute students' poor performance to poor funding of the education sector. The Ministry of Education has been blamed because of the incessant increase in the number of subjects to be taught and learned. Constant curriculum reviews have resulted in a yearly increase in knowledge content, expansion of syllabus, and increase in the number of subjects, yet school hours remain the same. The increase in class size has occurred as a result of the introduction of compulsory education in Nigeria in the quest to provide "Education for All" (UBEC, 2004, p.16).The effect of this quest is particularly noticeable in secondary schools (Dekker &van Schalkwyk, 1995) with overcrowded classrooms as the student population increases on a daily basis, resulting in the student-to-teacher ratio being a minimum of 40 students per teacher.

Currently, accusation and blame are being directed at social media. The recent national debate in Nigeria over students' social media usage and the standards of education has served as a revelation that there are profound issues that need to be addressed urgently in our education sector. For instance, both Adeyanju (2014) and Nnaike (2014) wrote in This Day newspaper that the past couple of years have witnessed a drastic decline in students' performance in the West African Examination Council (WAEC) examinations with a high percentage of failures. In 2013 the May-June result recorded a drastic decline in students' performance which was 29.17% while a 26% pass rate was recorded for the November-December examination the same year. The 2014 May-June West African Senior Schools Certificate Examination (WASSCE) recorded a pass rate of 31.28%, while the November-December recorded a 29% pass rate.

Previous years recorded similar results which is an indication that this occurrence will continue unless all stakeholders take definite steps to identify and correct this abnormal trend. It has now become a recurring incident and an embarrassment to the Government, the WAEC and the general society (Olupohunda, 2014). Stakeholders and other concerned citizens report through the mass media that social media has caused many students more harm than good, that it has adversely affected the lives of many good and brilliant students as it consumes so much of their time. They blame parents for providing smartphones, computers, laptops, and video games for their children, saying that this has caused a lot of distraction for them when they should be reading their books and doing their academic work. Some of these children according to Adeyanju (2014) and Nnaike (2014) spend up to 2 hours surfing the internet, browsing, pinging on Blackberry, using Facebook, WhatsApp, 2go, Twitter, Instagram and many more at the expense of reading their books. Similarly, a Senior Advocate of Nigeria, former president of the Nigerian Bar Association, and Chairperson of the Council of Legal Education, Onueze Okocha, lamented that social media is causing students' failure at Law School, saying that "It was a most unfortunate development the way the last Bar final exams turned out. Nearly 33% of the students who sat for the Bar finals failed and only about 51% passed." According to him, "the students who failed performed poorly and when we inquired into the matter, we discovered that some of the students were not taking their studies seriously. Some of them were using their iPhones, iPads, BlackBerry phones and other mobile gadgets to communicate with their friends on social network sites while classes and tutorials were going on. Therefore, we thought we needed to send the signal to the students. They must rise up and take their studies seriously" (Akasike, 2014). These perceptions put social media technologies in a negative light, suggesting that the relationship between social media and high academic performance is weak. In another development, the educationist Oladunni (2017, p.8) wrote in The Nation that "social media is responsible for the decline reading culture among primary and secondary school students in Nigeria". Why do they all assume that social media is a distraction rather than an academic tool? Could it be an assumption that social media is responsible for their poor performance? Were students performing better prior to the emergence of social media? Are there other limitations that are yet to be unravelled? Without specifying the time interval, Olufunminiyi (2015) notes that over the years, there has been an outcry regarding declining academic performance of secondary school students in major public examinations which include the WASSC, Joint Admission Matriculation Board (JAMB), and the National Examination Council (NECO) examinations. How did the students' progress to the level of writing these examinations and why are they performing so poorly in national examinations?

Sizer (1996) argues bluntly that "if students are not performing well academically, we must blame the school not the student" (p.35). These examinations are the most important in the lives of Nigerian students as it is their final examination at the terminal stage of compulsory education, and it is the reason I am curious and therefore interested in investigating the factors responsible for this enigma: mass failure in national examinations that is now being blamed on social media.

While there are multiple negative narratives being levelled against social media, how plausible is it to say that social media corrupts all students across the board irrespective of their individual values, interests and abilities? When Habermas (1978) formulated his critical theory of Knowledge and Human Interests and classified academic knowledge into three primary interests, he considered that student's intellectual needs, interests, capabilities and capacities are different. He categorised knowledge interests as technical, practical and emancipatory which suits the traditional Tyler (1949) model of education which most schools in Nigeria practice. Furthermore, he made provision in the practical-hermeneutic interest for students who feel that knowledge is out there, and that they can learn something interesting at every turn, at their pace and that such learning should count as academic knowledge. He also considered students who prefer to engage actively through praxis (Grundy, 1987), creating knowledge and learning on the spot with teachers as facilitators, referring to this as emancipatory interest. These three areas constitute what is defined as academic activity upon which academic performance is derived, suggesting that academic performance of students revolves around these interests. Considering Habermas's (1978) model, do academic activities from which academic performance is derived adopt all or some of the above interests? Can the practical-hermeneutic interest and the emancipatory interest approach to academic activities help to bridge the seeming gap between social media and academic performance? What is in the content of social media that causes students to fail? Is it the usage or the features? If social media is what students do, what are they doing on the media? If 45% of Nigerian students use social media as reported by Micaiah (2014), are they using it for academic purposes? Is use of social media a predictor or a predator of academic performance (Von Stumm, Hell &Chamorro-Premuzic, 2011)? Is there any relationship between social media activities and academic performance? The numerous negative narratives from various sectors of the country following students' social media adoption indicates that, apparently, the education systems functions on the assumption that students perform well due to what school programmes offers them, which says a lot about our national curriculum and the outlook of our education system in the 21st century. The ambivalences that are widely exaggerated about students' academic

performance pits social media against an organised, well planned academic programme. Perceptions are not enough in themselves as they neither consider the fact that, prior to the emergence of social media, students were already performing poorly in national examinations, and that their engagement with social media is not an automatic indication of success or failure.

Looking critically at the causes makes me to ask - what are the causes of effect and what is the effect of the causes? What makes a cause a cause and an effect an effect? Junco (2014b) writes that there is no outright relationship between social media and academic performance except a causal one. Everything is affecting everything else, even our thoughts are creating our reality (Kehoe, 1987), therefore, we can no longer be certain that a simple or a single cause brings a simple or single effect, or that a single effect is the result of a single cause, or that the location of causes will be in a single field only, or that the location of the effect will be in a limited number of fields. This provides me with a platform to explore to determine if social media makes students fail, or if there are other unforeseen factors that are responsible for students' failure that are yet to be explored.

While it is undisputable that the past couple of years have witnessed a gradual decline in students' performance in national examinations in Nigeria, what we have not taken time to check comprehensively and critically is the actual cause of the decline in our students' academic performance. Everyone may be right but there could be something inherently wrong that we do not know. Whereas it is perfectly plausible to say that social media causes students to fail, there could also be many other causes than just the social media. To date, no research conducted has completely elucidated the causal connection, if any, between students' engagement with social media and their academic performance (Junco, 2009). The truth remains that teachers had never taught students 100% of what students learn and know. Sitting behind a desk and listening to teachers does not necessarily result in great academic performance, nor does adhering strictly to structured academic programme equate to excellence. If it does, then why were students performing poorly prior to the emergence of social media as indicated earlier in this chapter? A substantial part of what students know comes through their interaction with their environment. Buehl and Alexandra (2001) argue that a student's knowledge base consists of knowledge that is both formally and informally acquired, that academic knowledge acquired through formal schooled experiences can either complement or contradict experiential or informal knowledge. Thus, knowledge comes through learning and learning is not confined to school, classroom, and teachers' interaction only and that a candidate for examination who fails to embrace learning will fail no matter the effort of the school, teachers and parents. This is an academic problem and therefore a research problem

that needs in-depth investigation. Most researchers have looked into school programmes and other socio-structural factors, but none have considered other unforeseen factors around why students' social media engagement inhibits their successful performance in both internal and external examinations. My hunch was that there could be other contributing factors to students' poor performance than just social media. Identifying the relationship between social media and academic performance requires that I define critically and in detail, the concepts of social media and academic performance.

1.3 Literature review

With the emergence of social media, the traditional belief of learning and what is considered academic activity has undergone radical changes over the years. Education now transcends mere teaching and learning to knowledge acquisition through seeking to know and understand. Social media have already changed the way social institutions function, and how the business sector manage and market itself. In the same way, it has influenced how students get information, use it and disseminate it, and because their learning patterns have changed, is it still appropriate for teachers to continue to assign knowledge paths to students according to their ability? Eisner (2002) asks: "What is it that student's need and who should decide?" (p.119). Sizer (1996) asks if teachers should still tell students that "they must learn what we want [them] to learn" (p.36). The literature review has revealed a number of scholarly works conducted on the relationship between social media and academic performance of students. I saw studies conveying dissenting and assenting views about students and social media usage, and the influence on their academic performance. At the forefront of the antagonists are Junco (2009; 2012a; 2012b; 2014a; 2014b; 2014c); Junco, Elavsky and Heiberger (2013); Kirschner and Karpinski (2010) who all argued that there is no relationship between social media and academic performance. Junco (2012a; 2012b) argued at one stage that social media distracts students, saying that after decades of research one cannot say for sure how Facebook improves academic performance of students, but his latter studies in 2014 and 2015 reveal, contradictory findings, indicating that such relationship exists. Does 'micro-blogging' make students shallow (Jiang, Hou &Wang, 2016)? Is social media a predator or predictor of students' academic performance? The literature review has drawn my attention to conditions such as procrastination, addiction and other interpersonal values that could possibly interfere with students' efficient use of social media. For instance, whereas Zimmerman and Schunk (2001) report that self-regulation is a key predictor of academic performance, Bar-On, Handley and Fund (2006) say that emotional intelligence drives academic performance, and Duckworth and

Seligman (2005) argue that self-discipline outdoes the intelligence quotient. Fenollar et al. (2007) conducted an integrated conceptual and empirical study of academic performance among university students. The results revealed that interpersonal values such as – motivation, self-efficacy and engaging in deep levels of processing information are predictors of academic performance and not class size or perhaps social media. There are protagonists such as Ainin et al. (2014), Wahab (2008), Chen and Bryer (2012), and Tarantino, McDonough and Hua (2013) whose studies revealed potentiality between technology and education and by extension, social media and academic activities. According to Sizer (1996) "All children can learn" (p.35), but learn what? Is it just a matter of what makes them learn or what makes them learn better and understand better? If it is the specific goal of education that enables students to perform well in tests and examinations, can they display mastery of such skills and knowledge publicly and privately?

For those who relate social media adoption to poor academic performance, Taylor (2002) argues that for them any other context or source of knowledge other than the traditional school knowledge which is usually presented as excellent, providing a sound foundation, is viewed with suspicion. Hence, "everyday knowledge is a private matter that has no place in the curriculum, the principal task of which is to teach the principles of formal knowledge through its various manifestations in school subjects and canonical texts" (p.91). Under the guise of propagating universal truths which transcend individual differences, the culture of the dominant class is elevated to the status of absolute truth. This results in the suspicion, repression and rejection of subordinate (Taylor, 2002) sources of knowledge resulting in the tendency to not see social media as serving a functional need, disregarding any changes in perspective or contribution it provides, and denying all positivity about its academic value. Nevertheless, now that technology has redefined the way students learn, the notion of education in-depth is now being replaced by education in-breath and content closure being replaced by content openness (Bernstein, 2002). The question then is: what should be the proper description of the relationship between the kind of learning formally codified in the school and the tacit learning which students acquire from the social media?

While this research is not focused on student empowerment, it is important to always note that while "part of the task of the school is to enable students to discover [their] interests and aptitudes, it is clear that the latter argument is not as strong as the former" (Eisner, 2002, p.114) because students' interest is what determines the level of performance. If students are performing poorly, are schools practicing what they know works poorly and then presenting a diversionary view? If students are not performing well in one area of knowledge, should they

adopt another learning style, and if students do not perform well in one context, should they be encouraged to adopt another context especially if the latter is appealing? Eisner (2002) contends that if schools are genuinely concerned with personal relevance, the interest in, and the demands of, the task will define learning activities and methods. This is in contrast to what Sizer (1996) describes as too much dependence on the fledging science of academic performance rating and expectation which plumbs up students' minds, and the prediction of the future capability of that mind which does not always work as envisaged because students are more complicated than we think they are. Sizer (1996) argues further that "we fail to identify and thus use talents of many children, this argument goes, and we cruelly humiliate good young people by giving up on them for specious reasons" (p.35). These narratives cause me to think that there are layers in the reality some of which seem obfuscated and therefore can only be understood based on the account of students themselves. It is not enough to simply judge students' academic performance based on the perceived premise that social media causes students to fail in their academic duties, because it begs the question - what is in social media that causes students failure? We live in a democratic society and it would be too naïve to conclude that students are undemocratic and so do not have reasons to employ any means in pursuit of their academic desires. Thus, it is too simplistic to say that their manner of usage is responsible for their poor academic performance, rather there should be an investigation as to why they are using it in that manner. What is the root cause of that manner of use and what is the resultant effect of this on their attitude towards learning?

1.4 Theoretical framework

The theoretical framework for this research is articulated within the multidisciplinary field of social media and academic performance, making both concepts salient, with performance as a theoretical base. Elger (2007) contends that to perform is to produce valued results, and developing academic performance is a journey, with the level of performance describing the location in the journey. He states further that the level attained in performance depends on six tenets: context, level of knowledge, level of skill, level of identity, personal and fixed factors. Elger (2007) proposed three axioms that he said enables a performer to achieve optimal level of performance, namely: immersion in an enriching environment, engaging in reflective practices and the performer's mind-set. The first two depend on the performer's mind-set and motivation. Enriching environment is relative as it depends on the performer's mind-set or interest. For one student, an enriching environment may be social media and for another the traditional context. Elger (2007) contextualised his theory in relation to the traditional, non-

traditional and organisational contexts, classifying the academic performance domain as belonging primarily to the cognitive, affective, psychomotor and social levels. From the anthropological perspective, Turner (1987) also wrapped his theory around tenets such as cognitive, conative, affective, social and cultural competencies with axioms hinged on rationality, repetition, volition, reflexivity, and regularisation. Although Elger (2007) used contexts to separate performative scenes, Turner (1987) used space and time, segmenting them as pre-modern, modern and post-modern eras. The intriguing part in these theories is not the definitions but the connection established by both and how they are intricately linked. I systematically examine the concept of social media and academic performance through the interrelated theories of Elger (2007) and Turner (1987), weaving them around Bloom's (1956) taxonomy, unpacking them into component parts, wrapping all around Habermas's (1978) theory of human interests, and relating all to students' social media usage and their academic performance.

1.5 Purpose and objectives of this study

Boyd and Ellison (2007) use the term 'social network sites' to define social media as web-based services sites that allow individuals to construct a profile or semi-profile within a bounded system; articulate a list of other users with whom they share a connection; view and traverse their list of connections and those made by others within the system. Prior to the emergence of social media, Nigerian students had always engaged themselves with other extracurricular activities be it indoor or outdoor. Such engagements were used to identify and test their skills, knowledge, talents and abilities. Currently, with the emergence of the internet, students' attention is now focused on social media. My purpose in this case study is two-fold: firstly, to explore and identify the social media platforms that students engage with; and secondly, to explore and provide an in-depth understanding of how students engage with social media and the impact of such engagement on their academic performance. To enable me carry out this research effectively as well as help me achieve my purpose, the following critical questions are set out guides;

1. What social media platforms do Nigerian secondary school students use?
2. What activities do students at a Nigerian secondary school engage with on social media platforms?
3. What relationship exists between social media activities and academic activities?
4. How does use of social media influence the academic performance of Nigerian high school students?

Of supreme importance in this research is to identify what students do on the social media, the rationale behind their use of the media, and the influence of that usage on their academic functions.

1.6 Significance of the study

There are diverse views with alternate ideas about the relationship between social media and academic performance as current studies have failed to concretely define the relationship between them. My hunch tells me that the contradictory results found previously is probably due to the methodologies they adopted or the population size of their participants. Whereas some researchers, especially Junco (2009; 2011; 2012a; 2012b; 2014a; 2014b; 2014c), used indirect quantitative methods to procure data electronically from a large population, some like Pasek et al. (2009) used a more direct approach with a mixed method with a large number of participants. For instance, Junco and Cotten (2011) engaged 4,491 participants, and Junco (2012b) engaged 2,368 participants. In their quantitative study they used restricted, codified questions to obtain information from these large populations of students through electronic means which do not provide them with the opportunity to meet and converse with participants in their natural contexts to gain an in-depth understanding of their experiences. Consequently, both direct and indirect approaches have not provided accurate enough measurement to address the case of students' social media usage and their academic performance, thus I elected to study this topic by means of a case study. Cohen, Manion and Morrison (2011) argue that a case study is suitable for investigating and reporting complex dynamic and unfolding interactions of events, human relationships and other factors in a unique instance. According to them, a case study has several hallmarks, particularly, negotiating access to people (which is a serious problem in qualitative study), and that it is valuable when the researcher has little control over events.

This research, like previous studies, explores the relationship between social media and academic performance of students. However, the uniqueness of my study is that whereas those studies focused on variables such as time users and non-users (Pasek et al., 2009; Kolek & Saunders, 2010), multitasking (Junco, 2012b; Kirschner & Karpinski, 2010), engagement (Junco, Heibergert & Loken, 2011; Junco, 2013; 2014c; Karpinski & Duberstein, 2009), impact (Junco & Cotten, 2011), and frequency (Junco, 2012c), this study focuses on the context – social media and traditional learning. In addition, this study differs from previous studies cited with regard to sample size, learning level and age of participants. Although, there are a great many discussions in literature on how social media use is related to academic performance,

few studies have examined it in relation to secondary school students, yet they constitute major users of social media. Similar to the findings on university students, some studies according to Junco (2012c) have discovered a positive relationship between information and communications technology use by secondary school students and academic outcomes like standardized test scores and course grades. On the other hand, some studies have also found a negative academic outcome in this setting. Still others have found contradictory positive and negative results. Based on these findings, the relationship between social media and academic performance is uncertain.

So far, every explicit attempt to identify and establish the relationship between social media and academic performance seems logically contradictory. This confirms Karbalaei's (2012) comment that the act of measuring performance in relation to social media usage is a complicated activity that is laden with limitations. Whereas many factors can act as barriers to students attaining and maintaining high average scores that reflect their ability, the academic progress of students who use social media is a critical issue that needs to be explored. Kirschner and Karpinski (2010) argue that any attempt to identify such fixed social reality and relate it to academic performance will involve representing it as stable, and, ensuring stability is a complicated activity, especially when the outcomes that are of interest are not clearly defined. Literature has proven that the relationship between psychological and psychosocial process of academic activity and performance has always been a complex exercise (York, Gibson and Rankin, 2015), therefore to obtain a result that is entirely different but draws on previous findings, I engage a case study approach.

This is a case study of students focusing on social media to the detriment of their academic function, in order to know if the assertion that social media causes students to fail is a claim, an assumption, a perception or a reality. Because perception is not always reality (Covey, 1989), approaching this study as a case enables me to look beyond assertions, to identify other factors that could possibly cause students who use social media to fail. Cohen et al. (2011) argue that case studies investigate and report the complex, dynamic and unfolding interactions of events, human relationships and other factors in a unique instance. This research fills the gap in knowledge about how academic learning is defined in relation to student's engagement with the social media, and how that definition relates to their academic performance. Findings are discussed in relation to existing knowledge with the aim of demonstrating how the present study has contributed to expanding the knowledge base. The result, I hope, may lead to an in-depth understanding that will fill the existing gap in literature and established new thinking that will benefit students, teachers, and other stake holders. I also

hope that the result will provide valuable information for curators of education materials so that they are specific and concise in their postings on social media, knowing that students have adopted social media as a source of academic knowledge. Finally, findings discovered through this exploratory case study can be used for future studies on how to integrate social media into the school curriculum so that knowledge acquired from social media can be incorporated into the regular academic context and rated accordingly.

1.7 Scope of the study

This research is restricted to grade 12 students due to the fact that they are at the terminal stage of compulsory education, preparing to write the national examinations such as the WASSCE, NECO, and National Business and Technical Examination Board (NABTEB, which are the most important examinations that will shape their lives. The West African School Certificate (WASC) qualifies both nationally and internationally and serves as a requisite into institutions and systems. Institutions value and rely on their assessment with the assumption that the certificate reflects the knowledge, abilities and skills of their prospective intakes (Olupohunda, 2014) and therefore progression in all our systems and institutions rely completely on it. In addition to these is the Joint Admission Matriculation Board Examination (JAMB), the examination that qualifies grade 12 students for Nigerian universities.

1.8 Methodology

In this study, coherence of methods and the enquiry into social media use was an important consideration. Consequently, for the exploration, a social media approach was deployed with surprising results, requiring a rethinking of contemporary data production methods.

1.9 Ethical consideration

All ethical protocol and procedures were strictly adhered to in this case study. Informed consent was obtained from participating students, their parents and the gate keepers. Participants were informed prior to the actual interview period that their comments are for research purpose, and that the results of the study would be made available on electronic media. Participants' activities and experiences were collected as data, based on their self-report accounts. Participants' perspectives on their own conceptions of practice is the focus, hence the framework developed in this research supports evaluating participant perspectives. Both the processes and the experiences of students were collated as data, based on their self-report accounts, as a general view of students on the subject being explored.

Finally, participants' response to interview questions gave me the opportunity to take into account the views of students on the matter. The face-to-face conversation approach brought me closer to understand students' positions on the matter, enabling me to be in their world which validates my findings compared to previous studies that were conducted electronically from a distance. Findings from this qualitative case study are accurate and authentic but may not be equated or transferred to other contexts.

1.10 Limitations

Firstly, a major drawback in this study was that many secondary school managers in Nigeria's Federal Capital Territory still live in denial that their students use social media. Gate keepers of schools I visited refused me access to their students after reading through my letter of intent. Those who granted me an audience used exhaustive evidence to convince me about the corruptive and distractive tendencies of social media platforms. If participants report that their parents purchased the smartphones they used, it then follows that the gate keepers may have bought phones for their children for social interaction, yet, each party consciously argued with complete honesty while at the same time carefully avoiding inconvenient realities with genuine intentions, even when they knew that their arguments were insincere. These digital immigrants (Prensky, 2001a) made it extremely difficult for me to find a school that was willing to grant me full access to their students, and those who did, asked to join the interview session, a ploy aimed at checking to ensure that their students were adequately protected from being corrupted in the process. However, with persistence I was able to find a secondary school that was cooperative and friendly.

Secondly, for unknown reasons, it was much easier to obtain data by face-to-face conversations than through Facebook, as participants posted short answers as response to questions that I knew were capable of making them provide a lot more detail. Some participants saw others as neutral sources of information and so posted answers based on other participants' responses, suggesting that effective conversation had not taken place.

1.11 Conclusion

Social media is redefining how social structures work and academic settings are not exempted. What is known is that Nigerian students are constantly on social media. What is not known is the degree to which they understand the academic value of social media so as to employ it for academic purpose. Participants' responses to interview questions gave me the opportunity to take into account the views of students on the matter. The face-to-face conversation approach

enabled me to understand students' position in the matter, allowing me to be in their world, thus validating my findings compared to previous studies that were conducted electronically from a distance. Findings from this qualitative case study are accurate and authentic but may not be equated or transferred to other contexts.

This chapter introduced the topic and the background of the research; in doing so, I defined the purpose, objectives, scope, significance and limitations, and reflected briefly on the literature and related theories. I have also introduced and defined the methodology as well as conversation analysis which is the method of data analysis, identifying four main tenets that sit as pillars for an in-depth analysis of social interaction in both online and face-to-face contexts. To fully achieve my aim in this study, I engaged in a detailed literature review that I segmented into three chapters. In Chapter 2, I studied scholarly work related to the topic of study. Findings conveyed contradictory reports as some say social media is a positive predictor of academic performance, some say social media is a predator of academic performance, and others say there is no relationship except a causal one. I sought to understand the background to the subject under exploration, including the associated views and propositions by scholars on the matter, and discovered three main issues about social media usage that could be detrimental to students' academic performance, namely; threat or insecurity of students, misunderstanding by teachers, and students' interpersonal values. This led me to study critically and analyse operationally the concepts of social media and academic performance. In the study, I found that social media and academic performance are two broad concepts, therefore to locate myself adequately in this study, I analyse both concepts in detail in Chapter 3, highlighting their conceptual structures and operational meaning in the study. I also provide an overview of specific social media platforms that literature says are popular destinations for students, describing their features, adoptability and adaptability in academic settings to know how related social media activity provides the knowledge from which the relationship with academic activities is directly derived or negated. The analysis of academic performance in relation to social media learning informed the need to consider academic performance in greater depth, which is done in Chapter 4. The theoretical base of this study is underpinned by the concept of academic performance. I analysed academic performance theories to understand how the academic context practises and interprets academic performance in relation to knowledge students obtain from social media. I also identified performance theories that are related to the study, defining and interpreting them including the associated views and prepositions, in ways that they could be useful as a meta-framing guide for data analysis. In Chapter 5, I explain in detail the research design and methodology used to generate and analyse

the data. The main themes in the data are presented and analysed in Chapter 6 using the methodology described in Chapter 5. Chapter 7 is a detailed description of the findings of the study, followed by synthesis and thesis, with a clear chronological descriptive summary of the entire process of the study, and offering alternative solutions. The research concludes with Chapter 8, in which conclusions are presented that may have implications beyond the specific case that I have studied.

I want to state clearly here that this research was conducted in a single location using 12 participants. Therefore, the resulting outcome of my analysis may not support extensive generalisations; they present contextual findings based on participants' accounts that can be useful in developing a theoretical understanding of students' social media adoption and their academic performance. This study ends with three implications and proposes a direction for future study. Summary description of each chapter is compressed and concisely presented as notes in Chapter 8. I now review the literature to present the full background of the study.

Chapter 2: Exploring the Relationship between Social Media and Academic Performance

2.1 Introduction

There has been a continuous debate about the positive and negative effects of social media on students' academic performance. Whereas some research finding say social media distracts and corrupts student users and therefore has no positive impact on their academic performance, some say it has features capable of enhancing students' academic performance if properly harnessed. Generally, studies find social media use and academic success negatively related in secondary schools. However, some studies on how secondary school students' use social media have found academic benefit in the use of the media, (Junco, 2014a). This literature review contains a selection of available documents published by researchers on the topic under study, from which I evaluate the variables in relation to the research as well as develop a rigorous logical argument for the inter-relationships among different variables (Ahmad, 2014). Hence, this literature review involves two streams of literature surfacing two themes with compelling reflective views. Each view originates from two opposing perspectives which put forward substantive arguments about student's use of social media and its impact on their academic performance. The first is informed by substantive arguments from the protagonists' and antagonists' assenting and dissenting views about students' use of social media and its implication on their academic performance. The second stream deals with the relationship between social media and academic performance based on scholarly research.

2.2 Dissenting and assenting views about students and social media usage

Social media usage has the capacity of revealing users and their diverse gifts, bringing them from obscurity to limelight, as they now have a medium through which they can present themselves everyday (Goffman, 1956), and they can display their abilities on the global stage. However, like any setting, performing on this stage popularly known as the social media, requires enrolment. This means presenting themselves in detail to the audience and doing so requires that they relinquish some degree of privacy in order to belong. It means exposing some aspects of their lives that was previously private to others – familiar or unfamiliar – and adopting theirs. It also means learning from different perspectives.

'Social media is a collection of internet website services and practices that support collaboration, community building, participation and sharing (Junco, Heibergert & Loken, 2011). The term 'social media' used in this research refers to social media tools such as Facebook, WhatsApp, Myspace, Twitter, Instagram, LinkedIn, Yahoo, Google, Reddit YouTube, Xbox and Pokémon Go that are becoming increasingly ubiquitous (Siemens, 2004) among 21st century learners (Hughes, 2009) and are fast becoming an integral part of Nigerian students' lives.

The popularity of social media has attracted so much attention that there is now a wealth of literature with different views carrying positive and negative perspectives regarding the impact of social media on the academic performance of students who use social media. A growing number of educators and researchers such as Wahab (2008), Tarantino et al. (2013), and Khasawneh, Miqdadi and Hijazi (2014) celebrate the potential of the social media to re-engage students with their academic activities, but Selwyn (2009) presents an alternative view which is that social media applications compromise and disrupt students' engagement with traditional education provision. Similarly, Lewis et al. (2010) say social media does not fully enable the generation of ideas among students because its features encourages recycling other people's intellectual property. Contrary to such perception, strong indications from Wahab (2008), Chen and Bryer (2012), and Tarantino et al. (2013) posit that social media is educative and therefore can play a key role in enhancing students' academic performance. This is a position vehemently opposed by Albert and Salam (2013), as they argue that it is very difficult for students to combine social networking and academic activities. Using concepts like corruption, distraction, unethical practices, cyber-bullying and marketisation to drive their argument, Albert and Salam (2013) describe social media as an emerging frontier where new forms of social relations causing power differences and other forms of unacceptable social practices develop. They argue that all of the applications that exist on social media are corruptive, distractive, and essentially market driven and, therefore, make students vulnerable. Nevertheless, Shahani (2013) says that although social media could be market driven, the gift it brings to education is capable of expanding the audience for classroom content so that students no longer write for their teachers or peers alone, but also can reach other students and teachers across the globe. The feedback from such activity has the potential to help students grow and reinforces the need to teach them the importance of revision and to be appropriate when posting, which is a positive influence on their academic performance. The value that social media brings to students' academic engagement is believed to be increasing dramatically (Wahab, 2008), yet the majority of Nigerian secondary school students still perform below

average in national examinations (Akasike, 2014). This points to the fact that although students are receptive (Shahani, 2013) and addicted (LaRose, Lin & Eastin, 2003), and use the social media frequently (Kelm, 2011), they may not be increasingly aware of the depth of support that social media tools can bring to their engagement in a literate environment (Shahani, 2013). This position reinforces the general belief among antagonist writers that students use social media in an elementary fashion for social interaction, listening to music, watching video and playing video games which links with lower grades and poor academic outcomes (Suciu, 2013). The antagonists' perception could be correct or an exaggeration. If I assume that they are correct, and that all students do is interact with friends, play video games, listen to music and watch videos on YouTube, I must ask the question: are there some elements of academic knowledge in such activities that could be useful to them academically? Antagonists' perceptions are not enough in themselves as they neither recognise the heuristic features of social media or the fact that students may be gaining some form of knowledge and skill that will enhance their academic performance in the activity. For instance, Hauge and Gentile (2003) say Xbox contains video games that promote critical thinking as well as social and analytical skills (Deming, 2015) which are crucial and are required for academic performance. Similarly, YouTube contains informative video related to both entertainment and education (Mayer, 2003). Obtaining knowledge from such multi-dimensional perspectives can help those students with short concentration span to improve their academic performance by building their mental representations from words and pictures that are presented to them through printed text illustrations or narration and animation (Mayer, 2003). Generally, students perform better when they engage multiple pathways and approaches for their studies (Deming, 2015), which multimedia representations such as YouTube, Xbox and other social media tools provide. The 21st century student simply does not have the patience to sit with a textbook for too long or in a prolonged lecture listening to a teacher, but can spend a lot of time on social media, paying attention to and focusing on their interest with great patience. Although it could be argued that communication in some multimedia learning is unidirectional (Lewis et al., 2010), the promise of engaging with multi-dimensional media is that students can learn more deeply from well-designed multimedia messages on YouTube and video games consisting of words and pictures than from more traditional mode of communication involving words alone. This could be why Winerman (2013) of the American Psychological Association says the 21st century children are smarter than children of previous generations. Even so, is it sufficient to simply say that the 21st century students are smarter than the previous generation? If yes, can the sudden increase in smartness among the 21st century students be attributed to their early exposure to the multiple

media tools at their fingertips? Winerman (2013) asserts that it is proper to say so because their early exposure to technological tools positions them in an environment that exposes and encourages them to think, create and learn earlier than it was with previous generations, and that social media is now an inseparable aspect of students' lives.

Several institutions in Nigeria insinuate that rather than making students smart, social media is a distraction due to its overuse in an inappropriate manner. In their view, students misuse the social media to the detriment of their academic functions, leading to poor academic outcomes, therefore, resulting in prohibition of cellular phones at schools in certain instances (Ajanaku, 2016). Such sentiment leaves a conflict between students and their institutions, with students clinging to their passion for social media and schools establishing stringent rules to curb students' use of social media even though information communication technology (ICT) is a vital subject in the school curriculum. Some school managers see the banning of cellular phones "as part of a more generalised struggle to impose restructured hegemonies in institutional practices and culture" (Fairclough, 1995, p.102). Suciu (2013) corroborates this thought when he says that social media corrupts students at the intersection of their collective engagement with others on the social media platform. Contrary to these perceptions, Chen and Bryer (2012) assert that social media has proven to be more effective in providing students with the opportunity to improve performance through collaborative learning than individualised learning. In support of Chen and Bryer's (2012) assertion, Ajanaku (2016) claims that social media possesses heuristic features that encourage students to learn, discover, understand and solve problems as they use sites such as YouTube for solving mathematical problems, spelling and grammatical correction.

In comparative terms, is it plausible to say that what students are gaining from their use of the social media outweighs what they are losing? While it is normal to say that social media features stimulate students' interest to investigate and explore in detail without assistance, Chen and Bryer (2012) argue that in the world of social media proliferation academic performance is not an internal, individualistic activity; rather it relies on connecting with others. They continue by reiterating that social media usage can contribute to the increase of motivation towards learning in students, which invariably raises achievement level, and ultimately, improved performance. Therefore, when Shahani (2013) uses words such as interactivity and feedback to assert that the feedback from the interactive activity is encompassing, what kind of interactivity is he referring to here? Does he mean that such interactivity and feedback have the capacity to keep students frequently connected and constantly engaged with each other through the media? Are they connecting formally with informal academic activities allowing

them to define and construct their learning in ways that improve their academic performance? Such academic practice is emancipatory on the part of prudent students who engage with the social media appropriately. Engaging social media prudently affords students the opportunity to reach knowledge that initially could only be accessed by teachers, raising their academic level and balancing the student and the teacher as partners in the act of education thus making the academic process an active one. For the first time, academic activity is truly praxis (Grundy, 1987), a dialogue of difference (Grushka, Donnelly & Clement, 2014) rather than a monologue of tradition as academic activities are negotiated and constructed together based on students' experiential benefit from using the social media on their own. This points to the fact that social media possesses emancipatory elements capable of empowering students academically. In support of this argument, Khasawneh et al. (2014) add that social media empowers students to be independent rather than relying completely on their teachers to show them the right way to do things. This statement contradicts Albert and Salam (2013) opinions about social media which they say it disempowers students, exposes them, and makes them vulnerable and prey to powerful institutions rather than providing them with positive outcomes. To push their views towards acceptability, Albert and Salam (2013) as well as Suciu (2013) weave their discourse around notions such as disempowerment, distraction, corruption, cyber bullying, privacy and engagement in inappropriate social behaviour thus positing that there is no academic benefit from social media for students. Albert and Salam (2013) and Suciu's (2013) assertions create an image of social media that does not reflect the reality presented by Khasawneh et al. (2014). Their argument completely ignores the fact that cyberspace operates on the basis of different assumptions and values compared to physical space. Their argument also dismisses every ounce of positivity about social media and the embedded benefits associated with the essential initial stage of multi-literacy that social media brings to students who use it. Through the multimedia approach model, students can read, understand, evaluate and interpret multi-literate texts (Grushka et al., 2014) even though this depends solely on the individual student and their mind-set.

Khasawneh et al. (2014) believe that social media has the capacity to improve students' creativity and performance because the contents it conveys are driven by academic activities that can assist students in achieving better academic outcomes. However, their praise is subject to debate in the sense that the contents are not always exclusively academic as non-academic materials with distractive tendencies appear alongside valuable content. Such appearances create the impression that social media is corrupting and distracting and some students may not be disciplined enough to sieve through and operate between the types of content. Such

appearances are what Suciu (2013) says corrupts students at the intersection of their collective engagement with others on social media platforms, thus presenting social media tools as "vehicles sent by manufacturers" (Clark, 1983, p.456; Shahani, 2013) to distract students from focusing on their academic activities. In addition, Selwyn (2009) notes that social network sites such as Facebook and Myspace have been subject to much debate within the academic community. Most dominant in the debate are ethical issues such as cyber bullying and inappropriate internet behaviour, leading to concerns about student's privacy and security (Chen & Bryer, 2012). This is suggestive of the fact that some of what may seem harmless can lead to tragic consequences. What is clearly resonating in all arguments so far is that unethical practices such as cyber bullying, invasion of privacy and security issues interfere with students' usage of the social media for academic purpose, and thus pose a challenge to their academic performance. These assertions are analysed below.

2.2.1 Ethical issues raised about social media use

Social media had become an integral part of our lives, and no group feels its impact more than students (O'Dell, 2011). Although it is undisputable and undeniably true that social media facilitates interaction among students and assists them to get academic information fast and in detail, there are a host of negative perceptions fuelling concerns about the perceived risk associated with the tools that seem to outweigh the potential benefits to those without first-hand experience (Junco, 2014a). Why would students want what seems inherently harmful to them? Like any offline communications platform, online platforms can also play host to various exchanges of misinformation or inappropriate comments (Lenhart & Madden, 2007). Social interactions among humans generally have both positive and negative aspect sand social media users will always counter negative influences that are considered unethical.

Although Albert and Salam's (2013) assertion that social media is an emerging frontier where new forms of social relations causing power differences and other forms of unacceptable social practices develop and will occur, consideration should be given to the fact that such practices occur anywhere that interactivity takes place. Unacceptable social practices are social actions or behaviours that are at variance with what is considered morally right. Albert and Salam (2013) are concerned with the vulnerability of teenagers and their naivety. In trying to alleviate such worries, Munoz and Towner (2009) provide a proposal that they consider ethical and safe for students to use on social media platforms like Facebook for the enhancement of their academic performance. They start by describing Facebook's bulletin boards and its heuristic features in bringing safety and academic efficiency to students. They assert that

instant messaging and email are features that make Facebook amenable for academic activities and thus can enable students to perform better academically. If we accept the position as given by them that Facebook possesses such ethical features, is Facebook the only social media platform used by students? Are other social media platforms structured in the same way as Facebook? What do they mean by ethical features? Ethical features in my opinion transcend the presence of bulletin boards, instant messaging applications, and email to more psychosocially (Clark, Frith & Demi, 2004) damaging practices that students are exposed to in their daily use of social media that is considered unethical by Albert and Salam (2013), and the consequences of such practices on their academic performance. Unethical practices such as cyberbullying, privacy and security issues expose students to predators that corrupt, distract, and confuse students causing them to lose focus on their intentions of using social media for academic purposes thus stifling their academic performance. These practices deserve to be considered in detail so as to be understood from various viewpoints.

2.2.2 Cyberbullying and social media use

Bullying is a vice that comes in the form of harassment, intimidation, aggression, threat, ridicule and can lead to violence. In bullying, the powerful stultify the meek in an oppressive manner, using any machinery available including manipulation, subjecting them to state of emotional, social, physical and political helplessness. Bullying (Selwyn, 2009) or victimisation (Juvonen, Wang, & Espinoza 2010) whether vertically suffered from seniors, or horizontally from peers, occurs everywhere in society be it online, offline, in class or at play. Shahani (2013) explains that when he was in high school, almost every school fight he was aware of occurred because of something that happened in the virtual world. Bullying experiences compromise academic performance across secondary school students (Juvonen et al, 2010), and this takes place in both the physical and cyber worlds, with the latter known as cyberbullying (Xu et al., 2012). Shahani (2013) says that cyber bullying and viral rumours have been a problem ever since young people posted on that once popular site, Myspace. Although social media is used for bullying, Keller (2013) says that cyber bullying on social media has largely the same antecedent users' behaviour, emotion and affective consequences as does non-cyber bullying. O'Dell (2011) reports that cyberbullying can have a tremendous impact on students' academic performance because a bullied student is a scared, uncomfortable, and depressed student; and a depressed student is a poor performer. Albert and Salam (2013) posit that cyberbullying occurs between the vulnerable and the powerful, with those who have the advantage dominating the helpless. In other words, it is assumed that a bullied student becomes worried

and afraid to the extent of avoiding social media use for fear of been victimised. Such practices are considered corrupt and manipulative on the part of the executioner, and distracting and traumatic on the part of the bullied – the latter being manipulated and disoriented so that even the most brilliant student becomes very disturbed and thus distracted from focusing on academic activities. Keller (2013) argues that this occurs because when students communicate through social media, they tend to trust the people on the other end of the communication, and their messages follow suit as they tend to be more open.

Students are not only caught in the web (Wang & Artero, 2005) of social media physically and mentally but emotionally as well. Emotional instability is capable of inhibiting the academic performance (Juvonen et al., 2010) of even the most brilliant student. Students who suffer emotional distress elicited by bullying are likely to lack concentration and thus are impeded in their optimal engagement and performance. This therefore makes it imperative that students engage their emotional intelligence (Bradberry & Greaves, 2009; Goleman, 2011) while using social media. Cyberbullying experiences can create psychosocial difficulties and somatic problems with both direct and indirect bearing on academic performance (Juvonen et al., 2010). Cyber bullying can alter the emotional (Goleman, 2011) and intellectual terrain of any brilliant student who lacks instinctive values such as psychosocial and emotional intelligence. Brilliance and prudence are not always the same. Whereas a brilliant student can be a victim of cyberbullying, some introvert student can often find a way to obviate the risk of being bullied. The difference is in who exercises psychosocial and emotional intelligence. Emotional intelligence is a students' ability to recognise and understand emotions in themselves and others and using that understanding to manage their behaviour in social contexts and interaction, using it to make personal decisions that lead to the attainment of better results (Bradberry & Greaves, 2009). It should, however, be noted that emotion is not common sense; you can have emotions without being sensitive. Four key part of emotional intelligence are self-awareness, self-management, social awareness and relationship management (Bradberry & Greaves, 2009). Managing all four tenets of emotional intelligence relies on the students' ability to recognise and manage their amygdala's hair-trigger response to perceived threats. The amygdala is the brain's radar for threat and positive emotion and so, when people are exposed to negative contents, the amygdala is provoked the same way as with positive content (Goleman, 2011). This means that students can automatically attend to negative stimuli with the same ability and motivation and sensitivity that they apply to positive stimuli. This makes submitting to bullying a choice. A student in any bullying condition can choose to attend to the amygdala trigger and avoid the threatening environment, or can choose to ignore the

threat and remain, enduring till it gets to a traumatic stage. Students who exercise emotional intelligence (Bradberry & Greaves, 2009) do not permit such occurrences to distract them from focusing on their target (academic excellence) – they respond to the amygdala trigger and exclude themselves from any victimising environment. After all, social exclusion according to experimental data does not affect academic performance (Juvonen et al., 2010). If students take control of their emotions, their social media usage becomes the transport or vehicle towards their academic excellence rather than an arena for psychosocial and emotional torment.

2.2.3 Privacy and security issues related to social media use

Aside from the issue of unethical behaviour, there are the issues of the privacy and security (Chen & Bryer, 2012) of students. Keller (2013) notes that one potentially negative consequence of social media is lack of privacy. Today students face potential risk associated with social media usage (Lenhart & Madden, 2007). Every piece of information shared on social media is searchable no matter how high the privacy setting is. The material users share on their profile is just one of many places where such information is shared online, but provides a glimpse into choices that students make in sharing their personal information in a relatively public and persistent online environment, thus making students vulnerable (Lavin, Marvin, McLarney, Nola & Scott, 1999; Keller, 2013). The personal information used to open an account as required by any particular social media platform is distributed across all social network sites and exposed to strangers, and can be used to, say, blackmail and embarrass (Gross & Aquisti, 2005) them. Though all social media platforms claim to have privacy policy in place, Gross and Aquisti (2005) say possibly fragile privacy protection mechanisms on social media sites may not be protective enough, hence pose a threat to individuals whose identities might be turned into public data by some hackers. They argue that hackers can pose a threat or fake their email address, manipulating the users or even changing the advanced search features in profiles, making students' private information public to their embarrassment, victimisation and humiliation. Lenhart and Madden (2007) suggest that privacy choices need to be made and revised often when applications are updated because, like any online communications platform, profiles can play host to various exchanges of misinformation or inappropriate comments. On this note, Apple Incorporated has installed what they say is the most reliable security and privacy feature that is capable of protecting students who use their iPhone and iPad, and since the majority of Nigerian students access the social media through their phone (Ajanaku, 2016), those who use such phones may feel safer.

2.2.4 Marketing and hegemony related to social media use

In addition to privacy, cyberbullying, unethical behaviour and security concerns, there is also an issue of hegemony (Albert & Salam, 2013) and marketisation (Clark, 1983 p.456; Shahani, 2013), using the academic arena as a launch pad to market social media tools. Manufactures make social media features so emergent, dynamic and irresistible for students because they are competing among themselves to control the market. For instance, Microsoft has installed Xbox (Hauge &Gentile, 2003) on Windows 10 personal computers (PCs), and the manufacturers of Xbox keep upgrading to include newer versions with enticing features that perpetually engage students. Like any social media platform, Xbox is addictive (Kandell, 1998; Hall & Parsons, 2001) to students. Pokémon Go and Xbox installations on Samsung phones and Microsoft Windows 10 PCs make the devices more saleable and competitive. Following this trend, Apple Inc. has recently collaborated with Akin, a Japanese Nintendo company to install the Super Mario game on their newest phones. Nintendo game is very popular among students and some are addicted to it. Is it possible that in an attempt to market products and compete favourably, producers of social media devices deliberately install features that create a medium for addiction and distraction? Griffiths (2000) says computer games usually contain inducing features that contribute to the promotion of excessive and addictive tendencies. Although there could be some academic benefit in Xbox use by students, video and virtual reality games and other gaming networks such as PlayStation are installed to improve the usability of the device, and that makes it more attractive and irresistible. The more attractive, the more engaging, and the more engaging the more demanding these features are, luring students to indulge in gaming at the expense of their studies. It is now a vicious cycle as students crave to acquire the newest version of smartphones, tablets and PCs with gaming features. The companies keep upgrading by installing new, more alluring, features, making them spend more money and more time playing games than studying. That explains why Shahani (2013) says that all of the apps that exist on social networking platforms are essentially market driven, and, introducing them to students could be "part of a more generalised struggle to impose restructured hegemonies in institutional practices and culture" (Fairclough, 1995, p.102). Hegemonies are also subtly presented through alluring notions such as; that learners can learn anything, anywhere, any time and with anybody of their choice and at their own pace (Hein, 1991). With such alluring features on their smartphones, what time do students devote to accomplishing the notion of learning anywhere, anytime and anyhow? The notion that students should be able to study anytime, anywhere and anyhow and at their own pace can be seen as an exercise of social

power and control by powerful institutions, as it is capable of giving students a false sense of independence, engagement and accomplishment which will keep them away from formal institutions (Locke, 2004).

If social media tools are compared with formal institution in an academic contest, would one of them enable students to achieve better academic outcomes than the other? Hegemony and marketisation as an issue present social media as a narrative construct put forward with the aim of manipulating students towards acceptance, therefore, resulting in mixed feelings about what students stand to lose or gain in their engagement with the media (Albert & Salam, 2013). This creates room for curiosity and spurs me to ask: if students constantly engage with the social media, are they gaining something while losing their grip on academic functions and expectations? If the answer is in the affirmative, does the gain outweigh the loss?

2.2.5 Social media use as addictive and distractive behaviour

Social media addiction is defined operationally by Griffiths (2000) as being a non-chemical behavioural addiction that involves machine interaction, which is either passive as in television or active as in social media and computer games, and usually contains inducing features that may contribute to the promotion of addictive tendencies. He contends that social media addictions are a sub-set of behavioural addictions with core feature components such as salience, mood modification, tolerance, withdrawal, conflict and relapse. Kandell (1998), Osuagwu (2009), and Hall and Parsons (2001) say social media is addictive to students because they do not use it impulsively, but instinctively and purposefully. Although students who exude such behavioural tendencies listed by Griffiths (2000) are said to be addicted to social media, he notes that social media addiction is purely a symptomatic behaviour exhibited by teenagers who either have little or no social life, little or no self-confidence, and that some students do not fit such stereotypes. Those students described as having no social life or self-confidence are probably those Young (1998) says are caught in the net, or caught in the web (Wang & Artero, 2005). Whether students are caught in the web or in the net, Griffiths (2000) argues that until the time of his writing, there was very little empirical evidence that social media is addictive. Whether there is any empirical evidence to prove students' addiction to social media or not, Cook (2011) contends that 38% of students cannot go 10 minutes without social media. Such addiction to social media without an academic purpose can ruin a students' potential (Bergstrom, 2008). As Young (2004) explains, social media addiction is a clinical phenomenon with grave consequences for students' academic performance. From a social-cognitive perspective, so-called addictions are another form of deficient self-regulation. Student users

are aware that the time they spend online is excessive and disruptive but suspend their comparisons to desirable standards of conduct and continue to engage with disregard for consequences. LaRose, Mastro and Eastin (2001) interpret such habitual disregard for standards as an indicator of deficient self-regulation within social-cognitive theory and propose that the symptoms of so-called social media addictions are really indicators of habitual use stemming from ineffective self-regulation. Deficient self-regulation is not limited to extreme addictive cases only, but also extends to other distractive tendencies that may affect social media usage even at moderate levels. Whether excessive use of social media is truly an addiction in clinical terms is a controversial issue that I will not attempt to resolve here, because in the absence of self-regulation, social media use may continue to mount unabated (LaRose et al., 2001).

Secondly, without explicit and convincing arguments, Suciu (2013) contends that social media is a distraction and therefore a limitation to students' academic performance. Distraction as an apparent tension between social media and academic performance can be viewed from two perspectives. Firstly, how and when students use the social media on the one hand, and what they are using it to do on the other hand. Secondly, how academia define performance, which is derived from what constitutes knowledge in academic terms. Let me start with how and when students use the social media. Students have the propensity of taking a surfing break to check their social media profile in the middle of a class lesson. Bradberry (2014) says such impulsive behaviour pulls them out of the flow, and it will take them 15 consecutive minutes of focus for them to recover and fully re-engage back into the lesson. He argues that when students focus on anything, be it social media or class lesson, they fall into a euphoric state of increased flow, and so pulling out-and-in of a class lesson to check their social media profile interferes with the flow. This will require another 15 minutes of concentration to reconnect with the lesson and get back into the flow in the study state. Such constant interruption, according to Bradberry (2014), hinders academic performance because the brain lacks the capacity to perform more than one task at a time efficiently, especially if the student learns at a slower pace. The second perspective is about how academia defines academic performance. While it seems indisputable that social media distracts students from performing optimally, here is another way to think about it. On what basis is academic performance defined? Does academic knowledge include every learning area? If not, such definition questions how broad and in-depth knowledge is defined and graded. What and who does the curricular definition of knowledge from which academic performance is derived include or exclude? If it does exclude some learning areas, has it also excluded some students with unique talent, or those with

physical, mental, emotional, cognitive challenges that have suddenly found their niche in the academic content on social media? Shahani (2013) reflects on these allegations by Suciu (2013) against social media and warns that an attempt to disconnect students from using social media means disconnecting them from the world outside of school. Any requirement that powers down students from using technological devices will leave many hyperactive students who thrive on communication and multitasking bored out of their minds, leading to hallucination, daydreaming, wool-gathering and fantasising. A state of delusion will expose them to negative fantasies about things that will distract and control their minds from their active engagement in academic functions their own way. Such a category of student, according to Shahani (2013), has been conveniently described as suffering from Attention Deficit Hyperactivity Disorder (ADHD). Interestingly, these same students have no problem focusing and paying attention when permitted to do so in their social worlds and environment as they exhibit acuteness of mental discernment in their use of the social media. This suggests that social media is not an escape route where weak students hide their academic inefficiency, but an activity capable of assisting valiant students with learning disorders to achieve better academic outcomes. The effectiveness of any academic practice is directly related to the ability of that practice to increase students' engagement. If social media indeed increases engagement, then it is possible that it could be useful to improve academic performance of all students, especially those with ADHD (Junco, 2014c). From the normative perspective of teachers and parents, if perhaps we adopt the *'don't ask, don't tell'* approach to students, our choice will be to look the other way as they communicate, collaborate, and connect in their worlds devoid of adults (Shahani, 2013). Nevertheless, freedom always has a prize attached to it, as Shahani (2013) put forward a caveat that the downside of such freedom can be that, just as in the real world, without any supervision students could be at risk if they exist without models for appropriate behaviour. Anyway, an intransigent student with a sound self-efficacy skill will understand what is trivial and what is not, and at his or her own volition, carry on effectively without supervision.

2.3. Social media, meaning making and content creation

In both the protagonists' and antagonists' assertions, the two arguments that stand out clearly are those of Lewis et al. (2010) and Munoz and Towner (2009). Munoz and Towner (2009) claim that Facebook can connect students with each other directly, thus, facilitating the creation of a learning community, providing an opportunity for students to help and support each other by building their course topics on the platforms created by them. Lewis et al. (2010) debunk such an assertion, arguing that harnessing social media dynamic interaction into academic

activities is a challenging exercise because they are so flexible and emergent, and that the upload mode of social media production is so primitive from the creative meaning-making perspective. Lewis et al. (2010) argue further that although the social media sites are certainly dynamic, those who study human interaction cannot help but notice that the forms of communication available are for the most part one-directional, originating from a collective circulation of artefacts and individual meaning making, rather than co-construction of meaning. They push their assertion further by arguing that the meaning students make from the conglomerate of data structures pushed at them in the media are very much tied to self-conceptions and reflections of others' perception. These reflexive practices are a social re-enforcement process or activity that leaves traces for students to resonate with in their overall user experience. Such reflective perceptions keep them coming back, either for more understanding or to influence others on what they may perceive to be correct. Thus, students approach social media with a sense of belonging and validation as they constantly monitor friends' activities, to the point of obsession and addiction at the expense of their academic activity. Lewis et al. (2010) contend that the felt presence of available connections is particularly strong with the proliferation of media-enabled mobile smartphones, which provide students with a sense of cumulative knowledge of the lives of people they may not have seen but heard about and facts they may not have known. This exposes students to vulnerability, as their quest to be validated by peers predisposes them to consumption rather than production and contribution towards the media. This assumption about the nature of participation embodied in material, symbolic and ritualistic aspects of features of the social media enables some forms a doxa of social interaction that deprive students from concentrating on their academic responsibility. A 'doxa', according to Lewis et al. (2010), is a system of thought within the social world that appears natural and common sense, which can also limit the visibility of many other possibilities that may be hidden in the gaps inherent within such systems of meanings. In such hidden gaps lies the opportunity for hidden possibilities that form through disjuncture which enables changes in the social system even as they are hidden by the system's logic. It is through this doxa that critical students who are equipped with the skill of self-efficacy identify sparse, flat possibilities for actual academic interaction with the social media and a large impact on their academic performance. Self-efficacy is students' influence over their own behaviour (Lepp, Barkley & Karpinski, 2015) and an intrinsic value that is positively related to cognitive engagement (Pintrich & DeGroot, 1990). While critical and determined students will see the logic behind the doxa and employ self-efficacy skill to create academic meaning, simple students will become accustomed to, and are carried away, by the

doxa, spending much time glancing through other people's social worlds. Lewis et al. (2010) describe such time wasting as fleeting connections between symbolic representations of the worlds' photos, videos or composite media and little possibility of the melding of meaning and co-creation of the world. Although Lewis et al. (2010) say circulating content does not fully enable students to create and make meaning, meaning-making skill is not merely the creation of new meaning, but understanding the possible levels of meaning (Grushka et al., 2014). Students require interactive thinking skills, material experiences and performative practices, which are performative skills that enable the transfer of cognitive skills to real-life situations in a way that makes meaning. This is imperative because print-based models of literacy have been adapted into models of multi-literacies that have merit, and such meritorious status provides a framework for analysis (Grushka et al., 2014) of their academic performance. Although I am analysing students' social media usage in relation to their social-cognitive skill in a modern era, the adoption of multi-literacy approach is a traditional one that sees the student as interpreting and analysing rather than creating new meanings through social media. Grushka et al. (2014) suggest a model that illustrates the process whereby students can decode, analyse, and critique semiotic images meaningfully, as opposed to encoding, or creating new meaning through text production only. According to them, the process is a continuum of four interdependent skills: code breaker, meaning maker, text user, and text analyser. They define code breaking as the ability to identify and use the semiotic systems of the electronic system. They compressed meaning making, text user and analysis skills as a process that enables students to comprehend and print live texts and understand how they collaborate. They point out that students employ a broad range of literary, cultural, social and technological experiences to interpret and understand text. Grushka et al. (2014) draw attention to the fact that it is important for students studying in a technical world to be encouraged, and to exploit the critical human skill. They identify two things that they claim are critical for student engagement in a literate environment that social media can provide, namely, audience and purpose. Audience refers to those who will see what students create and share for academic purposes, like a project on a classroom blog which is a safe social media site for the classroom. The purpose (academic) is the reason why students are doing homework. They warn that before students post their thoughts and work online, essential questions should be considered first. Is my project original and creative? What will my audience gain from what I am posting? Will it make a positive impact on me? Once students reflect on these, it becomes easier for them to maintain a focus that will yield better academic outcomes. When students reflect on these issues, they will create and generate their own meaning based on their cognitive initiation. Jiang et al. (2016) say

students who actively engage with social media just to re-cycle other people's intellectual property will soon lose their ability to think, read, comprehend and write. They posit that most student re-post comments they never take time to read in detail. Students need to develop rational thinking skills, and critique and contest ideas in the content that is pushed at them. The power of the social media on academic performance depends not only on its ability to offer students the opportunity to interact anytime and anywhere, but to engage meaningfully and creatively. Wartofsky (1979) said that the child is the construction of the world and the world is the construction of the child. If students' worlds are constructed and shaped by social media, then the academic justification is for students to be able to participate in constructing their world, using the social media. Unfortunately, it may not be so as Lewis et al. (2010) note that the current dynamics of the social media makes it difficult for students to establish an atmosphere that encourages creativity. They argue that while is seems undisputable that social media can enable exchange of ideas among students, it does not fully enable the generation of ideas among students in interaction. The reason, according to them, is that unlike the traditional academic activities, social media is a dynamic emergent process that cannot be pre-constructed, as the interaction itself is an element of knowledge embodied in the process. The assumption that all students do on the social media is consume and circulate content without contributing (Kirschner & Karpinski, 2010; Lewis et al., 2010) and to entertain themselves does not sit well because in their consumption and circulating process they may be using it to build understanding that transforms them for good. Wartofsky (1983) decades ago contended that children are active agents in their own constructions of the world even though they come to understand themselves in the mirror of what others have constructed as a world. He warns that no one should underestimate what students can achieve, create, analyse, differentiate, and identify for themselves in the face of what some mistakenly assume from a distance to be at variance with the norm of the education system, perceived as a complete narrative construction put forward to distract students. Although there are certainly both positive and negative outcomes associated with students use of social media, it is imperative to understand whether their use of the media is normative and beneficial (Junco, 2014c) to them academically. All discussion so far has been dominated by fearful myths about students' social media use and how such usage relates to their academic performance. Such myths may be driven by inadequate information and misconceptions as a result of how social media is presented or misrepresented which has led to distorted perceptions about social media usage by students. Myths about social media use may or may not synchronise with the reality of how students use

it. The actual evidence, according to Junco (2014c), may paint a different picture that could provide a more realistic perception, which is much more optimistic than popular assumptions.

2.4 Ontological positions on the use of social media by students

The widespread adoption of social media platforms by students has resulted in a great deal of interest and research on how social media use relates to academic performance. A contributing, yet very problematic issue, is what antagonists, especially Junco (2014c), describe as disingenuous or ill-informed interpretation and communication of research findings, leading to misrepresentation of facts about social media. It is possible to think that the features of the social media tools are capable of conveying academic programmes, but it may not be exactly so. Many centuries ago, Locke (1689) argued that activities relating to knowledge are built based on perception of the agreement or disagreement of two ideas. Just as there is a difference between peoples' perception of themselves and the public perception of them, social media is not different in this regard, resulting in contradictory views on the matter. People's perception and general idea about anything is usually informed by their observation of physical or abstract realities, resulting in different interpretations and communications. The functionalists focus on the role of social media in academics, while the socialists and interactionists pay attention to how social media is influencing social relationships, and educationists assess the academic benefit of social media for students. Each group interprets the role of social media from their own vantage point. Even researchers sometimes find it hard to move beyond their biases and pre-existing notions (Junco, 2014c) which ultimately shapes their viewpoint and perceptions, yet perception is not always reality. Covey (1989) in *The Seven Habits of Highly Effective People* used a bipolar image of a duck and a rabbit as an artistic optical illusion to illustrate that what seems to be real is only so depending on the position you are standing in, and the perspective you are viewing from (Figure 1).
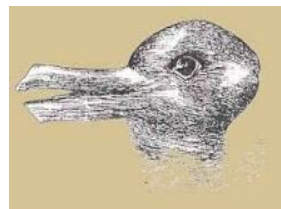
Figure 1:Bipolar image of a duck and a rabbit
Source: Covey (1989)

Understanding social media and its influence on academic performance can be likened to understanding the bipolar object of Covey, which requires an understanding of how the regional differences in our visual and cognitive perceptive fields works. Both the antagonist and protagonist views can be likened to a process and experience that is based on perception within a spatial field. A spatial field is an area in space perceived when the senses are fixed in a static position without reflexivity (Pavlidis et al., 2016). Perceptual consistency is our tendency to view familiar objects or ideas as having a constant function regardless of any changes in perspective or contribution, or the value it provides, thus relegating all positivity about the object while illuminating personal opinion (Covey, 1989). Opinion emanates from a perceptive stance when confronted with an object or new orientation. Opinions about social media usage by students in relation to their academic performance as thought by protagonists and antagonists without idealising this, is a classic case of perception that is termed to be naturalistic, which takes the form of realism (Turner, 1987). Realism is the doctrine that universal or abstract terms are objectively actual or normal, and so are mere necessities of thought or conveniences and therefore exist as means only, and thus have no general realities corresponding to them. Realism exposes higher detail and principles as illusory or even hypothetical (false perceptions) conceptions or interpretations and prejudices persisting through tradition (Turner, 1987). The protagonist and antagonist views are offshoots of their experiences that have evolved into perceptions about social media usage by students. Their explanations differ, as they are conditioned by their perception, which may originate from their experiences or ideas about the new orientation that accompanies the emergence of social media, thus, leading to generalisations that are encoded consistently as opinion that subsequently becomes reality.

Human interest differs; thus, it is common to note that while some suspect and find fault in any activity or process that suggests change, resulting in the tendency to focus on the negative aspect, some embrace change by focusing on the positive aspect of any new innovation. From all analysis so far, is it plausible to say that both the antagonists and protagonists are creating an image or an impression about social media that does not necessarily reflect the reality in its entirety? What is unknown is guessed at based on analogy from the known; what is unintelligible is explained based on analogy from the intelligible (Turner, 1987). Humans have the liberty to choose what they want to think, believe, and make meaning from, but there is always a down side to such thinking. Junco (2014c) advises that it is essential to use evidence to guide thinking and practice especially when it has to do with student matters. This is particularly so as there is a significant difference between truth that is based on fact and

fact that is based on truth. Whereas the former is subject to change with time or can be displaced by new thinking, the latter is constant. The only way to ascertain the reality of the relationship between social media and academic performance is through a scientific research. This then leads me to investigate the relationship between social media and academic performance from the researchers' perspectives.

2.5. The relationship between social media use and academic performance

The popularity accorded social media, and how it is increasingly becoming ubiquitous (Siemens, 2004) among 21st century students (Hughes, 2009), has generated a wealth of literature that links it to academic performance. Junco (2009) says research has shown that social media use is correlated with indices of students' engagement. The construct of student engagement as defined by Junco et al. (2013) is the time and effort students invest in educational activities that are empirically linked towards desired academic outcomes. While Chen and Bryer (2012) argue that a relationship exists, Junco (2009) argues that no research conducted so far has completely elucidated the causal connection, if any, between students' engagement with social media and their academic performance. Students use social media to express themselves, communicate, and maintain friendship and to obtain information. The question is: what percentage of such information constitutes academic knowledge? Some scholars such as Ainin et al. (2014), Wahab (2008), Chen and Bryer (2012), and Tarantino et al. (2013) believe that a relationship exists between technology and education; social media and academic activities. A fair number of professionals and popular interest such as Junco and Cotten (2012), Kirschner and Karpinski (2010) are working tirelessly to reveal their interests in identifying the impact that these technologies may have on students' academic activities and academic outcomes with particular focus on the platforms considered the most popular among students. The debate above on whether a relationship exists between social media usage and academic performance of students results in academic performance being measured differently by different researchers. The challenge is how to measure social media usage in relation to academic performance in gratifications sought, gratifications obtained formulations that are seemingly indistinguishable from an important mechanism in social-cognitive theory, namely, enactive learning (LaRose et al., 2001). Whereas researchers such as Chen and Bryer (2012) used indirect measures such as perceived performance and proficiency to represent academic performance, others such as Ainin et al. (2014), Junco (2011), Kirschner and Karpinski (2010) and Pasek et al. (2009) used a more direct approach. However, both direct and indirect

approaches that base their findings on self-report may not provide accurate results that will satisfy socio-cognitive and contextual expectations of institutions.

Junco is one researcher among many that has devoted time to investigate the relationship between social media and academic performance. Junco and Cotten (2011) explored the perceived effects of instant messaging use by students on their academic performance in a quantitative study. The results from 4,491 students suggest that college students use instant messaging at high levels. Over half of the students report that instant messaging has had a detrimental effect on their schoolwork. The authors conclude that multitasking is capable of impeding learning processes. Kirschner and Karpinski (2010) define multitasking as a process of performing dual or multiple tasks simultaneously. Junco (2014a) defines multitasking as the consumption of more than one item or stream of content at the same time.

In another study, Junco and Cotten (2012) investigated the relationship between students' multitasking with social media and academic performance, using 1,839 college students. They found that students spend a large amount of their time using social media tools, searching for content that is unrelated to their academic activity. A hierarchical linear regression analysis of their data reveals that using Facebook and texting while doing schoolwork, simultaneously may task students' capacity to cognitively process material, and precludes deeper learning. Junco (2014a) notes that 21st century students multitask to the detriment of their academic performance because such engagement interferes with the performance level of one or both tasks.

Junco conducted two studies on Facebook use by students and its impact on their academic performance. In the first study, Junco (2012a) studied the relationship between multiple indices of Facebook use and academic performance. His hierarchical blocked linear regression analysis reveals that time spent on social media was strongly and significantly negatively related to overall grade point average (GPA) and weakly related to time spent on preparing for class. Furthermore, he found that using social media for collecting and sharing information was positively predictive of the outcome variables while using social media for socialising was negatively predictive. In the second study Junco (2012b) studied the relationship between frequency of Facebook use, participation in Facebook activities, and students' engagement. Using a large sample size of 2,368 students, Junco measured students' engagement in three ways; time spent preparing for class, time spent in co-curricular activities, comparing both with a 19-item scale based on National Survey of Student Engagement (NSSE). The results according to him indicate that social media use was significantly

negatively predictive of engagement scale score and positively predictive of the dependent variables, while others were negatively predictive of both. To gain more detail regarding the relationship between students' Facebook usage and academic performance, Junco (2014b) studied students' class-standing in relation to their Facebook use and academic performance and found that the number of logins and time spent on social media were related to lower grades. He also found that sharing links and checking to see what friends are up to were positively related to students' GPA. Junco also found that there was a negative relationship between time spent on social media and time spent preparing for class. In all Junco's studies using various approaches, he did not find a direct negative relationship between Facebook usage by students and their academic performance.

In a related study, Kirschner and Karpinski (2010) explored students' use of Facebook in relation to their academic performance, using a descriptive survey. Their result reveals four major findings. Firstly, the result indicates that Facebook users reported having a lower GPA as they spent fewer hours studying than non-users. Secondly, that there is a remarkable difference between study strategies of Facebook users and non-users. Thirdly, certain students are more inclined to use social media than others, and that these users are more inclined to extracurricular activities, suggesting more extraversion, thus suggesting that such students may use social media platforms to expand their social network and social activities at the expense of their academic activities. Fourthly, the majority of the users reported a negative impact, citing procrastination behaviour on their part. This category of students reported having poor time management and lack of self-efficacy skill as social media keeps them perpetually busy, giving them a false sense of engagement and achievement. Kirschner and Karpinski (2010) note that students do not really have deep knowledge of technology and that their use of social media is often limited to basic technological skills, thus, they can use email and surf the internet with ease but moving beyond that is problematic. I take this as a finding from previous experience because current students are so savvy that they are referred to as *'digital natives'* (Prensky, 2001a) or the *'net generation'* (Junco & Mastrodicasa, 2007; Jones & Shao, 2011). Even Kirschner and Karpinski (2010) refer to 21st century students as *'Homo Zapiens'*. Kirschner and Karpinski (2010) identified two issues that could act as possible inhibitors to students' academic performance in their usage of social media. The first is that it appears that students do not recognise the enhanced functionalities of the social media applications they own and use, and the second is that those students appear to be slower in developing adequate skills in using social media to support their academic performance. Although Kirschner and Karpinski (2010) found a negative correlation between Facebook usage and grades, the study

was limited due to the sampling strategy and analytical design (Junco &Cotten, 2011). Despite the result obtained by Kirschner and Karpinski (2010), it can be argued that the relationship between social media and academic performance is a bilateral one. This is particularly so as it is capable of equipping students with skills and knowledge that enables them to research and construct academic content, which they can post on social media, thereby contributing to knowledge. However, Kirschner and Karpinski (2010) and Lewis et al. (2010) contend that the relationship between social media and academic performance is a unilateral one, as they claim that all students do on social media is consume and circulate content without contributing. Lewis et al. (2010) call this relationship a 'doxa' – this being a system of thought within the social world that appears natural and common-sense but limits the visibility of many other possibilities. This limits the value of social media, reducing the technology to mostly consumption of content rather than contribution (Kirschner & Karpinski, 2010), creating a unilateral relationship between students and social media in ways that negate the broad aim of education and social media.

Academic engagement is not a matter of transferring knowledge from person to person (Downes, 2008). The passive consumption attitude of students is informed by the orientation given by social media itself, and as such, it does not fully promote the generation of ideas among students. Rather, it simply encourages them to consume and circulate contents that they do not understand. This means that if some features on social media encourage mindlessness (Huett, 2004) this will result in mindlessness in academic performance as well. Lewis et al. (2010) argue that simply engaging with social media and drawing knowledge from it is not enough, suggesting that social media can be used to enhance academic performance if students use the knowledge gained through it to build more knowledge. They contend that to be equipped for academic excellence, students need to be able to participate in creating and generating meaning-making content, and sharing their ideas with others, so not being consumers only. If students do not understand the functionalities of social media, as stated by Kirschner and Karpinski (2010), what are they doing on social media? Kubey, Lavin and Barrows (2001) assert that students perceive social media primarily as leisure, and that surfing the internet, watching video and playing games was a break from academic stress. Since the *'net generation'* (Jones & Shao, 2011) detests prolonged focus, students take frequent Twitter breaks (Lepp et al., 2015) to check their profile, update their Facebook account and send instant messages. Sometimes such breaks are longer, extending and encroaching on study time without students realising how long their Twitter breaks have lasted. Such Twitter break between lessons is what Kubey et al. (2001) refer to as synchronous communication. The use of

synchronous communication applications such as chat-rooms (tweeting, texting, and sending instant messaging) had greater impairment on academic performance than asynchronous applications such as emails. Synchronous communication is a multitasking communicative act that both Junco (2014) and Kirschner and Karpinski (2010) say is detrimental to academic performance. Of note is that Kirschner and Karpinski's (2010) findings did not implicate social media as the *'root of all evil'* and did not find that the academic performance of student who use social media is likely to suffer. In addition, their co-relational data did not suggest that social media causes students to study less and have lower grades, or that students obtained higher grades because of their engagement with social media. They make the point that if social media did not exist, students might spend their time engaging in other activities that may interfere with their academic performance.

Another qualitative result that emerges from Kirschner and Karpinski's (2010) study is that some students who use social media frequently reported that it did not affect their academic performance whether they used social media or not. They say students claim that their academic activity was a priority to them and that social media was their networking tool for academic enhancement as it was beneficial to their learning. This category of student employs self-efficacy (Bong, 2001; Linnenbrink & Pintrich, 2003; Lepp et al., 2015) as a locus for their social media use. Self-efficacy as defined by Lepp et al. (2015) is students' influence over behaviour or external stimuli. While academic performance seemed to be unaffected by the use of social media, O'Brien (2011) explored college students use of social media and their perception about the academic effect of the use in relation to time spent studying and academic performance. O'Brien engaged 166 undergraduates in the study and the responses obtained indicate that online behaviours do influence the learning process. O'Brien (2011) writes that a majority of the students' surveyed report that online activities distract them from studying, leading to procrastination and displacement of time that could have been spend on academic activities. Students also reported that they went on social media and other recreational internet sites while they were in class and that their access to university computers had been negatively impacted by their use of social media. O'Brien concludes that students devote a significant amount of time to both academic activities and social networking and that there is no significant relationship between social media and academic performance. If social media usage leads to procrastination, distraction and displacement of academic time, what makes some students' social media usage more productive than others? Pasek et al. (2009) explains that social media usage by students simply does not seem to have a generalised impact on grades, and that the question is not whether students are using social media, but how. Pasek et al. (2009) attempted

to discern whether or not a relationship exists between social media and academic performance by adopting a tri-dimensional approach of data collection, using three different contexts. In the first context, they examined a representative-cross-sectional sample size of first year students from the University of Illinois, Chicago, and found no relationship between social media use and academic performance. In the second context, they examine the relationship in a nationally representative sample of youth between the ages of 14 to 22 years old and found slight positive relationship between social media and academic performance. In the third context, they examined the changes in average grade points from 2007 to 2008 among a longitudinal panel of nationally representative American youth aged 14 to 23 years old and found that changes in academic achievement did not vary with social media use when demographic controls were considered.

In all, two of their findings suggest that social media users were more or less likely to get good grades than non-users. Their third finding was that social media use was slightly more common among individuals with higher grades. Contrary to Kirschner and Karpinski's (2010) and Junco's (2012a, 2014a) results, Pasek et al. (2009) study that was conducted on the emergence of social media concludes that there is no negative relationship between social media and academic performance. Even though it sounded too soon to arrive at such conclusion at the time, their result is congruent with that of Ainin et al. (2014) who obtained a similar result when they examined social media usage, socialising and academic performance among 1,165 university students. Their indices suggest that students' academic performance was concomitant with social media usage and that the higher the usage the better the performance, indicating a positive relationship between social media usage and academic performance. Junco (2014c) warned against using correlation data in predicting academic performance of students who use social media. According to him, with correlational designs, there is no way of knowing whether additional variables may be causing the outcomes in question. Junco's assertion is synonymous with what Clark (1983) said several decades ago, that few studies claiming a relationship between any media and academic performance might have skipped the fact that the active ingredient might be because of some uncontrolled aspect of the subject's content and the instructional strategy rather than the media. Junco (2014c) notes that other research conducted on the relationship between social media and academic performance suggests that the relationship is complex, that other factors such as how students use the media are more important in determining academic outcomes. Lepp et al. (2015) reached a different conclusion to Pasek et al. (2009) and Ainin et al. (2014) when they researched the relationship between smartphone use and academic performance among college students and noted that

increased use of social media through the device was associated with decreased academic performance. Using 536 participants, they found a hierarchical regression that indicates that smartphone use was significantly negatively related to actual college GPA. After controlling for variables such as self-efficacy for self-regulated learning, and self-efficacy for academic achievement they found significant improvement in GPA. They conclude that after controlling for other established predictors such as socio-psychological variables (task value, goal orientation and learning strategy) increased phone use was associated with decreased academic performance.

Kubey et al. (2001) researched social media use and collegiate academic performance with a sample size of 575 students. They found that heavier recreational social media use was shown to be highly correlated with impaired academic performance. This finding is in harmony with Karpinski and Duberstein (2009) who state that despite the claim by students that their frequent use of the media does not interfere with their studies, their research shows that students who use social media frequently spend less time studying and thus have lower grades than those who use social media sparingly. They also found that students reported that their grades were not affected, but their research found differently. Bart (2009) conducted a study to determine if there was a relationship between online social media usage and grades of college students. A total number of 1,127 students from all colleges at the University of New Hampshire (College of Engineering and Physical Sciences, College of Liberal Arts, College of Life Sciences and Agriculture, College of Health and Human Services, Thompson School of Applied Sciences, and the School of Business and Economics) were surveyed. The research shows no correlation between the amount of time students spend using social media and their grades, and that students' grades followed similar distributions for all colleges, with the majority of students earning A and B grades. The study found no correlation between heavy social media usage and grades, which means there is no significant difference in grades between those considered heavy users of social media and those considered light users. For example, 63% of heavy users received high grades, compared to 65% of light users. Researchers found similar results with lower grades. While 37% of heavy users of social media received what were defined as lower grades, 35% of light users received fell into that same category. There was also no correlation between grades and social media platform used. For example, almost the same number of heavy and light users of both Facebook and YouTube received the same category of high and low grades (Bart, 2009). The mystery surrounding the relationship between students and their social media usage in relation to their academic performance has also been investigated among students with disabilities.

The review so far saw studies conducted across developed countries where it seems that students have easy access to internet and use social media frequently. Therefore, to broaden my understanding of the relationship between social media and academic performance of students, I briefly reviewed studies across developing countries such as Pakistan, Sri Lanka, Taiwan, Saudi Arabia, India, Kenya and Ghana for a comparative perspective.

2.5.2 Social media use in Pakistan

Suhail and Bergees (2006) undertook a study to investigate the positive and negative effects of excessive internet use on students at the University of Lahore, Pakistan. Their internet effect scale (IES) considered seven variables such as behavioural, interpersonal, psychological, educational, physical problems as well as internet abuse and positive effects. The results gathered from 200 participants showed a positive relationship between time spent on the internet, but various dimensions of their IES indicated that excessive internet usage can lead to a host of problems on educational, physical, psychological and interpersonal levels. However, both the IES indication and students self-report findings indicate that internet usage contributed positively to students' academic performance.

2.5.3 Social media use in Sri Lank

Jayarathna and Fernando (2014) examined 300 students and found a negative relationship between Facebook usage and students' engagement. However, they note that Facebook usage did not minimise students' engagement, rather, students' engagement with their academic responsibility minimised Facebook usage. The reason according to them is that in Sri Lankan culture, Facebook is not used for academic purpose and therefore cannot be used as a technological platform for students' academic enhancement.

2.5.4 Social media use in Taiwan

Ying-Fang Chen and Peng (2008) studied the relationship between students' internet use and their academic performance, interpersonal relationships, psychosocial adjustment, and self-evaluation, using a stratified sample size of 49,609 students selected randomly from 156 universities. They found that heavy internet users and non-users differed significantly in a number of dimensions. Their findings indicate that non-users had better relationships and learning satisfaction, resulting in better grades than heavy users. Of note in their explanation are the words *'heavy users'* and *'non-users'*, which makes me question if there were no

moderate users. If there were students who use the internet in moderation, how did they perform academically in relation to their usage?

2.5.5 Social media use in India

Gupta, Singh and Marwaha (2013) tested the relationship between social media and academic performance statistically and found no correlation. According to them, the majority of the students say they use social media tools for information sharing and personal interaction, and that the academic performance of students is independent of the use of social media as a tool for academic performance. In their view, academic performance and use of social media are independent of each other, so they have no correlation.

2.5.6 Social media use in Saudi Arabia

Alwagait, Shahzad and Alim (2015) surveyed 108 students using a mixed method approach. They found that there is no linear relationship between social media and academic performance. They identified poor time management as a factor responsible for low grades of students who use social media.

2.5.7 Social media use in Kenya

Muhingi et al. (2015) used a quantitative approach to study the relationship between social media and academic performance of secondary school students and found a negative relationship. Muhingi et al. (2015) claim that secondary school students in Kenya were much more vulnerable to the adverse effect of social networks to that found elsewhere in the world. This includes conversion of academic time into recreational sessions, resulting in poor academic performance among majority of secondary school students in Kenya.

2.5.8 Social media use in Ghana

Munkaila and Iddrisu (2015) studied the relationship between social media and academic performance of polytechnic students. Based on the response from 558 students used for the research, they found that there is no correlation between students' academic activity and social media usage. The say this is because they use social media for both academic and non-academic activities. Yeboah and Ewur (2014) conducted a survey on the impact of WhatsApp on academic performance and found that students spend an average of over 8 hours a day on WhatsApp, sending instant messages to friends. Seventy two percent of the participants said that their reason for using WhatsApp was to chat with friends; 9% to chat with family; 12% to

get general information, and 28% use it for academic purposes. They concluded that 76% of the students say WhatsApp affected their academic performance negatively while 24% of them responded that it influenced them to perform better. Those who said that WhatsApp affected them negatively said that they lost basic pronunciation and writing of words due to their constant usage of abbreviations. Students create their own social media language such that happy birthday is written as *'happy bonday'* or *'happy bafday'* (Yeboah & Ewur, 2014). Even though the phone is installed with spelling and correction tools, students still bypass the tools to form their own words like *'u', 'gdnite', 'good pm' or 'good am',* abbreviations that impair their English language usage and spelling skills, thus being detrimental to their performance in examinations. In related research, Aforo (2014) studied the influence of social media on academic reading. Based on a sample of 1000 students from the College of Art and Science, Kwame Nkrumah University, Aforo found that a large number of students say they spend a large amount of their free time using social media. The researcher concluded that social media generally is of great importance to academic reading because of the various features available to students, but entertainment options are often preferred. So social media usage does not augur well for academic performance.

2.5.9 Social media use in the Nigerian context

According to research conducted by Micaiah (2014), the demographic population of Nigerian youth is 65 million, and 45% of Nigerian students use Facebook, including 36% of grade 12 students (Figure 2).
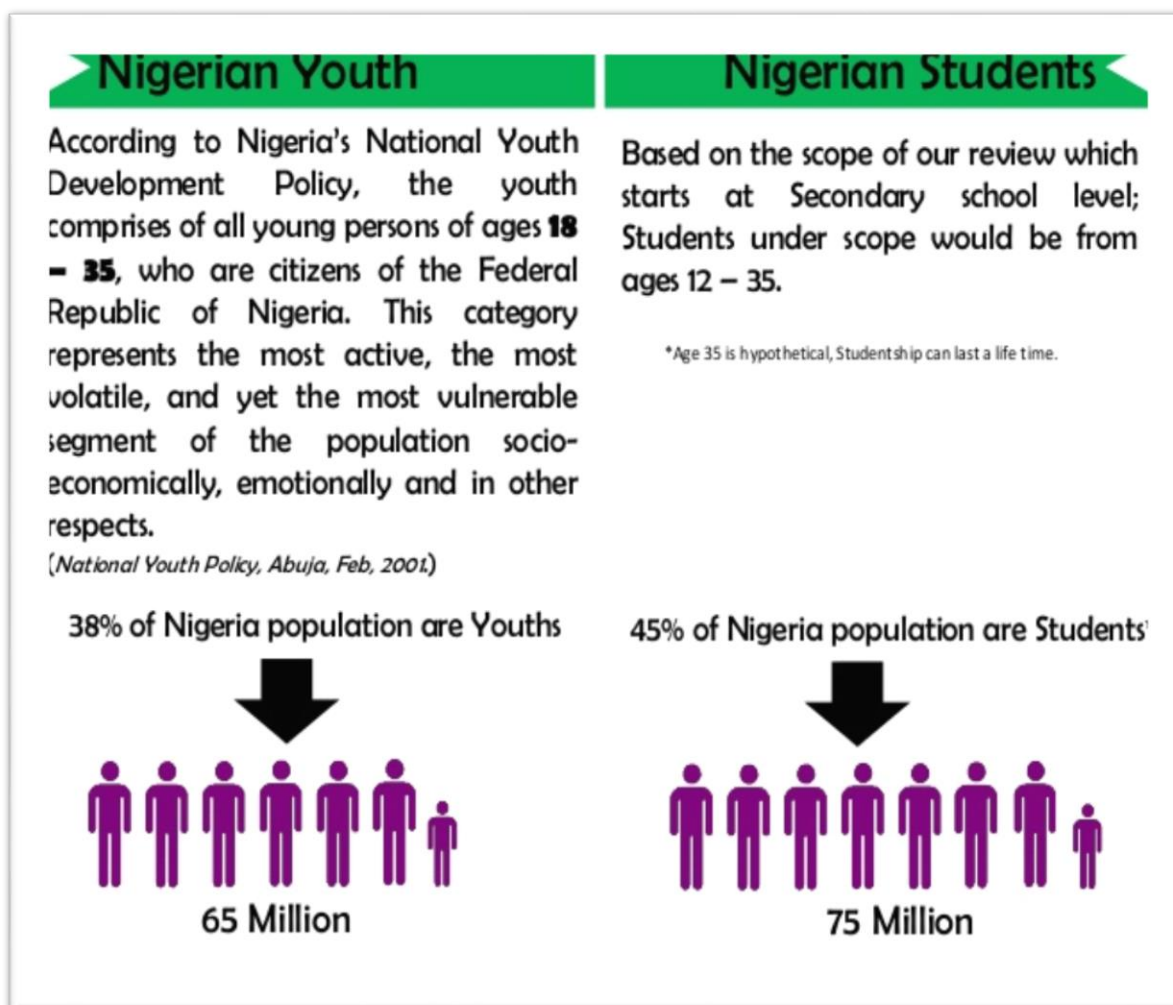
Figure 2: Demographic population of Nigerian students

The incredible social media usage rate among students makes me ask the question: if 36% of grade 12 students use Facebook, what are they using it for?

Olufunminiyi (2015) complains that:

> In recent times, social media has caused many students more harm than good. It has destroyed the life of many good and brilliant students because it consumes too much of their time. Some parents provide cell phones, computers, laptops, video games ... for their children. This has caused a lot of distraction for them against reading their books and doing academic work. Some of these children spend up to 2 hours surfing the internet, browsing, pinging on Blackberry, using Facebook, WhatsApp, 2go, Twitter, Instagram and many more, at the expense of reading their books (p.4).

Ajanaku (2016) notes that uncontrolled use of social media on mobile phones by many students affects their academic performance. Ajanaku writes:

> "Students engaging with the social media on their mobile phones, checking their Facebook status, sending instant messages, bullying and sending threatening messages, viewing, distributing pornographic content and receiving upsetting calls with distracting ringtones while in class, has become a regular habit among students" (p.8).

These observations and views present social media as an arena where students socialise with friends and family, listen to music and watch videos to the extent that there is a relationship forged between overuse of the media and lower grades and poor academic outcomes (Suciu,

2013). Olufunminiyi (2015) and Ajanaku (2016) are not the only ones with this perception about students' use of social media and the negative impact on their academic performance. Rosen, Carrier and Cheever (2013) posit that "students with high online addiction scores showed learning difficulties, resulting in poor grades, missed classes, and problems paying attention during classes because of sleep deprivation" (p. 477). A Senior Advocate of Nigeria, former president of the Nigerian Bar Association, and Chairman of the Council of Legal Education, Onueze Okocha corroborates this assertion, stating that social media is causing student failure at Nigerian law schools (Akasike, 2014). This is what Okocha has to say:

> "… nearly 33% of the students who sat for the Bar finals failed and the students who failed performed poorly and when we inquired into the matter, we discovered that some of the students were not taking their studies seriously. Some of them were using their iPhones, iPads, BlackBerry phones and other mobile gadgets to communicate with their friends on social network sites while classes and tutorials were going on. Therefore, we thought we needed to send the signal to the students. They must rise up and take their studies seriously" (Akasike, 2014).

It is becoming increasingly obvious to students that their over indulgence with social media is depriving them of good grades in both internal and external examination and the way they deem it fit to correct this poor academic performance is to cheat, using social media tools. Ebhomele's (2016) presentation in Naija.com reveals how social media fuels examination malpractice in Nigeria. According to Ebhomele (2016) some students go to examinations with their cellphones hidden on their person in readiness for the examination. As soon as the examination begins, such students send text messages about the examination questions to their proxies outside the examination hall to get them answered for them to transcribe and submit. In another scene, Ebhomele (2016) asserts that some candidates Google the answers directly from social media. Even though such students may eventually score high grades, this method of social media usage does not contribute in any positive way to the academic performance of students and deprives them of intellectuality and morality.

Although such corrupt activity is not condoned by the education system, it is interesting to note students' phenomenal ability to navigate through social media quickly and precisely to obtain assistance within a limited time and space in an examination hall. Nevertheless, does such activity actually result in good grades? Ebhomele (2016) notes that when the examination results are released, some of the students are successful and happy while many others are sad and mourning their failure. If social media is a distraction to students and thus causing them to perform poorly, how are they distracted and from what? Karpinski and Duberstein (2009) contend that every generation has its distraction and I certainly agree with them on this. Prior to the emergence of social media, Nigerian students engaged vigorously in other social activities that kept them occupied even into study hours. Without social media, students who

are easily distracted by social activities will still be distracted by other attractions. Demola (2012) has argued that students engage with programmes on the direct broadcast satellite service and other recreational games and sport. Boys occupy themselves with DSTV Super Sport channels, the girls with DSTV Africa Magic Movies, and both engage with music and other entertainment channels. Although Kirschner and Karpinski (2010) contend that students who use social media regularly are susceptible to having lower grades, Demola (2012) argues that social media is not the root of all evil, that if social media did not exist, students might spend their time engaging in other activities that may interfere with their academic performance, more so because the relationship between social media and academic performance is related to the time spent on social media, not necessarily social media itself (Junco & Cotten, 2011a). Measuring the finite nature of time as against the infinite nature of knowledge raises question about how students spend most of their time on social media entertaining themselves, and the time they reserve to meet their academic responsibilities. Is it appropriate to say that all the time that students spend engaging with social media is wasted? They argue that the real-world impact of such a relationship between time and students' usage of social media does not seem to be a major detriment to academic success; rather, there could be other variables that are more strongly related to overall academic performance. What variables could possibly exist as a barrier between social media usage by students and their academic performance?

2.6 Is there any relationship between social media and academic performance?

Identifying the relationship between social media and academic performance is becoming a conundrum. Looking back at history, over three decades ago (prior to the emergence of social media) Clark (1983) studied the relationship between mass media and education and found that there is no relationship between the media and academic performance. According to his meta-analysis of the topic, no media has the ability to influence performance under any condition. He claimed that studies that found evidence of a relationship between any media and academic performance, even where dramatic changes in performance and ability were evident, because of some uncontrolled aspect of the subjects' content and the instructional strategy rather than the media. Clark (1983) pushed it further, asserting that media is "merely a vehicle that delivers instructions but do not influence students' academic performance … the choice of the vehicle might influence the cost or extent of distribution, instruction, but only the content of the vehicle can influence achievement" (p.445). Clark's findings represent what was known at a point in time from which new thinking can draw on, suggesting that prior to the emergence of social

media, other technological devices were used for academic purposes. In the current state of knowledge, research findings are multiplying in this area of knowledge given diverse technological advancements and increased usage, thus, his assertion has been overtaken by new findings. Research findings from the University of New Hampshire reveal that students who engage heavily in social networking do just as well academically as students who are less interested in keeping in touch with the medium (Bart, 2009). Students' engagement with social media has both quantitative and qualitative features (Junco, 2014c); students can spend much time (quantity) using social media for qualitative purposes. Bart's (2009) study indicates that social media is being integrated with students' academic activities rather than interfering with them. Bart's findings are presented in Figure 3.
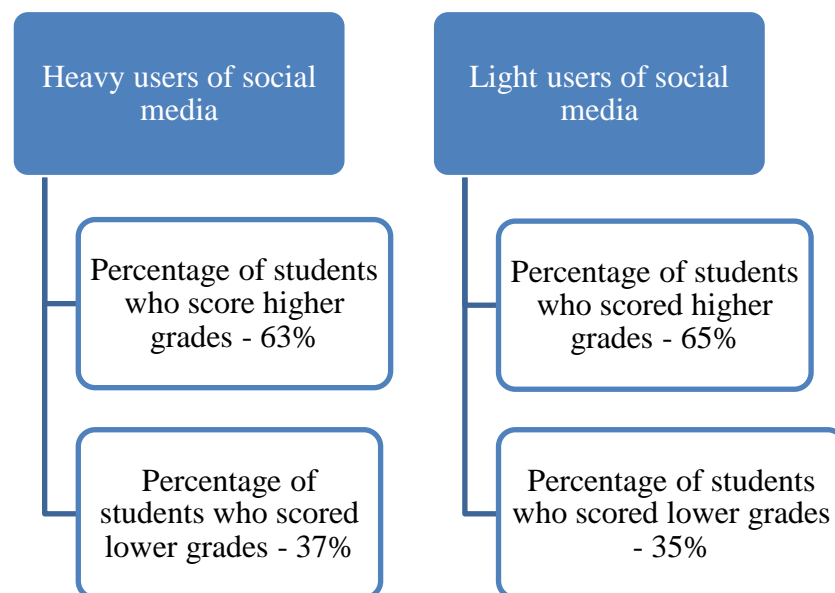
Figure 3: Comparative analysis of light and heavy social media users

This finding is similar to those of Siemens (2004) and Downes (2008) whose Connectivism Theory positively links social media to academic performance.

Connectivism proposes that knowledge is distributed across a network of connections (social media) and which locates learning (academic activities) in the context of being able to construct and traverse those networks (Downes, 2008, p.85). Accurate up-to-date academic content, according to Siemens (2004), is the intent of the technology, because the capacity to know more is more critical than what is already known. The aim of connectivism is to nurture and maintain the connections needed to facilitate academic activity and enhance academic performance. This suggests that the functional code in social media has the capability to enable students to learn more, know more and understand better.

The connectivism principle of constructing knowledge is an important principle in academic activities and performance as it has direct implications for students' academic activities by addressing deep thinking and creating understanding (Downes, 2008). Downes' statement suggests that there exists a connection between social media and academic activities, but that students' performance depends on their ability to develop and employ their cognitive skills. Junco and Cotten (2011a) contend that research findings that indicate a negative correlation between the time students spent on social media and their grades does not necessarily mean that social media causes lower grades. Junco (2014c) questions why social media use is said to cause lower grades when no controlled experiments have examined a causal relationship between the two variables. He further contends that it would be very difficult to conduct such a study and obtain a valid result, given the penetration of social media among students. The reason for this is that it would be nearly impossible to find a group of students who do not use social media as sample for appropriate comparison to the general population. There are many reasons why there could be a link between social media and academic performance, but the most important is typically called the third variable problem (Junco, 2014c), which can be extended to an infinite number of variables. Junco (2014c) says that an infinite number of variables can even cause a relationship between the original two variables to appear. This means that the indictment is not against social media but rather against some invisible character that prevents students from performing at optimal capacity. What are the variables that students express as behaviour that forms their personality?

2.7 Factors supporting or militating against academic performance of students who use social media
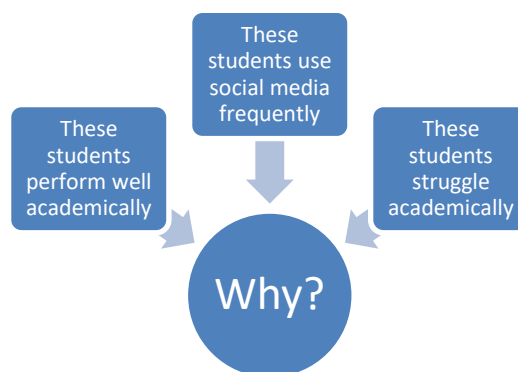
Figure 4: Why do some students do well and others not?

What makes some students who use social media heavily smarter than others? Is it that they are genetically wired to be smart or that they simply know how to use what they love to get what they want? Junco (2014c) contends that just because any group of students use social media does not mean they all use it in the same way. He argues that the ways students' use social media are much more important in predicting what they will get out of it. This suggests that whether or not students use social media is less decisive in predicting their academic performance than what they do on the site. This statement is consistent with what Clark (1983) argued several years back, that social media *per se* does not in any way contribute to students' academic achievement but other factors do. Junco (2012) and Downes (2008) add to Clark's argument as they attribute academic impediments of students to other factors rather than social media. What factors impact social media and academic performance? Divergent views have been raised regarding which factors inhibit students from maximising the benefit of social media to their academic advantage. Junco and Cotten (2012), Junco (2012) and Kirschner and Karpinski (2010) say multitasking with social media tools constitutes a major obstruction to academic performance of students, but Lavoie and Pychyl (2001) look in the direction of procrastination. O'Brien (2011) says that the majority of the students surveyed report that they are procrastinators, and that their online activities distract them from studying, leading to displacement of time that would have otherwise been spent studying. Wolfe and Johnson (1995) assert that personality is the main factor and is a predicator of college performance. To excel academically, students have to be passionate, tenacious, hungry for academic excellence and intellectually curious. Intellectual curiosity, according to Von Stumm et al. (2011) is the third pillar of academic performance. If intellectual curiosity is the third pillar of academic performance, what are the first and second pillars? Several researchers found that lack of self-efficacy (Choi, 2005), self-discipline (Duckworth & Seligman, 2005), and self-regulation (Pintrich & DeGroot, 1990; Schunk, 2001) on the part of students are the culprits of poor performance. Others point to the lack of motivation (Elliot, 1999; Pintrich, 1999), mastery (Fenollar et al., 2007), avoidance (Elliot, 1999), and time (Bart, 2009; Stinerbrickner & Stinerbrickner, 2004; Plant, Ericsson, Hill, & Asberg, 2005) as factors inhibiting academic achievement. The fact is that all of these factors can serve as both impediments and enhancements; what needs to be determined is whether these variables have the ability to enhance or inhibit the academic performance of students who use social media, and to what extent.

2.7.1 Multitasking

Multitasking according to Chen and Yan (2016) and Kirschner and Karpinski (2010) means divided attention, task-switching, non-sequential task-switching or ill-defined tasks when they are performed in learning situations (Junco &Cotten, 2011). When students are multitasking, they are using a variety of technologies at the same time while doing their homework or class work, and even while listening to lectures. For this reason, they do not accomplish any one thing effectively and efficiently. If for example, a student is writing an examination, tweeting, and sending text messages simultaneously, they lose concentration, with one of the tasks taking prominence over the others. Students who engage in constant multitasking with several streams of electronic activity cannot pay attention to any particular input, as they would have done with just one. However, Pavlidis et al. (2016) report that texting is different from other kinds of distraction because it blocks the 'sixth sense' – a subconscious corrector that is capable of counterbalancing diverse information coming into the student's mind when texting and listening in class. What is not clear here is, in conducting two competing tasks at a time, which task is considered by students to be vital for academic enhancement and thus retained, and which is not and so is filtered out for deletion? Some students may claim that multitasking makes them proactive and efficient, and helps to focus them, especially students with ADHD. Bradberry (2014) dismisses such claims, contending that those who say they perform well with multitasking are not serious multitaskers. He referred to research finding conducted by Stanford researchers based on the belief that multitasking helps students to perform better and which concluded that frequent multitaskers perform worse because they have more trouble organising their thoughts and filtering out irrelevant information. Bradberry (2014) states that it takes 15 consecutive minutes for students to focus on a task, and once they do, they fall into a euphoric state of increased flow. According to him, the research findings indicate that students who maintained such state of flow were 5 times more productive than those who switched from one task to another simultaneously because the multitaskers were slower at switching from one task to another.

2.7.2 Procrastination

Procrastination is the postponement of an activity or programme for later (Wesley, 1994; Tice & Baumerster, 1997; Lavoie & Pychyl, 2001). Students postpone their academic activities and use the time for social networking. Procrastination is a function of lack of self-regulatory skill and is a superhighway to poor performance (Lavoie & Pychyl, 2001). Procrastination has a

negative and positive side and can function as a two-edged sword depending on how students who use social media apply it. If students self-regulate (SR) by procrastinating and postponing tweeting, sending and receiving instant messages and gaming and spend the time on their academic function, such procrastination would translate into better grades.

2.7.3 Self-regulation

Self-regulation according to Pintrich and DeGroot (1990) is highly correlated with cognitive strategy use. Self-regulated learning (SRL) is a goal-directed activity that students instigate based on their self-regulated thoughts and behaviour. Junco (2014c) defines self-regulation as a voluntary control of impulses in order to achieve goals. Students modify and sustain such thoughts and actions through uncompromised behaviour by systematically orienting themselves towards the attainment of their academic goal (Schunk, 2001). Lack of self-regulation, according to Junco (2014c), may be a reason for poor academic performance in less motivated students who use social media, as some students may have a poorer ability to self-regulate. Such students use social media in ways that keep them from their academic functions, causing poor performance. He argues that students with lower grades tend to use social media more, but it could be that being a weak student drives their increased social media use rather than social media causing lower grades, making it impossible to assess the directionality of this relationship with any certainty.

2.7.4 Self-efficacy

Another important determinant of academic performance is self-efficacy (SE), or belief in one's capability to organise and execute a particular course of action (Bandura, 1977b). Self-efficacy skill is students' influence over their behaviour and thus can influence their academic ability (Lepp et al., 2015). Self-efficacy is an intrapersonal trait that resonates with self-discipline, self-actualisation, self-determination and motivation. Self-discipline, motivation and academic performance, according to Duckworth and Seligman (2005), are intricately linked and outdo intelligence quotient (IQ) in predicting academic performance of adolescents, thus contributing significantly to students' performance. Choi (2005) contends that self-efficacy and self-concept are predictors of college students' academic performance. Students who perceive themselves to be highly efficacious with reference to a particular task will invest sufficient levels of effort to achieve successful outcomes, whereas those with low levels of self-efficacy will not persist (LaRose et al., 2001). Habitually reaching for the phone to check social media sites for updates indicates a lack of these qualities on the part of students and can have

a detrimental effect on their academic performance. Social media self-efficacy, or students' beliefs about their capability in using social media to accomplish useful tasks (Eastin & LaRose, 2000) enables them to set measurable yet challenging goals to improve performance (Goleman, 2011). This means that self-efficacy correlates positively with virtually all measures of academic performance including semester grades, cumulative GPA, homework, test scores, writing assignments and research, and the lack of it is detrimental to academic performance in students who use social media. Self-efficacy relies on self-discipline, self-regulation (Zimmerman & Schunk, 2001) and intelligence (Duckworth & Seligman, (2005). If self-efficacy, motivation and self-regulation seem to have a direct and strong effect on academic performance, why do some students perform better than others do even though they all indulge in heavy social media usage? Could it be linked to individual difference (Lopez, 1999; Schunk, 2001; Zimmerman & Schunk, 2001) among students? Elliot (1999) answers this question by saying that self-efficacy on its own does not translate into action without motivation, because motivation is the desire that drives self-efficacy.

2.7.5 Motivation

Elliot (1999) assessed the connection between students' motivation and the impact it had on their academic performance and found a positive relationship that is dependent on two concepts: approach and avoidance. He writes that there is a distinction between motivation, avoidance and approach. From the personality theory perspective, he examined the role of approach and avoidance motivation on performance and notes that both concepts differ as a function of intrinsic attraction or averseness. In approach motivation, behaviour is instigated or directed by a positive or desirable event or possibility, whereas in avoidance motivation, behaviour is either instigated or directed by a negative or undesirable event or possibility. Elliot (1999), Elliot and Thrash (2002), Ahmad and Rana (2012) and Braverman and Frost (2012) all split motivation into two sub-headings, categorising it as either approach or avoidance. (Figure 5).
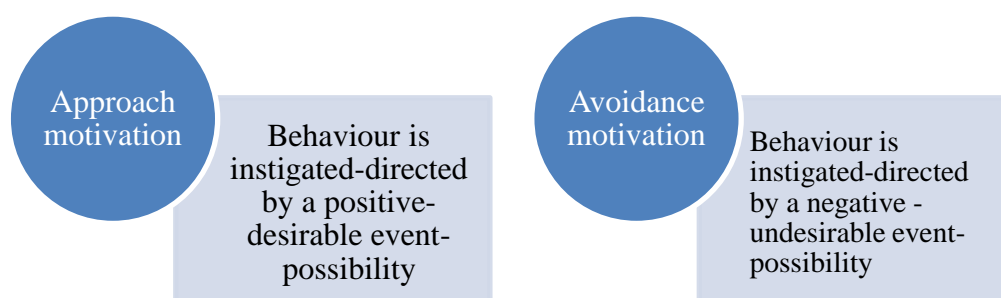
Approach motivation

Behaviour is instigated-directed by a positive-desirable event-possibility

Avoidance motivation

Behaviour is instigated-directed by a negative - undesirable event-possibility

Elliot and Thrash (2002) studied approach and avoidance in relation to temperament, goal-setting and achievement and contend that the distinction between approach and avoidance motivation is fundamental and integral to the study of affect, cognition, and behaviour. They posit that this distinction may be used as a critical conceptual lens through which to view the structure of each student's personality. Approach and avoidance motivation represent the foundation of several basic dimensions of personality that are commonly espoused. Both variables serve as a unifying thread linking different levels and units of personality, dictating approaches to engagements. The two concepts of approach motivation and avoidance motivation are unpacked below.

2.7.5.1 Approach motivation

In approach motivation, behaviour is instigated or directed positively in relation to desirable events with hope of possibilities (Elliot, 1999) It is associated with positivity, and with pleasurable and passionately active engagements (Ahmad & Rana, 2012). Students are largely driven by the desire to achieve their aspirations and desirable outcomes (Braverman & Frost, 2012) and the hope of success displayed by approach motivation is commonly generalised to the category of extroverts as extroverts are influenced less by negative and stressful situations than introverts are (Ahmad & Rana, 2012). Approach motivation is a necessary skill for students to address the pitfall of procrastination.

2.7.5.2 Avoidance motivation

In avoidance motivation, behaviour is either instigated or directed by a negative or undesirable event or possibility. Therefore, if students learn to avoid negative stimuli based on psychological, physiological, and social rationales (Elliot, 1999), they are driven by a desire to avoid distressing problems and undesirable outcomes (Braverman & Frost, 2012). Avoidance can be valuable in some instance with procrastination being advantageous in particularly threatening situations. However, avoidance can also be deleterious when it comes to the point of avoiding tasks that require completion (Leikas et al., 2009). Sometimes, fear of failure displayed by avoidance motivation is commonly generalised to the category of introverts, as introverts have a more negative reaction to stressful situations, and therefore avoidance is a common occurrence (Ahmad & Rana, 2012). This suggests that avoidance motivation skills can protect students from cyberbullying and other unethical practices on social media.

2.7.6 Mastery

In addition to approach motivation and avoidance motivation, Fenollar et al. (2007) identified mastery, performance approach, performance avoidance and work avoidance as the four pillars of academic activities. They assert that mastery and performance goals each have independent positive effect on self-efficacy task value and the use of cognitive and meta-cognitive (Grushka et al., 2014) strategies. This is suggestive of the fact that students who are high in mastery goal and low in performance goal are likely to be high in self-efficacy goal, task value and strategy. This means that students who are proficient with the use of social tools and who have mastered how to use search engines to navigate through social media to get what is needed for their academic gain are likely to perform better academically than those who rely solely on self-efficacy. If this is so, then mastery and self-efficacy function together in the context of efficient achievement better when they are separate from each other. Thus, the skill of mastery motivates students to improve on their self-efficacy towards better academic performance and the lack of one affect both, ultimately affecting academic performance.

Students who are pursuing mastery goals show a desire to develop competence and increase knowledge and understanding through effectual learning, as they are concerned with improving skill, competence and gaining insight (Fenollar et al., 2007). Such students believe that effort is synonymous with success and the lack of it is tantamount to failure. Effort in this regard, according to Fenollar et al. (2007), refers to the overall amount of energy and time expended in the process of studying.

2.7.7 Time

Time is the most precious resource students have and need if they desire to acquire quality knowledge and excel academically. Time is finite while knowledge is infinite. What amount of time do students spend surfing on social media, and what do they do during this period? A plethora of previous studies on the relationship between social media and academic performance has established the importance of time in determining academic outcomes, even though the effect depends largely on how students use time and what they use it to do. Junco and Cotten (2011a) report that students devote much of their time on social media nattering away, and that the result on students' academic performance is low grades. Contrary to Junco's view, Bart (2009) and Plant et al. (2005) argue that time has no effect on students' academic performance because study time does not predict the GPA of students who have grown up online (Dretzin & Maggio, 2008). Some students have grown up with social networking as part

of their lives, so this approach has now become a part of how they interact with each other with no apparent interference with their academic performance (Bart, 2009). If I clearly understand what Bart is saying here, I would interpret him to mean that the digital natives (Prensky, 2001a) seem to be oblivious of the value of time when using social media, the way digital immigrants do (Weiss & Hanson-Baldauf, 2008). They have no knowledge of time when engaging with social media, they simply spend time the way they want on what they want, in order to accomplish their goal. Since there is a significant difference between social networking and academic networking, students who suddenly find themselves performing low academically should pay attention to the time they spend engaging with social media and what they do on it.

2.8 Conclusion

This review reveals that the relationship between social media and academic performance is a complex and a highly debatable subject. Some research findings suggest that there is a positive relationship; some say it is a negative one and others say there is no relationship between social media and academic performance. The whole matter is a paradox (Turner, 1987). Junco (2012a, 2012b), who proves to be the chief researcher in this field, reports that after decades of research, one cannot say for sure how Facebook improves academic performance of students. There is no great consensus regarding how best social media can relate effectively and efficiently to academic performance, because such an attempt directly struggles with the mutability of established psychological and psychosocial realities like task value, goal orientation and learning strategy. Every attempt at trying to identify and establish the relationship between social media and academic performance seems logically contradictory with the diverse views and alternate ideas following it. This confirms Karbalaei's (2012) notation that the act of measuring performance in relation to social media usage is a complicated activity that is laden with limitations. Is the disparity in research findings due to the way research questions were structured? Any attempt to identify such fixed social reality and relate it to academic performance will involve representing it as stable (Kirschner & Karpinski, 2010), but ensuring stability is a complicated activity, especially when the outcomes that are of interest are not clearly defined. Relating psychological and psychosocial process of academic activity and performance has always been a complex exercise (York, Gibson & Rankin, 2015). Based on all the literature reviewed so far, the relationship between social media and academic performance is uncertain, but the main themes that have been picked up are: firstly, the protagonists fail to address in detail the ethical issues presented by the antagonists. In addition, they fail to articulate in clear terms how social media can effectively facilitate and enhance

academic performance in students with learning disorders in a way that such students grasp the associated gains (DeAndrea, Ellison, LaRose, Steinfield, & Fiore, 2012) and excel academically. The absence of such clarity creates room for social media to be viewed as a subtle imposition and persuasive tool, and persuasion represents power and hegemony (Fairclough, 1995; Locke, 2004).

Secondly, both the protagonist and antagonist arguments seem plausible. Whereas the propositions of the protagonists are useful, the views of the antagonists are not criticisms of social media use by students but a warning to caution them. They reveal the covert and overt dangers associated with social media use, therefore raising awareness and reducing vulnerability unless users intentionally wish to be victims. Their divergent views present convincing evidence of the dangers inherent in social media, as well as benefits they can derive from appropriate use and how social media tools can be employed to enhance academic performance. Thirdly, some say a significant relationship exist between social media and academic performance; some say there is no outright relationship between social media and academic performance except a causal one (Junco, 2014c). However, Junco did not say if the causality is in the positive or negative direction. Fourthly, the research by Kirschner and Karpinski (2010) did not imply that social media is the root of poor academic performance, or that students who use social media are likely to perform poorly academically. Their co-relational data did not suggest that social media causes students' failure or lower grades, because if social media had not existed, these students may have been spending their time engaging with other activities that may interfere with their academic performance. Fifthly, if social media is something students do concurrently with studying, the negative relationship found may be due to the deleterious effect of trying to implement two cognitive demanding tasks simultaneously, which could have a negative impact on both the effectiveness and the efficiency of the tasks. Although some studies such as enquiry, learning or research may require the simultaneous conducting of multiple tasks, conceivably, any task that is implemented at the same time as studying may have the same collateral effect of impaired, ineffective, and inefficient performance.

From all the exploration so far, is it sufficient to say that it is not frequent use of social media but inappropriate use of it that is the crux of the matter? Does the depth of engagement with social media determine the level of academic performance? If social media usage is placed against an organised, well-planned academic programme for academic enhancement, which context will provide students with better outcomes? The answers to these questions may not be found in the context or method but may be with the approach used by students. The value

students get out of social media largely depends on the value they put into it which directs and dictates how they use it. Thus, social media does not make students perform less or more academically, rather their academic excellence depends on their ability to use their instincts to do what they are supposed to do academically, using social media appropriately and at the appropriate time. Finally, academic activity is a process of knowing through learning, and if students are distracted from predefined and prescribed knowledge by their use of social media, could it be possible that they are immersing themselves in it, seeking other forms of knowledge whether academic or non-academic? Is there such thing as non-academic knowledge? Does the school curriculum have a boundary demarcating what student should know and what they should not? Confining students to predefined, curriculum-based prescription with the notion that their use of social media distract them, tends to set up a process that will exclude some students with unique talent, including those with learning disorders, that already excludes them anyway! If one thing is used to effectively replace another, it means that the newer has an overriding interest over the former, thus should be explored in detail to understand the benefit.

Exploring the relationship between social media and academic performance has led to the discovery of disparate views put forward by protagonist and antagonist writers – each party arguing with complete honesty, while consciously presenting a firm double-think. A study by Bart (2009) found that social media usage enhances students' grades, while, on the contrary, Kubey et al. (2001) found that social media usage causes a decrease in students' grades. Junco and Cotten (2012) used exhaustive evidence to convince readers that there is no outright relationship between social media and academic performance except a causal one. Such ambivalence portrays the relationship between social media and academic performance as nebulous.

This literature review has helped in the identification of relevant factors, as determined by previous studies. It has also provided a number of theories to be used as a foundation for developing the conceptual and theoretical frameworks for this study. The variation in all findings above makes it difficult to draw any coherent conclusion and thus justifies my reason to adequately define and operationalize the concepts: 'social media' and 'academic performance'. Adams suggests that "if the context is strongly predictive of the word to follow, that word's meaning should receive a strong and focused boost in excitation …. such boosts in the excitation of a meaning gives it a head start toward reaching consciousness (1994, p.139). Thus, the succeeding chapter explores and analyses in detail, both concepts, as they sit as pillars of support and provide direction for this research, to reveal how they relate. I will now define key concepts that sit as pillars of support and provide direction for this research.

Chapter 3: Conceptual Exploration

3.1 Introduction

Concepts are generalised ideas that have been given a name. In other words, a concept is an idea expressed as symbol or words, and words symbolise language used to represent an abstract idea about physical reality or an abstraction thereof (Ahmad, 2014). Social media and academic

performance are broad concepts created by the abstraction of reality, thus requiring an elaborate definition.

Social media on its own is an abstract and complex concept. Therefore, to define it operationally, I chose to exclude mass medias such as television, newspapers and radio. The absence of a clear description of the functional role social media plays in academic settings in the Nigerian curriculum poses a problem to both school managers and students. Sociologists describe functionalism as a relationship between the macro units and the micro units of the society, and how each micro units functions to provide stability for the macro unit. Functionalists, especially Mooney, Knox and Schacht (2000), use words such as functional and dysfunctional to describe the effects of social elements in society and how one part influences, and is influenced by, the other. Several decades ago, Durkheim (1893) made an indelible contribution that set the trajectory for the understanding of how the social system functions. However, post-modern thinking may see his work as arising from a static positivist perception as he emphasised the interconnectedness of society with the belief that each part of a social structure will compensate naturally for any negative impact that occurs as a function of social interaction and so does not support social change even if such change brings better results. Such perceptual consistency (Covey, 1989) in cultural hegemony (Bates, 1975) fuels the tendency to ignore new innovations and ideas regardless of any contribution or value they provide, thus relegating all dynamic positivity about change while promoting structures aimed at maintaining status quo. When social instability occurs it alters and destabilises the status quo of the entire system's functionality, creating a situation Durkheim (1893) himself refers to as 'Anomie'. Social stability during the pre-modern era depended on the strength and weakness of each unit (Parsons, 1951), with each unit being rooted in interactive relationships within each unit and across units. This idea presents functionalism as a bottom-up activity that negates beneficial change. Despite all perceptions about change, I choose to discuss the concept of social media from the functionalists' perspective, reflecting on the role interaction plays in establishing and stabilising the functional relationship between students and social media on the one hand, and social media and academic performance on the other.

Academic performance is a process that indicates students' academic standing, revealing why some students are graded higher than others. Academic performance as an organising idea has been responsive not only to new modes of live action but also new technologies. Virtual reality and the technologies that produces it make the distinction between human and technological performance increasingly problematic (Kirshenblatt-Gimblett, 2004). This makes the relationship between social media technological tools, the students that uses

them and their academic performance problematic, thus making academic performance a legitimate concept in this study and therefore appropriate to analyse. Thus, the definition of academic performance in this chapter involves a hermeneutic approach that employs critical thinking and interpretation of what others have written about academic performance, and unpacking all definitions (Ahmad, 2014) into component parts in ways that address the research objectives. Hermeneutics, as per Auslander (2009), views performance not as a tool of positivist inquiry that will help in the discovery of truth about the historical facts of performance but as texts from which imaginations about the anthropology of performances (Turner, 1987) can be reactivated in the present; thus, allowing for the experiential understanding of both the past and the present as they are disclosed in and through ongoing dialogue with one another (Auslander, 1999). I define and analyse academic performance in detail from the hermeneutic perspective.

This conceptual framework is articulated within the multidisciplinary field of social media and academic performance, unpacking their definitions to reveal how social media functions as a tool for academic performance. It also discusses the inter-relationships among these variables that are considered integral to the dynamics of academic activities, linking both concepts to students' academic lives. As a result, this chapter is divided into two sections; the first section is a panoramic view of what constitute social media and what is not. The second section deals with the concept of academic performance, covering mental, physical and manual performances as a socio-cultural processes, a product of learning as well as an activity that reveals competency. For the purpose of clarity and as it relates to this study it is worth starting by examining the constituent term 'social media'.

3.2 Social media

Unlike the traditional media that pushes the opinion of few on the general public, social media is the opinion, views and voice of the public. Whereas the mass media is accused of manipulating society into a social order through unidirectional (monologue) rhetoric, social media platforms[3] provide avenues for bi-directional (dialogic), cohesive, interaction (Mills, 1959). Cohesive interaction is a key principle in academic performance. Social media is not the traditional media that pushes content and the opinion and view of a few on the general public. Rather, it is the opinion, creativity, views and voice of many of the public. This informs why Web 2.0 technologies such as Facebook, YouTube, blogs, Twitter, Email, Myspace,

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[3] Whereas Boyd and Ellison chose to use the term 'social network sites', I elect to employ the term social media platform (SMP) as both concepts carry the same operational meaning

Google, Wikipedia, WhatsApp, LinkedIn, Reddit, Instagram, and more are referred to as social media. Based on this description, social media by technical concept can be described as an umbrella term for technological tools used for social interaction on the internet. Boyd and Ellison (2007) use the term 'social network sites' to define social media as web-based service sites that allow individuals to construct a profile or semi-profile within a bounded system, articulate a list of other users with whom they share a connection, view and trasverse their list of connections and those made by others within the system. This definition can be further unpacked into component parts to mean that when a profile or content is created by an individual within the social media system, it is made public to only those who have created theirs within that system. This then forms a community that can share and interact with each other within that bounded system. This suggests that membership of that bounded system is controlled, and acceptance depends on permission granted by a member of that particular system or community. This means that social media content can be shared within a relatively small audience. Based on Boyd and Ellison's (2007) definition, the concept 'social media' implies that people interact across multiple platforms of knowledge in a social context. Grushka et al. (2014) posit that social media creates the opportunity for students to be multi-literate, providing opportunity whereby such students are able to seamlessly navigate between paper, electronic and live texts, and their semiotic systems as they decode, communicate and collaborate across platforms. They warn that as students are now deluged with vast quantities of information, an understanding of the constructed nature of texts has become vital, therefore a broad range of platforms need to be evaluated in terms of veracity and reliability.

From the functional viewpoint, social media is a marketing and entertaining product that enables efficient socialising and education in a meaningful way, linking humans with cultural values (Gamson, Croteau, Hoynes & Sasson, 1992). Emails, Facebook, WhatsApp, and Twitter are some examples of social media platforms that possess features which provide support for the functionalist vision, as they function for the purpose of enabling interaction among and across students anywhere, anytime, anyhow, on any subject. The platforms enable students to maintain cohesive and valuable contacts with friends, family and knowledge which Durkheim (1893) says is in line with the functionalist vision. Davies (2009) argues that although social media allows students to maintain cohesive interaction, it also assist them to upload content to a target audience with no control over who sees and shares the content with others. He advances the definition of social media to include the establishment of a dichotomy between things commonly referred to as social media and what is not. Social media according to him is not simply the creation, publishing and sharing of content from an author to a crowd,

but is that which provides a locus for horizontal interaction across the crowd that cannot be restricted or controlled from spreading. This is different from email because while a blog creates, shares and publishes content to an unknown audience, email pushes content to a defined, chosen target. Social media platforms such as Facebook, Instagram and LinkedIn are different in that while students can restrict others from reaching them, their content is exposed to others and everyone is not obligated to engage with your information but can choose to access it. 'Content', according to Davies (2009), is a medium that is licensed to allow users to remix, share, and engage actively and creatively, and 'platform' is a tool through which the content is published and allows for, or enables, comments and interaction. Bearing in mind the earlier definition of social and media, I will now interaction and communication to that definition which will extend it to include interactivity and verticalland horizontal elements.

Social media interactivity can be viewed from two perspectives: horizontal and vertical. If the interaction possibilies around content are below the author and individual members of the audience, it is a vertical interaction. In vertical interaction, the potential social interaction around content is highly constrained (Davies, 2009) which is a typical characteristic feature of email. Moreover, the interactivity among students and the knowledge gained in the process is particularly of importance in the academic setting as it helps to expand the subject content beyond the limit of the curriculum.

For horizontal interaction to take place on social media, there must be the possibility of audiences and content interacting with each other around or through the content, with or without reference to the originator of the content. Davies (2009) refers to such interaction as horizontal. An example of such is Facebook. However, not all interaction on social media is horizontal (peer-to-peer formation), but it does suggest that without the potential for the horizontal interaction around content, the content is not social media (Davies, 2009). If so, can technical terms such as 'comment', 'likes' and 'rating' be also included in the definition as interaction? Davies (2009) says such technical features on social media cannot be defined as interaction because they contribute to content, and have the potential of becoming a social object or subject around which interaction can be organised. This can happen in two ways, which are not mutually exclusive; firstly, the platform through which content is published allows for comment and interaction. Secondly, the content is licensed in ways that allow students to share, remix and actively engage with content and friends, keeping them engaged and active. Does active engagement with content and friends make students oblivious of their physical environment and the presence of those around them? So far, the interactionists seems

to focus on how social media promotes and influences interactivity with less focus on problems of behaviour and functionality.

3.3 Smart phone as entry point to social media platforms

Nearly two-thirds of Nigerian students own a smartphone, and for many, the device is a key entry point to the online world (Micaiah (2014), and they all use it features and applications. Like any student the world over, the portability of smartphone makes it the most popular device among Nigerian students for social media interactivity (Ajanaku, 2016) and thus engages them more than any other device. A majority of Nigerian students own and use a smartphone to access the social media without connecting to any broadband service at home or in school.

I use this image to represent concrete indicators of how students use smartphone in class to access social media tools that can be observed as presented by Lucas Ajanaku in the Nation newspaper of July 5th 2016.

Most Nigerian students bring their phones to schools irrespective of its prohibition by school authority. Its heuristic feature has such an incalculable effect on students that makes it irresistible. Based on my involvement and experience with students, Smartphone usage among students has raised concerns as most schools are worried that uncontrolled use of the mobile phone is doing more harm than good to the students. Every barrier erected by school authorities to stop students from bringing their smartphone to school has always been by-passed, as students are unrelenting, making me to question if the smart phones are smarter than students or students are smart enough to use the smartphone to achieve their academic excellence. Bart (2009) says millennial students have used technological devices from cradle to crayon to chalk and now, college and therefore prefer less formal learning environment in which they can interact with a variety of active learning methods. She posits that they prefer fewer lectures, more multimedia and collaborating with peers, and that when they are not interested in a lesson, their attention quickly shift somewhere else – social media.

Although Smartphone functions as a base for reaching all social media platforms to access academic tools, it is also said to be distractive and boring. An experience sampling survey illustrates that although, smartphone usage often produces feelings of productivity and happiness, many students also feel distracted or frustrated after mobile screen encounters

(Smith, 2015). Nigerian students have deeply embedded mobile devices into the daily contours of their lives. Ajanaku (2016) gave an account from a study of students' Smartphone use in Nigeria. According him, students' engagement with the social media through their phones, checking their Facebook status, sending instant messages, bullying and sending threatening messages to fellow students, that, viewing and distributing pornographic images and receiving upsetting calls with distracting ringtones in class has become a regular habit. These activities disrupt classes and distract students, from focusing on their academic responsibility. He emphasises that the device occupies a central place in the lives of the Nigerian students and thus has become a status symbol among students in general.

As part of growing influence for the enhancement of students' academic performance, the Osun state government gave out smart phones loaded with several learning materials tagged 'opon imo (a Yoruba language, meaning tablet of knowledge) to all secondary pupils in the state (Oluwalanu, Omowale & Kayode, 2014). The purpose is to help students, especially the less privileged to gain access to knowledge that will enhance their academic performance. The more they use the social media, the more their cognitive, affective, dexterity and socio- cultural skills are developed. If social media was created to facilitate interaction among humans which is exactly what students do (Kelm, 2011), is it the overuse of it, or the abnormal use due to lack of understanding of the academic values of social media that is the crux of the matter?

Despite the complex controversies surrounding students' use of social media, smartphone possess heuristic features that enable students to become autodidact in the sense that, its usage encourages them to learn, discover and solve problems on their own. With smart phone, students can access the internet, use Google, Yahoo, YouTube, Facebook, Wikipedia and other search engines to read books related to their academic demand. Ajanaku (2016) notes that some students report positive use of their smartphone as they said they use it to access sites such master mathematics for help with their homework. They also use the device features to accomplish other mundane tasks such as calculation and word correcting to enhance their academic performance. However helpful these features are to students, using the cellular phone to do simple calculation and spelling that student should be able to accomplish cognitively to improve critical thinking is detrimental to their cognitive ability. Over-reliance on calculator and word correcting features can rob students of spontaneous mental prowess in calculation and spelling ability. Though some students in the Art department claim that smartphone usage distract them from focusing on their academic responsibility, a majority of those who say they use smartphone to achieve better grades are probably those who have more inclination to science and technology subjects. Lepp, Barkley and Karpinski (2015) say increase use of the

social media through the smartphone is associated with decrease in students' academic performance. In their study, they found a hierarchical regression that indicates that smartphone use was significantly and negatively related to actual college grade point average (GPA). Apparently, when they use demographic variables such as self-efficacy for self-regulated learning, and self-efficacy for academic achievement they found that high GPA were all significant predictors. They further attempt to establish the relationship by analysing critically, other socio-psychological variables such as task value, goal orientation and learning strategy in relation to increase smartphone use and found that smartphone was associated with decrease academic performance. Prior to Lepp et al (2015) report, Gikas & Grant (2013) had obtained a self-reported data from students on their use of smartphone. From students' perspective on their engagement with smartphone, and the role of social media on their academic performance, Gikas & Grant (2013) found some specific themes which suggest that social media usage on smartphone created opportunities for regular interaction. They also found that smartphone provide students with knowledge of a variety of ways to learn and the opportunities for collaboration which also allow for students' engagement in content creation and communication through social media and other web 2.0 tools. In addition, they argue that smartphone also promotes continuous learning that extend classroom discussion regardless of location. They conclude that despites its heuristic features, smartphone is distractive. Taking Gikas & Grant (2013) findings into the Nigerian context and drawing on Ajanaku (2016) would mean that smartphone is not only student's most valuable companion but has the capacity to contribute immensely to students' academic performance if used wisely.

3.4 Which social media platform do students use frequently?

Aside from Yahoo, Email, and Skype, Micaiah (2014) says that popular opinion reveals that out of over 200 social media platforms the most popular and user-friendly among students are those listed in Figure 7.
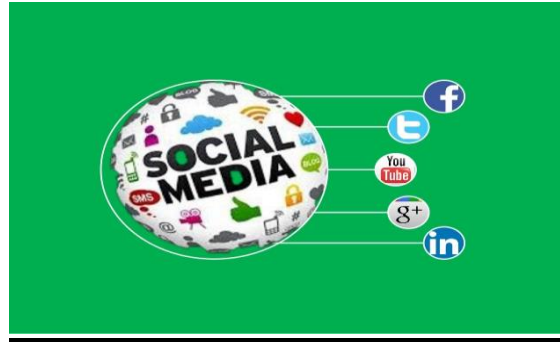
Figure 6: Social media platforms frequently used by students

Although Micaiah (2014) identified Facebook, Twitter, YouTube, Google and LinkedIn as the most popular social media destination of students, Bart (2009) posits that more students use Facebook and YouTube than any other social media platform. Her argument is statistically presented in Table 1.

Table 1: Comparative analysis of students using various social media platforms and their grades

Social Media	Percentage of Users	Heavy Users Grades	Light Users Grades
Facebook	96%	62-38%	63-38%
YouTube	84%	64-36%	63-37%
Blogs	20%		70-30%
Twitter	14%		68-32%
Myspace	12%		65-35%
LinkedIn	10%		73-27%

3.4.1 Facebook

Studies reveal that Facebook is the most popular and frequently used platform among students (Junco et al., 2013). According to Junco (2011), researchers from Pew Internet and the American Life Project (Pew Research Centre, 2014) found that between 67% and 75% of college young adults use social networking websites and that anywhere between 85% and 95% of students use Facebook, making the latter the most popular social media platform used by students. Facebook started on a college campus, and it continues to thrive there among students, with 96% of students using it (Bart, 2009). Statistics available shows that students world over spend more time on Facebook than any other website, making Facebook the network site of choice for students as well as an integral part of their behind the scenes academic experience (Selwyn, 2009). It is used to reinforce online relationships just as in normal face-to-face communication. Sheldon (2008) says students' motives for Facebook use depends on their

intrapersonal needs and interests. In the light of the uses and gratification theory, she posits that students use Facebook to fulfil needs that are traditionally fulfilled by normal interpersonal communication or relationship.

In Nigeria where social media is fast becoming a very popular means for interpersonal and public communication, the interactive aura of Facebook according to Ezeah et al. (2013) has resulted in unprecedented popularity of the medium. A survey conducted by Micaiah (2014) reveals that, like other countries the world over, the vast majority of Nigerian Facebook users fall below the age of 40 years, which means that approximately 3.9 million Nigerian youths are on Facebook.
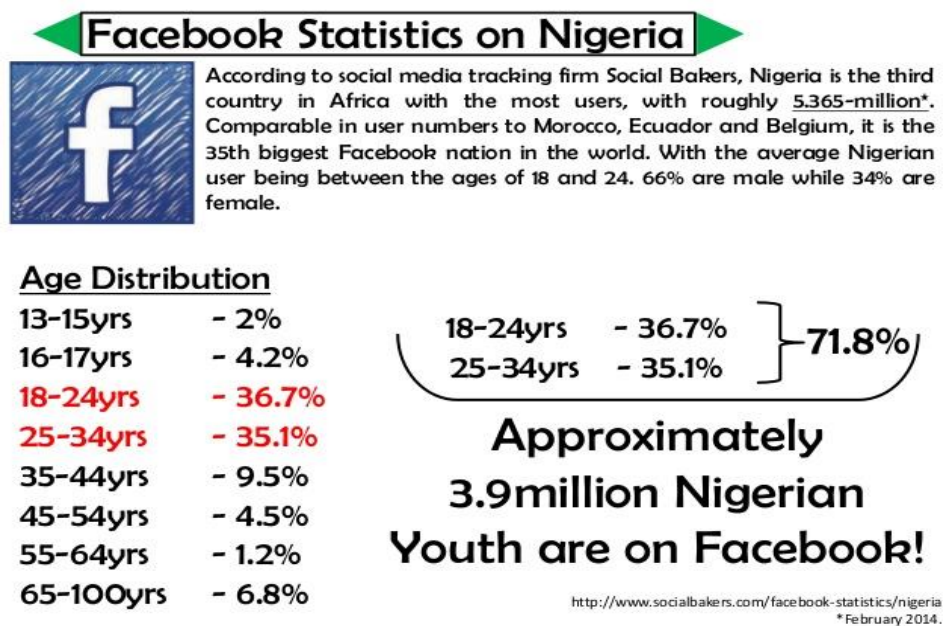
Figure 7: Facebook statistics on Nigeria

Statistics available from this study shows that 45% of Nigerian students use Facebook of which grade 12 students falling between the ages of 18-24 constitute 36.7% of those users (Figure 8). The incredible usage rate among students makes me question: if 36% of grade 12 students use Facebook, what do they use it for? Sheldon (2008) says students use Facebook as a means of maintaining social connections with family, friends and people who users want to keep in touch with. Unlike Twitter, which is efficient with ongoing synchronous discussion among students but lacks space to accommodate bulk text, Facebook allows for extensive communication. Ellison, Steinfield and Lampe (2007) say that in addition to assessing bonding capital and bridging social capital, there is a dimension that assesses student's ability to stay connected with members of a previously inhabited community which they call 'maintained social capital'. There is a strong relationship between Facebook use and the three social capitals – bridging

social capital, bonding social capital and maintaining social capital. However, does time spent on Facebook activate the academic process? Each social media platform has specific function but there are several unique features that make Facebook amenable to academic activities. For instance, Munoz and Towner (2009) note that Facebook is equipped with instant bi-directional activities such as email, chatrooms, bulletins, chats, videos, photos etcetera that can be integrated into academic activities. In addition to these features, Facebook has downloadable applications that can further enhance academic activities and supplement school academic programmes. These possess the capacity to provide numerous other pedagogical advantages, so that students and teachers can post information and knowledge content and collaborate on Facebook, thus, helping in maintaining connection among students themselves, and with teachers, bonding them in knowledge and skills. Boyd and Ellison (2007) say Facebook takes a different approach by default, allowing users who are part of the same platform to view each other's profiles unless owners decide to deny permission of access. It also allows students to add applications or modules that enhance their profile, making it useable for academic purpose. This suggests that there could be a bilateral relationship between students' use of Facebook and their academic performance. While students acquire knowledge from the platform, from such knowledge, they can also construct and post their authentic knowledge as their contribution. Students may choose to follow an organisation or an individual they admire because they post comments and inspiring articles that give them insight into areas of their interest.

3.4.1.2 Is Facebook a distraction?

Some social media platforms are very engaging therefore prove to be more distractive than others. Karpinski and Duberstein (2009) say that every generation has it distraction, but Facebook is a unique phenomenon. Dretzin and Maggio (2008) have a different point of view to Karpinski and Duberstein (2009) in that they posit that the 21st century students grew-up online, so what is termed distraction is what they know and do (Kelm, 2011). But what students grew up with, know and do according to Bergstrom (2008) can also ruin a life depending on how they use it. According to him, Facebook causes depression and isolation, and is the worst network for cyberbullying, lowering grades by 20% (Junco, 2014a). There are assertions that Facebook is the culprit of all negative outcomes assigned to social media. Junco (2014a) provides evidence to show that Facebook and other social media are a reflection of the offline world, arguing that all social media are tools by which we communicate in a novel way. He used the word novel carefully, in defence of his previous finding that Facebook use can cause

students' grades to lower by 20%. He indicates that although Facebook use causes certain variables that could indicate a relationship with academic performance, such a relationship is not causative. He says that there is a difference between correlation and causation. The fact that there is a negative correlation between time spent on Facebook and academic performance does not mean that Facebook use causes lower grades. Junco (2014c) contends that it is not plausible to assign students poor performance to Facebook use because no controlled experiments have determined a causal link between the two variables.

3.4.2 Google

Just like other social networking services, Google is a social networking project designed to replicate the way people interact offline more closely. Launched in June 2011, Google is a commercial company with a high profile that has already raised much interest in the academic community and thus is used heavily for academic purposes. Its services are aimed specifically at developing academic community. Its influence upon the academic arena makes it necessary and useful to students because it provides open access to academic journals through the Google Scholar. Friend (2006) contends that the development of open access and a search service on Google Scholar link has a potential of shaking the foundations of the academic world. Google Scholar provides students with a simple way to broadly search for relevant scholarly literature that will equip them academically, making Google the most valuable academic resource. Students can use Google search engine to search across several disciplines and source articles, preprints, peer-reviewed papers, books, thesis, abstracts and opinions on various topics from professionals, repositories, universities and their scholarly articles across the web. Friend (2006) provides an insight into how the lack of context-related searching forms the most significant weakness in the use of general search engines for academic purpose by stating that if Google Scholar is to provide an effective context-related search service like Yahoo does, its designers have to be inside the minds of students and academic staff. This means thinking about words in the way students think, understanding relationships between words in the way that fits with learning and research, knowing the context within which particular words are likely to be used in diverse cultural contexts in the World Wide Web. He, however, contends that although the academic context of words crosses international borders, there will be remarkable differences in cultural context, which will influence the information needs. Previously, students had to research relevant topics or information through obsolete journals on their local community or school library shelves. Currently, with the plethora of knowledge available, such a medium is becoming grossly inadequate in academic content delivery. Friend (2006) says

that electronic supply through the Google Scholar website contains various portals, providing links to resources on specific topics, leading students to relevant academic content that addresses their academic needs. He, however, notes that access to Google Scholar books is a major challenge as the access to texts are very limited. That even when full text are available the number of clicks to get to the full text entries tests the patience of students with limited patience and so they get frustrated and exit. The results from the general Google search engine includes open access content but the open access links are usually not clear to the reader as they are buried in a mountain of other links.

An important limitation on the use of the Google search engine is the growth of content on the World Wide Web. On the other hand, some domains may not have websites worldwide while many others such as universities have different websites under one domain. This creates problems for students seeking the information most relevant to their needs as too much information is presented to them. A reader with very little knowledge of a subject is easily led into an information quagmire when so many websites are available (Friend, 2006). The main Google search engine on its own is valuable, but it's limitations for students searching for academic content are readily observable. A search may show up many references of no academic value, not necessarily because the quality of content to which a link is provided is poor but because the content is not relevant academically. Most times, words used in searching often have different connotations and a search may reveal content related to different meanings of a word. The problem lies with the inadequate search results emanating from the inability of the search engine to recognise the context of the words used for searching. Some Google searches can provide numerous entries out of which only a few would be useful to the searching students, but beyond that limited number the students have to grapple with what Friend (2006) calls the proverbial needle in a haystack, but a student can employ the assistance of the Google advance search facility to reduce the size of the haystack in the search. The advance search facility will provide many more but related links than the initial few useful entries that showed up in the first general search. Millennial students are swimming in the sea of information (Friend, 2006), Googling anything they want to know, hence they do not typically value information for information's sake. This requires that teacher's shift their role from disseminating information to helping students sieve, grasp and apply the diverse, yet vast information that social media pushes at them (Bart, 2009).

3.4.3 YouTube

YouTube is a classroom in the pocket of students (Antonio & Tuffley, 2015) as they can access YouTube on their smartphones. YouTube does not only possess an entertainment capability but also serves as a means of disseminating academic content in the form of entertainment. It is an affordable platform with e potential that it can be employed in school settings. As knowledge is increasing exponentially, learning content is now infinite while school time is finite. Teachers have to rush over important topics, squeezing much knowledge into little time and only fast or gifted students can catch-up with the pace and process while a reasonable number of students are lost. YouTube lends itself as a reliable tool in bridging the gap between students, time and knowledge by complementing teachers' efforts. Teachers can upload the details of their subject content on YouTube for a population of students to reach the same knowledge as they would in class and they can play it repeatedly till they grasp the knowledge content. It also works well for students who were absent from class. Lange (2007) complicates the traditional dichotomies between public and private learning as she explains how YouTube blurs the lines between students and knowledge through their video sharing. Students learn and understand better with motion pictures as it captures their attention, making learning interesting and enjoyable. Because YouTube can be played repeatedly without the message being altered or recast, it helps slower learners catch-up with fast learners. YouTube contains categories devoted to education, covering art, mathematics, languages, science, technology, and other disciplines. Students' whose parents cannot afford extra help for them can connect to YouTube and use it to enhance their academic performance. For the English class, phonology and pronunciation in either British or American English can be effectively learned via YouTube. Language students can improve their pronunciation and understanding of various languages by watching experts on YouTube. In mathematics, certain mathematical equations presents themselves as being very difficult for many students, with mathematics being the most dreaded subject for many students. Sometimes teachers' methodology makes it difficult for students to grasp content in detail. The YouTube contains various teachers with simplified methods that can be employed in this regard to facilitate good mathematical teaching and learning for improved performance. In science, many schools cannot afford to provide all the necessary material for laboratory experiments. Thus, there are pieces of laboratory equipment and types of materials that students know only by name, and can only describe blindly because they have read it in text books but they have no visual knowledge of what they look like. YouTube brings all these to life visually so that students can see, examine, understand and interpret based on

their visual engagement wich leads to improved understanding. YouTube can provide students with simpler methods of how to carry out some laboratory experiment that ordinarily would have been complicated in the traditional school laboratory. Therefore, students' can perform most of their laboratory experiments in detail and with much understanding on their own. YouTube brings knowledge alive, and learning becomes simple and enjoyable. In as much as it is necessary for all students to be in school, audacious students who cannot afford tuition can decide to register for national examinations without attending school, and study on their own using YouTube features, and perform credibly well. In all, YouTube may possess features that combine education and entertainment in a manner that is capable of simplifying complex topics and strengthening academically weak students' and fun loving students, making education an edutainment. YouTube is a suitable too for collaborative or individual, formal and informal learning.

3.4.4 Twitter

Twitter is a free microblogging and social networking platform service that allows registered members to broadcast short posts called tweets, and to follow other users by using multiple platforms (Junco, Heibergert & Loken, 2011). Users are only allowed to post 140 character messages called tweets. Whereas Facebook allows users to readily connect with others and to share content, Twitter differs in the sense that it is designed to allow users to broadcast short messages called tweets, and to follow the short messages of others. Tweets are inserted into text messages which are written in short hand due to the limited space. Constantly writing in shorthand hinders students from writing words correctly, and the result is wrong spellings in examinations. Twitter updates are ephemeral, in that if a student who follows many people who tweet regularly is not logged into Twitter at the time someone the user follows posts an update, the user is likely to miss seeing the update (Junco, 2014a), meaning that academic updates can be missed by student followers. Its ephemeral nature makes Twitter streams run constantly, pushing an overwhelming volume of content at students without an opportunity for preview, which makes it less useful for academic retention (Junco, 2014c). Students are likely to miss updates from a significant friend which is contrary to Facebook algorithms which ensures that a student's posts can be seen no matter when they were posted.

Bishop and Becker (2016) posit that tweeting expands students' literacy, linking them to academic related sites that can help them to build and expand their vocabulary and general knowledge. She says that despite all the academic benefit associated with tweeting, few students tweet as they are more incline to using Facebook, Instagram, Snapchat as their top

social media platforms. Although Bishop and Becker (2016) contend that the benefit of Twitter far outweighs the drawbacks, Jiang et al. (2016) argue that sharing information on microblogs interferes with information comprehension. Microblogging for relevance by students on Twitter is mainly for dialogue, and the purpose can impact student's engagement and grades (Junco et al., 2011). Does it mean that micro-blogging makes some students shallow? Jiang et al. (2016) say yes, that tweeting and retweeting interferes with learning and memory both online and offline. The authors state that such synchronous sharing leads to cognitive overload, tasking the brain and thus, interferes with subsequent tasks. They recommend that students should not retweet if they want to remember because retweeting makes them forget what they have read. In real life when students are surfing online and exchanging information synchronously and right after that they go to take a test, they may perform worse. Jiang et al. (2016) conclude by recommending that social media platforms should have a design that promotes cognitive processing. However, a report by the Pew Research Centre's (2014) Internet and American Life Project states that blogging is on the decline as students now use email more frequently.

3.4.5 WhatsApp

Beside Facebook, another favourite destination for students is WhatsApp (Barhoumi, 2015). WhatsApp meaning 'what's up' or 'what's new' is an easy to use interface for students. Aside from text messaging, WhatsApp can be used to send images, video and audio messages and voice calling and these make it a popular destination for students. Founded in 2009 by former Yahoo employees Brian Action and Jan Koum, WhatsApp was and still is the most popular social media application with more than 600 million active users. WhatsApp is a free social network that allows users to access a great deal of information rapidly (Bouhnik & Deshen, 2014). This free messaging application is available for any smartphone that uses the internet to send messages, images, video, user location and audio messages to other users, using standard mobile numbers (Barhoumi, 2015). The general educational benefits of WhatsApp according to Chokri Barhoumi (2015) are: instant messaging; facilitating online collaboration and cooperation between students, connecting them from school to home in a blended mobile lecture; enabling sharing of learning content easily through comments, texting and messaging among students, especially if discussion is related to course content taught in class; providing students with the ability to create a class publication and thereby publish their work as a group; easy construction and sharing of information and knowledge through instant messaging. Research findings show that students find learning through WhatsApp very interesting and

educationally useful (Bansal & Joshi, 2014). Bouhnik and Deshen (2014) claim that in class students use WhatsApp groups to communicate with each other; to nurture a social atmosphere; create dialogue and encourage communication among students; and as a learning platform. Barhoumi (2015) states further that his experimental study shows that nearly 70% of students say they could learn with WhatsApp just as well as with face-face lectures. Students with learning difficulties report that WhatsApp helps them to easily construct and share knowledge and support research into needful information for academic purposes. Thus, WhatsApp mobile can help with learning and knowledge sharing, acquisition, dissemination, analysis of information and knowledge. It also serves as an interactive tool that facilitate the rapid exchange of ideas as it help students to send and receive messages instantly. As opposed to the traditional classroom that only disseminates information, WhatsApp and other social media platforms promotes both dissemination and interaction.

3.5 What do students do on social media?

Social media has become an integral part of our lives and no group feels its impact more than students. Is social media an asset or a liability to students? There is no doubt that social media has had a huge impact on the lives of students, but what is not clear is whether this impact has been good or bad (O'Dell, 2011). Just because a category of people decide to agree or disagree with their own views and opinions about social media does not mean that everyone will adopt their views. Statistical data presented by Bart (2009) reveals that the majority of students use social media for reasons as presented in Figure 9.
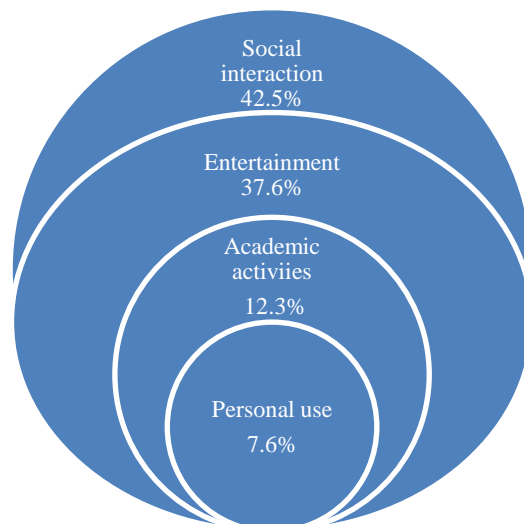
Figure 8: Social media use by students

Brief analysis of Figure 9 indicates that students use social media mainly for social reasons and for their entertainment. However, viewing social media with the conflict lens does not provide a reliable claim that can be used to enhance understanding about its relationship with students' academic performance. Although the figure gives entertainment more preference than academic activities, Swatman (2015) argues that social media can support students in two ways. Firstly, as a tool for finding and accessing educational material, secondly, as a tool for meeting and interacting with people and groups. However, do students leverage on such values? Whereas students may appear to be comfortable using social media for academic purposes Chen and Bryer (2012) posit that such an assertion is an assumption. The fact is that students use social media for personal reasons and rarely for educational purposes.

3.6 Social media and cognitive overload

The academic benefit of social media for students seem endless and enormous, but like every good thing, there is a down sides to its usage by students, especially Facebooking and instant messaging. Junco & Cotten (2011) say that college students use instant messaging at high levels, and that they multitask while using instant messaging, which is detrimental to their school work. Multitasking, according Chen and Yan (2016), and Kirschner and Karpinski (2010) means divided attention, task-switching, non-sequential task-switching or ill-defined tasks as they are performed in learning situations (Junco & Cotten, 2011). Students multitask, sending instant messages while listening to lectures in class simultaneously. Being in a constant state of partial attention, lack of focus and distraction affect concentration and thus are detrimental to academic performance (Junco & Cotten, 2011). While it can be argued that engaging in multiple tasks, and switching mental engagements between equally demanding task at a time increases the capacity to be alert, but you do not function optimally due to cognitive overload (Mayer & Moreno, 2003).

3.7 Social media usage and Attention Deficiency Hyperactivity Disorder

Both Vitelli (1996) and Caitlin Dewey (2015) claim that studies reveal a positive relationship between social media exposure and ADHD related symptoms and behaviours. Although excessive usage of social media can cause a collateral problem in distracting and causing attention problems, frequent multitasking could be an escape route for students with ADHD (Dewey, 2015). These authors argue that social media can play a nominal role in controlling and assisting students with such problems. ADHD is a behavioural scourge that makes students restless, impatient, impulsive, and easily distracted so that they lose concentration and are also

easily bored (Dewey, 2015). By multitasking, impulsive students are able to reduce their tendency to distract others, yet for their benefit convert what seems to be a distraction into a focusing tool. Although they did not indicate a clear understanding of the reason for the existence of such relationship, and how it works, Schmitt and Halassa (2017) assert that the thalamic reticular nucleus (TRN) in the human brain helps to filter out distracting or irrelevant information while at the same time, focusing on that information considered vital. The TRN functions as the switch board by helping to direct sensory signals from outside as well as internally generated information like memories from the inside to their appropriate destinations in the brain. The TRN automatically sieves and processes the thoughts of the mind, retaining the valuable and deleting the distraction thereby helping to focus students with attention problems. This explains why students with attention disorder have no problem focusing on their social media engagement for hours, exhibiting acuteness of mental discernment in their navigation. This indicates that what seems to be a distraction is converted by impulsive students for their benefit, hence multitasking plays a dual role of being a positive and a negative activity depending on the usage.

3.8 Social media as students' addiction

Although Kelm (2011) says students are addicted to social media, Griffiths (2000) posits that what is referred to as social media addiction is purely symptomatic behaviour exhibited by teenagers who have little or no social life, and little or no self-confidence. Kandell (1998), Osuagwu (2009) and Hall and Parsons (2001) argue that social media is addictive to teenagers because they do not use it impulsively but purposefully. Technological addiction is defined operationally by Griffiths (2000) as being a non-chemical behavioural pattern that involves machine interaction, which is either passive as in television or active as in computer games, and usually contains inducing features that may contribute to the promotion of addictive tendencies. Social media addictions are a sub-set of behavioural addictions with core feature components such as salience, mood modification, tolerance, withdrawal, conflict and relapse. Let me start by analysing each point, employing Griffith's words. First, salience is when a particular activity becomes the most important activity in a student's life and dominates his or her thinking, graduating into preoccupations and cognitive distortions, feelings or cravings, and deterioration of specialised behaviour. Second, mood modification is the subjective experiences observed as a consequence of engaging in the particular activity that can be seen as coping strategy. Thirdly, tolerance is the process whereby increasing amounts of the particular activity are required to achieve the former effects. For instance, in attempt to be more

popular, students gradually enlarge the size of their community on social media to increase affirmation, recognition and validation from many people with numerous followers. Fourth, withdrawal is an unpleasant feeling that occurs when the particular activity is discontinued or suddenly reduced. This results in boredom (Smith, 2015), moodiness or irritability with tremendous negative impact on their academic performance. Fifth, conflict can be an interpersonal tension between the addict and those around them, or intra-psychic, as in conflict from within an addictive user in connection with a particular activity. The sixth is relapse, which is the tendency for repeated reoccurrence of reversions to earlier patterns of the particular activity, and for even the most extreme patterns of the typical height of the addiction to be quickly restored after many years of abstinence or control. In addition to the quest for validation and acceptance, another thing according to Griffiths (2000) that intensifies social media addiction among students is the vast resources available on social media that feed or fuel other addictions or compulsions. But he contends that to date, there is very little empirical evidence that social media is addictive, arguing that what is referred to as social media addiction is purely symptomatic behaviour exhibited by teenagers who have little or no social life, and little or no self-confidence.

3.9. Social media and the problem of face-to-face communication

Communication is a basic element in academic performance. Communication is a means of acquiring and exchanging ideas among students which is basically the idea behind knowledge acquisition. The emergence of social media has bridged the gap in space and time, making communication faster and easier. It's features are designed to bring people together and to ease communication between them. Social media communications have expanded and become robust with the student community being active users. According to the Pew Research Internet Project (2014), students stand out especially prominently when it comes to social media use especially with phones, and they do so for two purposes in particular: avoiding boredom, and avoiding people around them. Similarly, Smith (2015) posits that 47% of young smartphone owners use their phone to avoid interacting with the people around them.

Although social media was intended to bring people together, its' *modus operandi* presents it as a tool that separates people in close proximity from each other. The more elaborate the means of communication, the less students communicate proximally (Griffiths, 2000). While it is true to say that platforms such as Skype, WhatsApp, Facebook, Instagram, LinkedIn and Twitter bring people together, Jiang et al. (2016) point out that all social media

platforms disrupt face-to-face communication, as it brings people who are physically apart together and but creates distance between people who are physically together. Replacing people time with screen time can create a tremendous impact on relational qualities and socio-academic performance. Tyrell (2015) notes that although social media has built new grounds for communication, it interferes with face-to-face communication, causing mixed character judgement that makes levels of alertness in the conversational context decline. It has changed the way humans engage with each other and humans now prefer to text than talk to each other, or email each other rather than have a meeting. Such a decline in face-to-face communication can dramatically affect the emotional cognition of students, specifically in conversation because conversation and emotion are intricately linked, it allows students to understand what someone else is saying and follow the speaker to gain closure and to express their views articulately. People are becoming isolated from one another as a result of less face-to-face communication and more social media communication (Tyrell, 2015; Jiang et al., 2016). The effect of this phenomenon is taking a huge toll on students as they are gradually replacing face-to-face communication with social media communication (Jiang et al., 2016). Lack of face-to-face communication among students exacerbates poor verbal interactive skills and poor interactive skills which exacerbates poor academic performance. The lack of communition skills resulting from less face-to-face communication can deprive students of confidence and conversational skills that are ingredients for verbal and social interactivity, and essential for optimal academic performance (Tyrell, 2015). Face-to-face communication is a verbal and non-verbal interactivity that works with rationality, reflectivity, meaning making, evaluation and exchange of ideas, observation, expression, admiration, interpretation and conclusion, and it arises because of personal contact with each other. It is an opportunity for students to present themselves (Goffman, 1956) for assessment, grading and promotion thereby making face-to-face communication a crucial skill in the academic process. No one admits or employs people without first having a face-to-face interaction with the student or employee. Wilks (2015) uses the word 'real conversation' to enumerate the benefits of face-to-face dialogue as an activity that humanises participants, making them feel more worthy, enables them to gauge opinions and to understand objectives without guesses making it easier for them to build rapport which is desirable, allows them to explain complex ideas far more easily and more efficiently, assist them to illustrate their passion and excitement, allows them to demonstrate urgency, and increases their possibility of getting final decisions more quickly. These qualities connote that face-to-face communication is at the pinnacle of academic performance. Keller (2013) argues that social media interaction cannot strengthen conversation as much as face-to-face

interaction. The resultant effect on students who rely on social media for interactivity is that they may not be able to deepen their physical relationships with humans or academics. This is because, students simply follow and interact with those who agree with their points of views on social media as opposed to a more deep discursive engagement with diversity of viewpoint as in face-to-face communication. Although these qualities make face-to-face communication a preferred activity than social media communication in an academic setting, face-to-face communication is still a complex process laden with argument, hesitations, flaws, and other personal factors (Turner, 1987).

3.10. Social media, multimedia and its multi-literacy features

New digital technologies, with their multimedia capabilities, are now our social reality. The term multimedia means a collection of different types of media (Mayer, 2003). Multimodal devices shape the ways in which contemporary society make meaning and communicate. Not only does new medias have the capacity to instantly record and communicate life world experiences unimpeded by the distance or size of the targeted audience, it offers the means to construct virtual reality environments which were previously beyond human experience (Grushka et al., 2014). As students engage with social media on digital devices such as smartphones, tablets and computers, it raises issues that pose challenges for our conventional understanding of literacy as we attempt to relate it to academic performance. Grushka et al. (2014) define digitisation to mean that the image, sound and text are processed similarly by computing devices. This is unlike the previous analogue system such as typewriter, printer, photocopier and landline phone where different modes require different rendering processes as in the case of printed text and images. The typewriter is now replaced with the computer, analogue printers are now replaced by digital scanner, printer and copier, and the mobile phone has replaced the landline phone. These changes have altered the relationship between production and dissemination, disrupting the conventions of the relationship between audiences and author, as different types of texts proliferate with multiple-literacy, and different audiences' semiotics systems come into play, pushing overwhelming knowledge content at students. Grushka et al. (2014) draw our attention to the fact that the corollary of multi-literacy is the multimodal nature of communication. Communication and meaning-making call for diversity of modes including sound, movement and image, each with its own repertoire of semiotics (Grushka et al., 2014). Based on the increasing presence of sophisticated devices that promote quick access to diverse social media platforms, literacy is presented as more than learning to read and write in the traditional sense as it now extends to the manipulation, mastery

and use of multimedia technologies. In addition, these different modes of communication are shaping new sensory capabilities, thus, operating as personal meaning-making apparatuses (Grushka et al., 2014). As a result, students now create their own language (Yeboah & Ewur, 2014) and use it to communicate among themselves in ways that they think empowers them to study and understand better.

3.11. Students' social media engagement, sleep deprivation and academic performance

Higher levels of usage of social media tools and specific types of multitask activities are associated with students reporting sleeplessness and not getting schoolwork done (Junco & Cotten, 2011). Students with high online addiction, according to Rosen et al. (2013), show learning difficulties, resulting in poor grades, missed classes, and problems paying attention during classes because of sleep deprivation. Because most social media platforms are free and user-friendly, students spend more study time sending instant messages, chating with friends throughout the day and into the late hours of the night to early hours of a school day, waking up tired, drowsy, incoherent and ineffective and continue with the same pattern the next day. Sleep deprivation destabilises the brain network and corrupt brain function by deactivating and impairing various cognitive functions and behaviour, including decision-making. Lack of sleep causes irritability, cognitive impairment, memory lapse or even loss, impaired judgement or decision, decreased creativity and accuracy, all of which are symptoms of ADHD. These occur primarily in the thalamus, a sub-cortical structure involved in alertness and attention, and the pre-frontal cortex, a region in the brain subservient to alertness, attention, and higher order cognitive process (Thomas et al., 2000). Lack of sleep distorts cognitive task and performance ability thereby causing decreased motivation and alertness. This suggest that students who engage with social media through the night and for several days may show signs of some or all the aforementioned brain memory problems including restlessness and tremor slaking. Ellenbogen, Payne and Stickgold (2006) found that lack of adequate sleep affects mood, motivation, judgement, and perception of events. Although there are some open questions about the specific role of sleep in forming and storing memories, the general consensus is that consolidated sleep throughout a whole night is optimal for learning and efficient memory function. Research suggests that sleep plays an important role in memory both before and after learning a new task. Ellenbogen et al. (2006) note that in the view of many researchers, evidence suggests that various sleep stages are involved in the consolidation of different types of memories and that sleep deprivation reduces student's ability to learn. The overall evidence suggests that adequate sleep each day is very important for learning and memory and academic

performance. Ellenbogen et al. (2006) conclude that lack of adequate sleep affects mood, motivation, judgement, and perception of events which is detrimental to academic performance.

3.12 Performance

The concept of performance is as old as humanity. The pre-modern era, 'performance' would have been an extremely difficult word to define (Schechner, 1988) because it is not always constant (Goffman, 1956) and unstable as performers' often present irregular, contradictory act, knowingly or unknowingly. However, due to the role the concept of performance plays in this study, I elect to apply the definition by Elger (2007) who attempts to provide a more modern definition and so defines performance as an act of expressing knowledge and skill in a given task before an audience or in private, by an individual or a group engaging in a collaborative effort. This definition links the pre-modern era to the modern, making performance an inclusive term that is not restricted to theatre alone (Schechner, 1988) but all endeavours including academic. It also means revealing or exhibiting once innate qualities, suggesting that any action can be viewed as performance, and anyone can simply frame an activity as performance. This is probably why many decades ago, Goffman (1956), whose visionary contribution towards anthropology and performance is still for a point of reference, described performance in his work as "the presentation of self in everyday life", as a mode of behaviour that may characterise any activity because, to him, the whole world is a stage. It therefore follows that performance is the basic stuff of life (Turner, 1987). Performance reinforces and communicates the performer's identity and ability in a context or series of complex activities that integrate skills and knowledge to produce valid result (Schechner, 1988). To perform is to produce valued results, and to produce valid results the performer engages in complex actions that integrate skills and knowledge (Elger, 2007). It also means presenting oneself every day to be evaluated and rated. If performance is the basic stuff of life (Goffman, 1956), what then differentiates everyday mundane performative activities from academic performative activities?

3.13 Academic performance

The concept of academic performance is often interpreted to mean grades, outcomes or achievement. Students' academic performance is often measured by grades and grades come quarterly as a form of feedback for students performance. Such activity positions academic performance and is what distinguishes some students from others as grade is the defining factor.

Fenollar et al. (2007) note that academic performance is an important predictor of achievement at all levels of schooling. This means that academic performance, also known as academic achievement, is the outcome of engaging in educational activities. Kirschner and Karpinski (2010) posit that academic performance is conceptualised differently not only between schools but also across states and even nations, thus making the measurement of academic performance a convoluted activity. This description defines academic performance as a complicated activity involving an intricate process that is conceptualised differently not only between nations but schools and individuals. With such a perception in mind, how then can the construct of academic performance be defined and measured accurately to accommodate such diversity in operational definition? If developing performance is a journey, and the level of performance describes the location in the journey (Elger, 2007), how is academic performance defined in school? Should GPA or letters be used to represent students' academic performance standing? If letter equivalents are used, how should grades be coded? The concept of academic performance is often interpreted and presented as grades, interpreted as outcomes or achievement. Fenollar et al. (2007) say academic performance is an important predictor of achievement at all levels of schooling, and that grade is what distinguishes some students from others. It is an activity that students do for themselves in a proactive way through adherence to structured rules and regulations, rather than a covert event that happens to them reactively as a result of teaching experiences (Zimmerman & Schunk,2001). The Institute for the Public Understanding of the Past (2007) writes that academic performance entails observation of a rigid structure of operation. They note further that it can also be a means of resisting, as a significant part of academic performance has always been conducted at the peripheral level. The three concepts that stand out clearly in these sentences are rigid structure, resisting and peripheral. Let me take rigid structure to mean stipulated rules guiding the performative act; resisting to mean refusing to comply with the rules; and peripheral to mean superficial. Putting all together would mean that a performer can choose not to perform based on laid down rules, or do so superficially. If my hunch is correct, can such be possible in academic performance? Rather than a superficial, peripheral presentation, I would imagine that in order to communicate his-her intention effectively, the performer's (which in this case is the student) actions would express messages capable of penetrating beyond the surface to reveal deep meaning in the act. Such assumptions are behind concerns about how best the concept of academic performance can be adequately defined. Academic performance can also be defined as an activity, a process and a product of learning that operates at different levels, incorporating the mental, manual and physical aspects of the performer while at the same time, considering the social system and

cultural context (Turner, 1987). As a process, Turner (1987) argues that academic performance is never amorphous or open-ended but a diachronic process having a beginning, a sequence of overlapping but isolated phases, and an end. For any student to perform at a level that reveals deep meaning, Fenollar et al. (2007) suggest four performance elements that needs consideration, namely, mastery, approach, avoidance and work avoidance. They posit that approach and avoidance in performance is a regulatory process that streamlines what students need to do or avoid in their regular academic practices, while voidance form of regulation can mean abstaining from either valuable or invaluable activities or content. The avoidance performance element requires specialised skill which Turner (1987) calls Conative components of volition, authentic rationality, and self-discipline. The approach form of regulation on the other hand could mean audacity and curiosity (Von Stumm et al., 2011) which is informed by perception and purposeful engagement (Greene et al., 2004). All these performance elements require skills such as mastery, motivation (Elliot, 1999) and self-efficacy (Choi, 2005). One of the most relevant perspectives in understanding academic performance is motivation. All concepts already named including self-regulation (Pintrich, 1999; Lopez, 1999) are functions of motivation. Aside from motivation, which must drive student's engagement, other components of academic performance are interest, performative skill and an impressible character. When a person performs an act, he-she automatically attracts implicit attention from observers by creating an impression of him-herself (Goffman, 1956). Such activity is not informed by an abstract system rather, it is generated out of the dialectical opposition of processes and of levels of processes. All of these define academic performance as an activity, a process and a product of learning that occurs at different levels.

3.13.1 Academic performance as an activity

Performative activities occur throughout the academic process and are planned either by individual students based on the their need, interest, or desires, or by a group of students with shared intention. It also works with teachers designing academic activities based on the curriculum criteria in ways that engages students in a continuous process of performance. However, should students perform based on what they know and can do, or on the basis of what institutions want them to know and do? Duckworth and Seligman (2005) note that some of the variance between intelligent quotient and achievement is due to a shared method of variance, which may be due to what students know and can do on their own, for it is in such that some students excel more than others. This suggests that when students perform based on what they know and can do, the activity creates an opportunity for them to think creatively,

reflecting on institutional criteria and expectations while at the same time, considering societal and personal goals. All these spur them to aim high by putting in their best to impress, and to meet all expectations, and they do so based on their rationality and ability.

3.13.2 Academic performance as a process

Academic activities is not to emphasise content, but process, and teaching is not to impart, but to help students learn to acquire knowledge and improve performance (Eisner, 2002). Academic performance is not academic achievement or academic outcome but a process leading to them. Academic performance is a diachronic process covering cognitive, affective, conative, social and cultural domains. It is an infinitely more complex process, requiring reflexivity and competency (Turner, 1987) and the messages it conveys are through verbal and non-verbal media. In the process model, academic performances resonate as verbal and non-verbal expressions which are concomitant with the students' cognition, rationality and idea (Turner, 1987). The functionality of the verbal medium varies from one student to another, and is capable of communicating rich and subtle ideas and images. Whereas the verbal performance is deeply rooted in the cognitive domain, the non-verbal stems from the affective and psychomotor domain, which are to be goal directed and non-goal directed, but are both observed and interpreted as outcomes. The non-verbal processes have two pathways that can be graphically describe as shown in Figure 10.
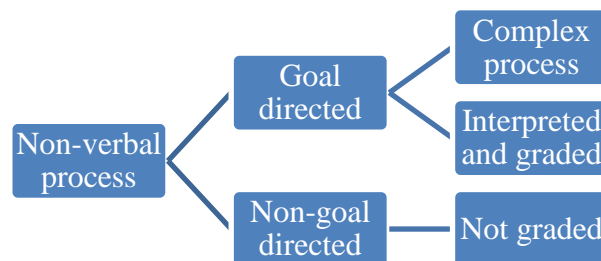
Figure 9: Non-verbal pathways of social media use

In all perfomrances, outcomes are presented as grades obtained through students' performance in a series of class work and homework covering written, verbal and visual presentations (Duckworth & Seligman, 2005). The verbal and non-verbal aspects of academic performance can be divided further into visual and non-visual.

The visual aspect of academic performance covers all cognitive, affective and psychomotor domains (Atherthon 2013), Anderson and Krathwohl, 2001; Turner, 1987), and is found particularly in subjects such as theatre arts, visual arts, physical education (athletics

and games) and music. The non-visual component of performance is related to a mental process which can only be revealed through assessment of class performance when students engage continuously in academic process through lateral (classmate) and horizontal (teachers) interactions. These cognitive, affective and psychomotor activities sometime present themselves as instant or spontaneous, and in some context as general and specific. Whether it is verbal or non-verbal, visual or non-visual, the situational components, be they cognitive, affective or psychomotor aspects of the performative act, provide clues to the very nature of the academic performative process (Turner, 1987). To stretch the performative clues further, Turner (1987) extends that the performative element includes social, cultural and what he calls conative components, arguing that all five dimensions reveal student's processual qualities. According to him, the cognitive refers to intelligence, the affective reveals feelings and emotions, while the conative represents volition and how humans act based on both the cognitive and affective presentations. He posits that the social and cultural components works with the three in establishing consistency and character in the performative process. These suggest that academic performance transcends cognitive process and attainment of grades, and are the reflection of students' total engagement in the academic process as well as depicting their performance in examinations, to the recognition and incorporation of the totality of all academic activities engaged in by students whether in school or outside the school. This description confirms that academic performance is not a destination neither is it an achievement or an outcome but is a process leading to them. The process is not always regular or similar but varies from one student to another and depends on type or knowledge area and location. Developing performance is a journey and the level of performance describes the location in the journey (Elger, 2007). If the level of academic performance is determined by the location in the journey, what then determines the location in the journey? Whether the processes involve modern or post-modern era, changing or unchanging components, Turner (1987), notes that the process of regularisation and the process of situational adjustment are activities that may each have the effect of stabilising the location or changing an existing situation or order.

3.13.3 Academic activity as a product of learning

Academic achievements and academic outcomes are products of academic performance. Academic performance as a diachronic activity is laden with passion that engages students cognitive (knowledge), affective (attitude) and psychomotor (skill) domains (Atherton, 2013), requiring competency and reflexivity (Turner 1987). Although consciousness, cognition, ideas, rationality are paramount in the process of academic performance, cognition shares equal

footing with volition and effect. Effect in this context refers to the overall amount of effort, time and energy students expend in the process of studying or performing an academic task (Turner, 1987). What is not clear in Turner's view of academic performance as a product of learning is the disparity he tends to create between idea, volition and rationality as his articulation ignores the fact that efforts and effects both have elements of positive and negative tendencies. Fenollar et al. (2007) write that whereas effort is the cause of success or failure, engagement in more strategy use, especially deep strategy processes, affects academic performance level. It all depends on the performer's mindset, as the performer's mindset is student centred (Elger, 2007). A positive mindset plays a key role in enabling students to possess the skill of setting challenging goals, accepting failures as part of attaining higher performance, and creating a suitable context that enables the development of positive emotions and a feeling of safety. Academic performance transcends just knowledge as it consists of observations, reactions and cumulative wisdom based on cognitive value. Wisdom is humankind's intuition that expresses not only in custom and tradition, but also in great works of speech and action (Turner, 1987), revealing cognitive, affective and psychomotor competencies.

3.14.4 Academic performance and competency

Can excellent academic performance be interpreted as competence? Turner (1987) argues this by stating that we can only interpret students' academic performance in the light of what we have already inferred about competence. He contends that in order to make original inferences about competence, there is the need to consider the dichotomy between academic performance and competence. Using theatrical terminology to describe the dichotomy between competence and performance, Turner (1987) refers to competence as mastery of a system of rules or regularities underlying a performative activity. The processes and activities that produce competence regards academic performance as a fallen state, or a lapse from the ideal purity of systematic competence. Although what Turner is referring to here is linguistic competence, an extreme approach to competence and academic performance entails the integration of everyday learning and school learning as an ideal purity of systematic competence. Canonical rules, generalisations and algorithms, according to Taylor (2002) are never progressive approaches to competence modes because these cannot be revealed directly by the teacher and neither can textbooks because they are generally viewed with some suspicion because they present knowledge in a packaged form. Competence starts when students are encouraged to use their own methods for solving their academic problems, and to develop their own generalisations,

an approach that Taylor (2002) refers to as epistemological democracy. It then follows that whether as verbal or an activity, academic performance in the modern era has moved to the centre of hermeneutical attention where flaws, hesitation, personal factors and situational components are revealed, because competence is context dependent.

Turner (1987) believes that the concept of academic performance is separate from the concept of competence, and that unlike competence, academic performance is never amorphous or open-ended. However, both competence and academic performance have their pitfalls. Mastery and regularisation are characteristic of competence in a performative act which I see as being repetitive ritualistic and therefore objective with minimal cognitive involvement. The problem with the concept of academic performance is its peripheral characteristics that rely majorly on observation that is sometimes deep and most times shallow. Academic performance as a concept lacks subjectivity and that is probably why Turner (1987) expanded his discourse beyond the traditional definition of performance that originally tied it to theatre alone, to post-modern grammatical competence. This suggests that competency is also subject to clues that can be perceived as genuinely novel, with greatness emerging from the performance situation. Clark (1983) views academic performance beyond the entire description given by Turner (1987), arguing that it is the method of instruction that leads more directly and powerfully to competency rather than mastery of a system of rules or regularities as postulated by Turner. In Clark's view, instructional method is the condition which, if properly implemented, can foster the acquisition of competence. However, both Clark (1983) and Turner (1987) seem to agree that competency and academic performance are tied to the same variables which can be summarise as the instructional programme, method and students attitude. These can be extended to include context, programme, intrapersonal quality and student's skill. Although Turner's (1987) focus is on grammatical competence in the performative act, his argument is aimed at post-modern thought which progresses beyond performance errors found in hesitation as a result of personal and socio-cultural factors, to what Duckworth and Seligman (2005) call intellectual strength. Intellectuality can be divided into intellectual strength and non-intellectual strength. Intellectual strength operates at the level of long-term memory and the ability to think abstractly, while non-intellectual strength is in the form of motivation, self-discipline and other intra-persona traits, and both are decisive factors in academic performance.

The analysis so far indicates that mastery, motivation, intellectuality, and competence have a strong and direct effect on academic performance. The only detrimental factor according to Fenollar et al. (2007) is that mastery and academic performance goals each have independent

positive effects on self-efficacy, task value and the use of cognitive and meta-cognitive strategies (Grushka et al., 2014). If academic performance is an activity, a process and product of learning, is academic performance separate from academic achievement? Defining both concepts separately according to Schechner (1988) is a complex one because it involves the appreciation of components of the performative act first. This means identifying and separating what was taught to students from what they learned on their own, then rate each as levels of academic performance. To achieve this, Sizer (1996) whose work many years ago projected what the modern school should look like even before the emergence of social media, suggests that "the tone of the school should explicitly and self-consciously stress the values of un-anxious expectation ("I won't threaten you, but I expect much form you"), of trust (unless it is abused), and of decency (the values of fairness, generosity, and tolerance" (p. 208). In his 'more is less' principle, he emphasised that schools should focus on helping students learn to use their minds well, and helping students to master a number of skills and to be competent in certain areas of knowledge.

3.14. Levels of academic performance

Academic performance has been defined as a cognitive, affective, psychomotor, social, conative and cultural activity in a process (Turner, 1987). It has also been defined as a journey not a destination. Therefore, when students consciously work to become better, they are striving to improve their performance, and as they aim at developing a positive mindset, they consciously immerse themselves in a physical, social and intellectual environment that enables them to elevate their academic performance level and stimulate their personal development. It is a journey and the location in the journey is referred to as level of performance. Each level is characterised by the effectiveness or quality of a performance. Elger (2007) asserts that as a student advances in his or her level of performance, he or she is able to learn from any medium, which can be traditional or social media. He argues that because academic performance is a knowledge driven concept, it carries within it elements such as social interactions, disciplinary knowledge, active learning, emotions (both positive and negative), including spiritual alignment. He writes that students who engage in reflective practice which is assessment driven will have to pay attention to, and learn from, experiences by observing current levels of performance, noting accomplishments and analysing strengths and areas of weakness, thus leading to improve levels of performance. In addition to Elger's assertions, Fenollar et al. (2007) writes that the level of achievement influences study strategy and thus influences performance, which helps to create a shared variance between intelligent quotient and

achievement. This is based entirely on what students know to do and can do, which makes some students excel more than others (Duckworth & Seligman, 2005). The ability of students to achieve and maintain better academic performance extends further than merely conceptualising and organising simple knowledge, to graduating from simple to complex levels and maintaining higher performing ability. Performing at a higher level produces results that can be further classified into categories such as increase in the quality of knowledge withdecrease in cost of achieving it, capability, capacity, knowledge, skill, identity, motivation (Elger, 2007). All these increase students' self-esteem and other intrapersonal values and skills. In most performative activities, the students' manipulation of simple objects is the determining factor, and beyond a certain minimum standard, self-esteem and greatness entirely depend on the performer-student. For students to be able to acquire, sustain and improve their level of performance, Elger (2007), in addition to the three axioms (the performer's mindset, immersion in an enriching context and, engaging in reflective practices) which he says raises academic performance level, suggests six components which he says are performance dependent: context, level of knowledge, level of skill, level of identity, personal factors and fixed factors. Reflective practice which is assessment driven helps students to pay attention to and learn from experiences by observing current levels of performance, noting accomplishments and analysing strength and areas of weakness using this as a vehicle to improve performance (Elger, 2007). Skilful students can improve their academic performance level by immersing themselves in enriching contexts and engaging in reflective practices that will lead to better academic outcomes.

3.14.1 Context

Level of context represents team learning, and team learning enhances individual and collective performance (Elger, 2007). Team learning here could be interpreted as collaborative, and collaboration is individualistic because, whereas some students lack team spirit and therefore do not perform well in a group, others excel when they study as a group rather than on their own. In most academic performance activities, students, whether individually or collectively, are required to manipulate objects as the determining factor. In such situations, students have to engage in reflective practices that will enhance their academic performance.

3.14.2 Level of knowledge and level of skill

Level of skill, according to Apple and Ellis (2015) covers the cognitive, social and affective domains. Whereas the cognitive is the thinking skill for processing information, constructing

meaning, and applying knowledge, the social domain requires skills for producing effective team learning; and the affective domain requires skills for emotional stability in taking risk, accepting failures and improving on it persistently through success. All of the three axioms (performer's mind-set, immersing in an enriching context, and engaging in reflective practices) are important to be able perform efficiently and optimally at this level. This questions how students discipline themselves in regularising their time, thoughts, feelings and actions with the aim of achieving better academic performance (Zimmerman & Schunk, 2001). This also challenges their self-discipline, self-efficacy, self-regulation and motivation (Junco & Cotten 2011; Zimmerman & Schunk, 2001; Pintrich & DeGroot, 1990), physical ability and mental capacity Although Elger (2007) and Apple and Ellis (2015) write that level of knowledge elevates the level of learning and by implication, elevates performance level as well, I think it is the level of learning that elevates level of knowledge, as knowledge comes through learning. In addition to the acquisition of knowledge and performative skills, it is through learning that students acquire skills for emotional stability in taking risk, accepting failures and improving on them, which are required skills for maintaining persistency in activity towards success.

3.14.3 Level of identity

Another factor is identity efficacy (Pintrich & DeGroot, 1990), which requires that students have self-confidence in themselves and take responsibility of their academic activity and progress. Performing effectively at this level depends largely on the axiom 'performer's mind-set'. Although Pintrich and DeGroot (1990) assert that self-efficacy is highly correlated with cognitive strategy, Zimmerman and Schunk (2001) argue that self-efficacy depends neither on mental ability nor an academic performance skill. Rather, it is an organising concept that refers to self-directive processes through which students transforms their mental abilities into task-related academic skills. This addresses the question of how students regularise their time, thought, feelings and action with the aim of achieving better academic performance. Self-efficacy originates from identity-efficacy and addresses how students use a systematic approach to improve their academic performance. Identity-efficacy is an element of feeling, emotional presentation and character (Apple & Ellis, 2015) that can be linked to the affective domain as it is associated with self-actualisation, self-efficacy, self-regulation and self-discipline (Junco & Cotten 2011; Zimmerman & Schunk, 2001; Pintrich & DeGroot, 1990). All of these are distinct approaches to academic performance and thus are categories that influence students' ability to construct knowledge and perform adequately and efficiently in different contexts. The more successes and accomplishments students have in more challenging

contexts, the stronger their efficacy (Apple & Ellis, 2015). Efficacy theories refer to students' convictions to successfully execute a course of action required to obtain a desired outcome in order to achieve academic excellence. Whether we approach academic performance from a cognitive, affective or psychomotor perspective, there will always be a socio-cultural aspect of mutual influence between the students and their intrapersonal values that implicitly or explicitly influences their identity level, and, by extension, their performance level.

3.15 Personal and fixed factors

Personal factors such as health, emotional, financial and other social challenges could impede academic performance at a particular time during academic activity, thus infringing on competency and authentic performance. Apple and Ellis (2015) argue that personal factors can challenge students' ability to perform efficiently, thus, constitute an impediment to their authentic academic performance. Authentic performance is a critical approach that involves rational application of knowledge and skill. Personal factors such as motivation and self-efficacy enable the performer to immerse himself or herself in an enriching environment while engaging in reflective practices. These practices are context driven, depending on the performer's personality and mind-set.

3.116. Grades as a defining factor of academic performance

Academic performance is established in the classroom culture in ways that encourage interaction, and the use of social media tools in the classroom extends interaction beyond the classroom setting. Performative activities occur throughout the academic process and are planned either by individual students based on their need, interest or desire, or a group of students with shared intention, or teachers designing academic activities based on the curriculum criteria. These academic activities engage students in a continuous process of performance. However, should students perform based on what they know and can do, or on the basis of what institutions want them to know and do? Does academic grading really measure intelligence and comprehensive knowledge or does it only measure what it is structured to measure? If the grading of a student reveals his or her academic performance as grade B, and the student is put through a series of academic activities repeatedly over time, will the result be consistent? Defining academic performance based only on the ability of students to perform at a certain level in specified knowledge before progression from one class to another in an academic setting may not be the best definition of academic performance. Sizer (1996) deeply resents the categorisation of students' minds, saying: "no coach ever fielded a team, and no

music teacher ever assembled an orchestra on the basis of a set of scores. It is the student's actual effort and sustained performance on the field or behind the tuba that counts, not just what that students did with a pencil and paper at one sitting" (p. xiv). He argued that students are more complicated than we think, therefore it may be possible to think that the existing performance rating is seriously flawed, providing, at best, snippets of knowledge about students' actual academic standing and at worst a profoundly distorted view of their ability. Inaccurate academic assessment is a terrible irony; inflicting it on students is an outrage especially in relation to senior secondary school students who are at the terminal stage of compulsory schooling. It suffices to say clearly that each students' real academic performance should be judged from the perspective of their individual circumstance because, sometime at the end of schooling, there is usually no relationship between such performance rating and their future activity in life (Sizer, 1996), thus creating a vacuum.

In such a definition, students are required to perform and maintain a satisfactory academic record that meets the minimum requirements set out as per the assessment procedure interpreted as grades, outcomes or achievement. Failure to meet the standardised requirement means that the student will have to repeat the class or be excluded from the school. What is the benchmark used to grade the academic performance of students who use social media? Are the criteria used for grading social media users comprehensive or is the grading skewed in favour of tradition rather than knowledge? Grading processes that segregate and exclude do not recognise achievement in general terms. Do grades reveal students' performance levels in a particular subject area that is of interest to them as being an indicator of academic performance without according more prominence to it than the actual performance itself?

If students are forced to study basically mainly in order to pass examination rather than as comprehensive preparation for life after school, then extracurricular activities become a distraction because grades are the mainstay. Although the computer-based tests (CBT) are gradually taking over from the paper and pen test (PPT), our schools are not yet equipped to implement CBT or encourage social media activities that promote computer-based knowledge. There is a need for competence and authentic performance that involves critical competence and rational application to knowledge and skill. When students perform based on what they know and can do, the procedure creates opportunities for students to think creatively, reflecting on the criteria, institutional, societal and personal goals and aim high to meet them. They put in their best to meet such expectations and they do so based on their rationality and ability. If grades are the defining factor of academic performance, then students who use social media

frequently should pay attention to their grades, and if there is a decline, they should be concerned about how they use social media.

3.17 Social media and academic performance

The ephemeral nature of social media trends may not render enough stability to fully investigate certain platforms such as Facebook and their relationship to academic performance, and differences in the definitions of constructs make comparison across studies nearly impossible (Karpinski & Duberstein, 2009). Social media provides immediate information for student use, nevertheless, the role of social media in the academic context is not simply information processing but a more complex milieu with the platform being in regular use by students having an overriding influence on their affective and motivational processes (Lewis et al., 2010). This practice is particularly popular in some schools in Nigeria which act as though they are on the path to fulfil and maintain what Merton (1938) pointed out as being institutions establishing sets of cultural goals but failing to provide the institutional means of achieving them. In this light Parsons (1951) in his visionary work decades ago, argued that students are goal achievers, that they create alternative ways of achieving their academic goal through any means, even if it means breaking school rules and regulation. Therefore, when academic performance is established in the classroom culture in ways that encourage interaction, students will use social media tools to extend their academic and social interaction beyond the classroom setting (Weiss & Hanson-Baldauf, 2008) because this is a vital aspect of students' lives, and one of their main forms of communication.

Oluwalanu et al., (2014) identify two factors that they say favour students who use social media in enhancing their academic performance, namely, immediacy and permanence. They say immediacy, because social media messages give room for instantaneous responses, unless a student decides to delay, but that the emergent nature of social media leaves room for permanence in message production, thus, creating an opportunity for editing. They further identified four areas where students stand to benefit from using social media: exposure to modern technology, academic support for students, fun, easy, and creative ways to learn, social bookmarking. Bookmarking enables students to save valuable academic information online, which can be accessed on any computer any time anywhere. Bookmarked information can be made public or private. Oluwalanu et al. (2014) identified dangers that accompany social media usage as information overload, reduce reading culture, hindrance to face-to-face interaction with teachers and classmates, and creating a decrease in comparing views.

3.18. The impact of social media on cognitive, affective, psychomotor, socio-cultural skills

Table 2 lists the impact of social media on cognitive, affective, psychomotor, socio-cultural skills.

Table 2: The impact of social media

Social Media Activities	Domain Centre	Effect on the Domain
Cut and paste.	Cognitive	Less reasoning, thinking, creative writing skill.
Cyber bullying, multitasking.	Affective	Decline in emotion, erratic behaviour, lack of self-efficacy, self-regulation and self-discipline.
Over-indulgence in social interaction and entertainment.	Psychomotor	Less physical activity which may result in health challenges including weight gain and visual impairment
Over-indulgence in micro-blogging, instant messaging, Facebook and gaming.	Social	Social: less physical interaction with immediate environment, peers and family. Promotes hibernation and self-exclusion from others, boredom, irritability and restlessness.
Over-indulgence in social interaction and video watching.	Cultural	Identity crisis: culture is the identity of a people. Social media promotes a variety of culture that students embrace and adopt as modernity. When they try to transfer alien culture into their established immediate environment it sometimes gets rejected and they become confused and rebellious.

Social media and its adoptability by students are a phenomenon that challenge students' character and their ability to transfer cognitive skills to real-life situations. It challenges their ability to winnow through social media space, bye-pass distraction and target what is needed for their academic enhancement. Although social media is designed to facilitate learning, its usage can pose a problem for cognitive affective and psychomotor skills. For instance, at the cognitive level, it can challenge the reasoning skill of students whose only engagement with social media is to re-post other people's comments and ideas. Such student will soon loose cognitive creativity and thinking skills (Lewis et al., 2010; Jiang et al., 2016). Recycling other peoples' ideas limits reading and comprehension ability. Understanding the academic benefit of social media requires addressing students' intrapersonal qualities.

3.18 Much information and less understanding

Students now have more information on every academic topic to the extent rather than managing it for their academic improvement, they could become cognitively confused. Boyed and Ellison (2007) argue that what makes social media unique is not that it allows individuals to meet strangers, but rather that it enables users to articulate and make visible their social networks. The concern is that social media pushes a tremendous amount of content that can

overwhelm students, making it difficult for them to handle and make sense of the amount of information they now have access to (Keller, 2013). In trying to foster learning, students encounter so many facts and figures on social media and because facts are not always true, how do students sieve out the difference? Whatever is capable of producing a magnitude of information is also capable of confusing a young mind. This means that students spending a lot of their time playing video games, listening to music on YouTube, Skype, tweeting, texting and talking on the phone may not only be the reason students who engage with social media technologies perform poorly in examinations.

3.20 Conclusion

I identified the social media platforms used by students, their functions and their associated problems. I have logically described the interconnections between the concepts. I also defined and analysed the concept of academic performance and its relationship with social media, elaborating the associated variables to reveal why and how such a relationship exist. I described the nature and direction of the relationships between social media and academic performance, providing the logical base for developing useable hypotheses.

My analysis indicates that both concepts of social media and academic performance have drawbacks. A major drawback of social media is usability: students' inability to self-regulate, lack discipline, and multitasking. The analysis of the concepts of social media and academic performance reveal themes that can be summarised as follows; firstly, social media contributes to the understanding of basic concepts in a literal setting, thereby directly contributing to excellent academic performance. Secondly, some social media possess heuristic features that can inform and modify students' behaviour and enhance their academic performance. Thirdly, social media presentations can best be useful academically if students understand their value. Fourthly, if academic function is student driven, and academic performance is goal driven, then students' socialising on social media would be kept to a minimum. Fifthly, if institutions expand academic performance rubrics to accommodate social media components, intrapersonal realities of cognitive, affective, psychomotor, social, and cultural, and their components will draw students to curricular compliance (Sivula, 2011). Social media has nothing to do with negative or positive academic performance but relies rather on students' intrapersonal qualities.

Finally, habit is wrong when it involves addiction, especially if the addiction occupies the space and time necessary for academic activities. Agreeing with Turner (1987), it seems to me that the time is coming when it will be essential to use social media as a dimension of

multiple perspectives rather than as a linear continuum conceived in spatial terms as in existing school culture. All perspectives enumerated so far, in addition to other logical connections, form the basis for the theoretical model as presented in the next chapter.

Chapter 4: Theoretical Framework

4.1 Introduction

A theory is an interrelated set of propositions. That there can be a relationship between social media and academic performance, or that social media usage is detrimental to student's academic performance, are propositions that can be considered as hypotheses expressed in the form of testable statements that need strong theoretical argumentation (Ahmad, 2014). In the previous chapter I discussed academic performance based on the hermeneutic perspective. In this chapter I discuss academic performance through the lens of the functionalist theory. When sociologists use the word 'functionalism', they are referring to how each component part of a society or organism functions for the stability of the whole society or organism (Durkheim, 1893). This means that each component part cannot function efficiently alone but works in unity with other parts to form a cohesive system. Durkheim (1893) refers to functionalism as division of labour. Linking Durkheim's theory of functionalism with the theory of performance indicates that the whole idea behind functionalism is performance, thus, in this theoretical framework, I systematically examine the theoretical base of academic performance from the functionalist perspective using the lens of Donald Elger (2007) and Victor Turner (1987). Currently, performance theory has graduated from being simply a visual art concept to being an inclusive term covering everyday activity. Theory of performance is now useful in all learning contexts: traditional, non-traditional and organisational contexts (Elger, 2007). As students advance in their performance levels, they are able to learn from any medium, whether traditional or social media. Although Turner speaks from the viewpoint of an anthropologist, technology, which extends to include social media, is an integral part of the history of performance (Kirshenblatt-Gimblett, 2004), thus making performance a key concept in this research. In the first section of this chapter I define and analyse the concept of performance, drawing on Elger (2007) and Turner's (1987) theories in relation to the academic process. Whereas Elger asserts that cognitive, affective, psychomotor and social processes drive academic performance, Turner (1987) posits that performance is a function of cognitive, affective, conative, social and cultural processes. In the second section, I unpack both Turner (1987) and Elger's (2007) theories into component parts based on Bloom's (1956) taxonomy, identifying the problems associated with each domain. In the light of the three main domains

given by Bloom, I reflect on Habermas (1978) three generic domains of human interest and how they relate with students' learning interest.

4.2. Theoretical underpinnings of academic performance

Performance theory provides an opportunity to examine how people act and react in society (Turner, 1987). The Institute for the Public Understanding of the Past (2007) writes that performance theory originated from the works of Turner (1987) and Schechner (1988) and that it is most associated with the performing arts of theatre, drama, dance and singing. Schechner (1988) explains that performance theory first appeared in 1977 as an essay on performance theory. Before then it was formally based on kinaesthetic learning and later include approaches to performance rating. It is obvious that there are similarities between Turner's and Schechner's theories because of their theorisation of performance and their perception of the concept, but they differ on many issues because their individual experiences underlie their theories. The intriguing part in this context is not the definitions but the connections established by both Turner and Schechner. For instance, Schechner's (1988) theory focuses on psychotherapy and the psychoanalytic, which suggests that performance is a sublimation between conflict and the pleasure of reality, or for Schechner performance is an extension of fantasy rather than a process in an activity. Turner (1987) built his description of performance on the dichotomy between linguistic competence and cultural anthropology in a segmented sequence which he refers to as an 'era'. Although there is a major difference between linguistic and anthropological definitions of performance, they both involve meaning making through expression. Turner's (1987) theorisation of performance links body, brain and culture to cerebral neurology in a fascinating interface that bridges the academic gap between humanities and the social sciences with a distinctive cross-cultural perspective in anthropology (Lewis, 2013), thus drawing my attention to his interpretation of the meaning of performance. Turner's theorisation of performance invokes the full definition that describes how human expression is interpreted meaningfully in action (Lewis, 2013). Both Turner (1987) and Lewis (2013) agree that performance is understood by looking back over a process in time and not just the immediate moment, because the meaning of every part of a process is assessed by its contribution to the total result. In other words, the meaning of any given factor in a performance process cannot be assessed until the whole process is concluded (Turner, 1987). Anthropologists such as Turner (1987) and Schechner (1988) view performance as an activity that is carried out and rated through the delineation and specification of frameworks informed by cultural standards and interpreted as competence. Thus, linking the concept of performance

to academic activities means interpreting how individual students' symbolic actions can be seen to make sense (Turner, 1987) and understood, especially in educational contexts.

4.3 Academic performance

Academic activities are understood to be a contest in a complex and negotiated process that values personalisation and encourages reflective understanding through historical, cultural and personal insights, engaging students' interactive thinking skills, material experiences and performative practices (Grushka et al., 2014). Academic performance is the function of students' engagement in academic activity, and reveals their intellectual strengths (Duckworth & Seligman, 2005). Using the lens of a linguistic anthropologist, Turner (1987) delineates a framework of performance using competence as an indicator for cognitive, affective and conative aspects, and defining academic performance in terms of students' demonstrative actions that make sense. Turner segmented performance based on eras: the pre-modern, modern and post-modern eras, wrapping all around social and cultural practices. In Turner's (1987) theory, the pre-modern represents a distillation or encapsulation of many world-views and cosmologies. According to Turner, the modern perspective 'spatialises' (provides an overall sense of social space, time and culture) the world, orienting the eye in relation to space in a way that rationalisation of sight makes it possible to relate numbers as symbols for measurement, thus, everything becomes measurable and what is not measurable becomes capable of being measured due to the spatialisation of space and time. Turner (1987) posits that the perspectival model makes humans the measure and measurer of all things, and that in the modern era, measurement is driven by cognition, ideas, and rationality. He further argued that in the post-modern, cognition is not dethroned, but rather takes its place on an equal footing with volition and affect. Analysing academic performance in the post-modern era, Turner uses the word 'processualisation' to refer to a diachronic process which he says is laden with flaws, hesitation, personal factors, and incomplete ellipticals that is context driven with situational components as clues to the very nature of human performative processes. Thus, for Turner, the pre-modern, modern and post-modern eras are regulated by social and cultural factors rooted in a set of loosely integrated processes, with customised, rigid rules in ritualistic procedures with regular formalities, symbolic repetitions and continuity, a process that Turner himself refers to as 'regularisation'. Turner's (1987) theorisation, definition, description and analysis of academic performance differs significantly to Elger's (2007) theorisation. Although they both consider cognitive, affective, psychomotor and social factors, they differ in terms of space and time. Whereas Turner segmented his analytical views of performative acts in relation to

eras, Elger's (2007) analysis is based on organisational, traditional and non-traditional contexts. In addition to the cognitive, affective, psychomotor and social factors, Elger (2007) identified six components which academic performance depends upon: context, level of knowledge, level of skill, level of identity, personal and fixed factors. According to Elger, context as an academic performance index represents team learning which enhances individual and collective performance. Elger writes that the level of knowledge elevates the level of learning and, by implication, elevates the level of academic performance. Elger (2007) describes level of skill as being a function of the cognitive, social, affective and psychomotor domains. Elger further argues that whereas the cognitive is the thinking skill for processing information, constructing meaning, and applying knowledge, the social domain requires skill for producing effective team learning. The affective domain, according to Elger, requires skill for emotional stability in taking risk, accepting failures and persistently improving on it through success, while the psychomotor domain deals with the practical demonstration of skill. The tenets presented by Elger (2007) suggest that academic performance is a triangulated activity between students' personality, the learning context and skill. Personality is probably why some students perform better in group work than those who lack team spirit but perform better working alone on a task. Elger (2007) presents a performance model that reveals three axioms for effective performance: the performer's mind-set (which is 'student-centred'); immersion in an enriching environment (which is 'knowledge-centred'); and engagement in reflective practices (which is 'assessment-centred'). This model relates the social aspect of academic performance to effective team learning skills which he later describes with reference to the demonstration of cognitive and marketing skills, but Turner (1987) says the social aspect is rooted in cultural regularisation. According to Turner, the post-modern era is guided by volition and says academic performance still maintains the culture of social rigidity and ritualism. If academic performance is legitimated and rated based on cognitive, affective and psychomotor ability in line with socio-cultural values, then it is worth considering in detail. I do so by reflecting on the theories of Elger (2007) and Turner (1987) and their description of regularisation, in relation to the cognitive, affective, psychomotor, social and cultural categories of academic performance. Elger (2007) and Turner's (1987) personification and metaphor of academic performance are much more mutable than a cognitive construct is. That is probably why Turner (1987) classified performance according to era (pre-modern, modern and post-modern), while Elger (2007) classified performance under traditional, non-traditional and institutional settings. Both Turner (1987) and Elger's (2007) theoretical models of performance are presented in Figure 11.
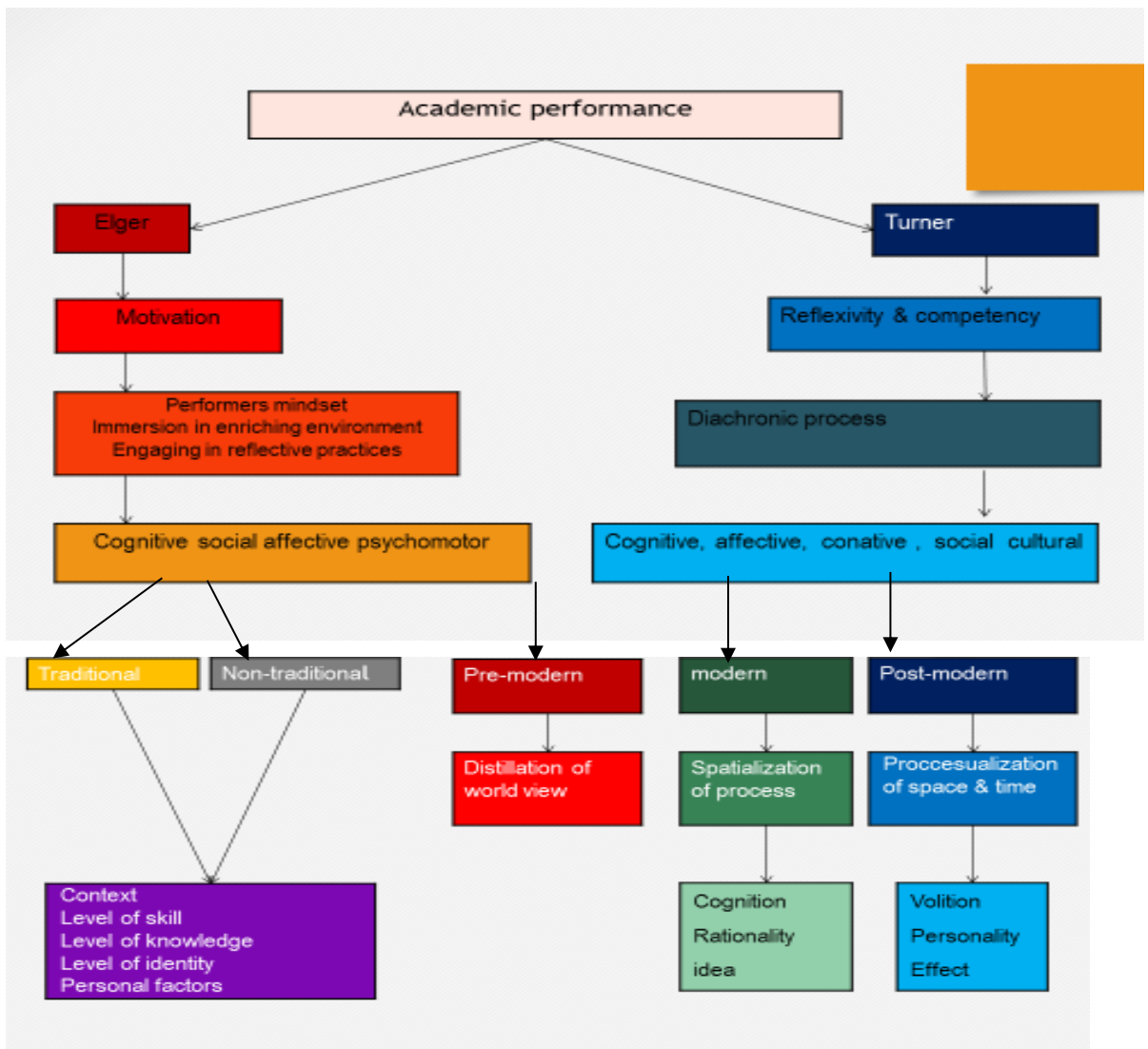
Figure 10: Elger and Turner's theoretical model of performance

4.4 Academic performance as a function of cognitive, affective and psychomotor domains

A broad description of academic performance could be: any act or process that engages the cognitive, affective and psychomotor domains of students in a socio-cultural setting. This means that knowledge and understanding of the socio-cultural elements of the context are necessary for students to achieve their academic goal. In an attempt to define the function of thought ('coming to know' or 'cognition') decades ago, Benjamin Bloom (1956) created a taxonomy that classified performative sequence as consisting of cognitive (mental knowledge), affective (emotional, attitude) and psychomotor (manual, physical skills) domains. Bloom's classification identified six cognitive levels for academic performance: knowledge,

comprehension, application, analysis, synthesis, and evaluation skills, thus making the cognitive level the most frequently used domain as presented in Figure 12.
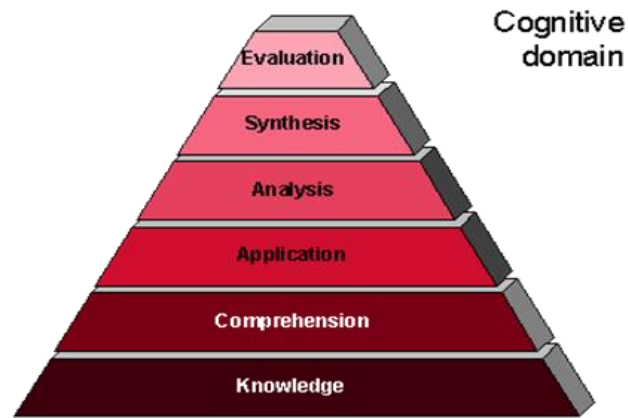
Figure 11: Cognitive domain

The six levels represent increasingly complex forms of thinking. In the cognitive domain, Bloom (1956) identified cues such as participation and reinforcement as elements that determine the quality of academic performance. The assumption underlying the taxonomy is that academic activities should be developed so that they transverse the entire range of cognitive processes and do not simply remain at the lower level of cognitive functioning, and that test items should be derived from levels of cognitive achievement that students have reached (Eisner, 2005). As a sequel to Bloom's model, Anderson and Krathwohl (2001), former students of Bloom, reversed the psychological and hierarchical order of Bloom's taxonomy to accommodate recent technological demands. Their model is driven by cognitive measurement and assessment including remembering, understanding, applying, analysing, evaluating and creating. This new epistemological modification can be described as an upgraded version of Bloom's taxonomy because they replaced knowledge with remembering, comprehension with understanding, synthesis with evaluation, and then allowed the opportunity for students to create their own knowledge, as presented in Figure 13. Thus, as explained by Eisner (2005), the mind is conceived of as a collection of relatively independent faculties or aptitudes with the ability to infer, to speculate, to locate and solve problems, to remember, and to visualise. These faculties that must come into play in order for students to deal adequately with the problems that they encounter during the course of learning, in order to perform excellently.
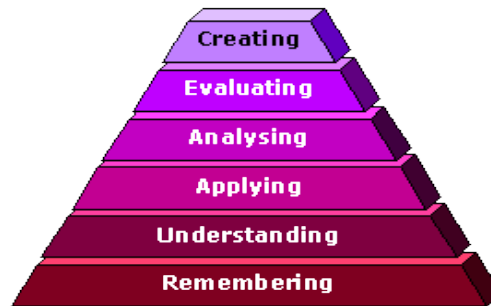
Figure 12: Analysis of the functions of the cognitive domain

This model appears as a top-down approach, meaning that students start their performative act by first creating knowledge, perhaps from previous knowledge, evaluating the process and the knowledge itself, analysing it, and applying it, based on their understanding. However, remembering is at the base of the pinnacle. What do students need to remember? If the model was a circle, I would link remembering to creating as a continuum, but in this model, there is nothing to remember, because remembering is at the base of the pinnacle. From another perspective, if I view the model as a bottom-up approach, it means students start their academic performance by reflecting and remembering previous knowledge and experiences: first to understand, then apply before analysing, after which they evaluate the process in order to create more knowledge. This means that students do not simply consume other people's intellectual product as argued by Lewis et al. (2010), but also contribute to knowledge. It also suggests that the bottom-up model can serve as a co-construction and meaning-making process, rather than a one-directional activity originating from a collective circulation of artefacts and individual meaning-making (Lewis et al., 2010). In the actual academic performative process, both models seem problematic in their hierarchical approach. In Bloom's model, students know, comprehend, analyse, and synthesise before evaluating the knowledge, and not the other way around, which involves applying knowledge before analysing, synthesising and evaluating it. Academic performance analysis involves breaking concepts into component parts for better understanding and application. However, Anderson and Krathwohl (2001) sequence promotes the application of knowledge informed by mere analysis, devoid of synthesising. In addition, their model is devoid of the concept of knowledge which means that students have to create their own knowledge, but out of what? Where do students get the knowledge to use as the baseline for the creation of further knowledge? Knowledge builds on knowledge, thus positioning 'create' at the pinnacle of the hierarchy is problematic because students need to have something to remember, understand, analyse, apply and evaluate to be able to create their

own knowledge. In the actual academic process, students' performance starts with understanding before analysis, followed by application based on their understanding, then evaluation of their application process before creating their own knowledge. This is an imperative sequence because most students want to understand the rudiments of the academic activity, they are about to engage with by first questioning, guessing, comprehending and understanding, then interpreting through imitation, trial and error before creating knowledge based on that sequence. Turner (1987) affirms this by stating that students create their academic and socio-cultural field through cognitive, evaluative and affective mappings of the structure and classes of events whether publicly or privately, formally or informally. Academic performance consists of observations, reactions and cumulative wisdom informed by students' previous encounters with everyday experiences, not based on academic exercise only, because knowledge is cognitive while wisdom is intuitive. Wisdom is a human trait that is expressed not only in custom and tradition but also in great works of speech and action that reveal cognitive competence (Turner, 1987). Thus, the synchronisation between cognition and intuition is capable of yielding excellent academic performance.

4.4.1 Academic performance as a function of the cognitive domain

Within the field of learning and performance, a variety of academic programmes exist which are designed to be directly related to the belief in the primacy of cognitive development and efficient academic performance (Eisner, 2005). At the cognitive level, academic performance is a mental activity which is a process and a product of learning, and which operates at levels based on competency. There are some factors that impede the level of performance in students that may project them as incompetent. Some of the factors which have their origin in the affective domain but serve as a theoretical underpinning for the analysis of the genre of cognitive performance in academic settings are: multitasking, motivation, approach, mastery, self-regulation, self-efficacy and intelligent quotient (IQ) (Junco, 2014b). All of these factors have a bearing on procrastination, self-discipline and time management. While it could be said that the cognitive domain influences academic performance, Schunk (2001) contends that cognition may accompany academic performance but does not influence it. The reason for this is that although students selectively engage in cognitive activities, they are motivated to engage more with those activities that they value, that they believe will enhance their academic performance. For instance, students learn more through observation, reading selected texts that appeal to their cognition, watching television, playing video games, and surfing the web. These activities accelerate their cognitive processes. This is in line with Schunk (2001) who says that

cognition often combines vicarious and enactive activities. Enactive academic activities, or learning by doing, depends largely on the consequences of students' actions, intrapersonal values, and cognitive ability.

At the school level, a problem-centred curriculum is one in which students are encouraged to define problems they wish to research, with the teachers' help, and the appropriate materials and guidance are provided. Some of these problems can be identified by individual students, whereas others can be the result of deliberations by the class or a small group of students. The reason that a problem-centred curriculum is regarded as central to emphasising the development of cognitive processes is that the opportunities to define and solve problems are among the most critical intellectual abilities a school can foster (Eisner, 2005). Without the opportunity to conceptualise, analyse, deal with ambiguity, locate resources and evaluate their efforts, students are unlikely to use their most sophisticated abilities. What matters most is not the particular content on which these processes are employed but the exercise of the intellectual faculties. For this exercise to occur, content that is meaningful to students and problems that are intellectually challenging are critical (Eisner, 2005) for them to perform efficiently.

4.4.1.1 Cognition, academic performance and the use of social media platforms

Wakefield (2015) describes memories as various repetitions through different moments and mediums that are constitutive of the transformational process of appearances. Which means that whatever information that is stored at the cognitive level has to be organised and coded properly as memory for easy retrieval. Memory allows access to both past and present information and knowledge. Wakefield (2015) argues that because memory is enables persistent performance, it appears, disappears, remain and is re-enacted, archived and performed. Social media engagement by students is capable of re-enacting and refreshing memory if what is required to be memorised is presented in line with their engagement. This is particularly so if what they were taught in the past and what they see and do on social media in the present are constantly interpenetrating through memory. Sometimes, it might be difficult for students who use social media regularly for socialising to remain confident that their memory will not soon give way to the appearance of an opposing performance memory. It could also be possible that such hypothetical performance memory would influence future action unconsciously through habit (Wakefield, 2015). On the other hand, memory appears when the action in the present necessitates knowledge of the past. The appearance of such knowledge, especially on social media, has both temporal order and duration. The duration

carries, within it, apprehension which depends on use and obsolescence (Wakefield, 2015). This is probably why Wakefield (2015) argues that when certain knowledge is obsolete, the value of the source (a document, for instance) begins to fade or disappear, but when social media is used for re-enactment, the resulting effect may have more impact on students' academic performance than their previous experience. Wakefield (2015) notes further that social documentation, which extends to social media documents, has its own power over students' memory and academic performance. This assertion questions the function of the brain in relation to memory. It also questions brain memory capacity and ability in academic performance, unless memory is not a cognitive skill for academic performance.

There are two opposing arguments relating to the effect of multitasking on students' academic performance. One view put forward by Kirschner and Karpinski (2010), Bradberry (2014), and Chen and Yan (2016) is that multitasking is detrimental to students' academic performance. The second argument promoted by Halassa and Haydon (2010) is that multitasking enhances the academic performance of students. Multitasking is a way of exercising the brain to perform optimally, but for how long should the brain be engaged in such an exercise to maintain optimal performance? In order to fully understand the implication of multitasking on students' academic performance, Wilson and Golonka (2013) suggest the need to conduct task analysis based on students perspectives on the specific task that challenges their cognition: identify the task-relevant resources (brain or its regulator-neuron) that enables students to multitask; identify how students manage their resources to accomplish two competing tasks at the same time; then test the students' performance to confirm that they actually accomplish academic tasks during multitasking. Conducting these tests requires considering the working memory and the learning memory capacity of students.

4.4.1.2 Working memory test

The working memory test, according to Junco and Cotten (2011), is a type of short-term memory assessment that reveals how people temporarily store and retrieve information in their minds and work with it whenever needed. In this regard, multitaskers are efficient in responding promptly to sudden simultaneous cognitive demands which are presented pictorially. Students' overall relationship and skill with social media equips them with the knowledge of how sounds, image and text interact (Kirschner & Karpinski, 2010). Does this mean that students who engage with both pictorial presentation on YouTube and text simultaneously perform better than those who simply multitask with text and non-pictorial materials? In studies carried out by Junco and Cotten (2011, 2012) and Junco (2014b) as a test

of working memory, they found that frequent multitaskers score lower grades on a test of working memory due to their deficiency in responding promptly to sudden cognitive demand. They are slow in switching between two competing tasks especially when their thoughts are deeply embedded in one, a condition Bradberry (2014) refers to as the 'euphoric state'.

4.4.1.3 Learning memory test

Research conducted by Junco and Cotten (2012) and Kirschner and Karpinski (2010) links students' frequent multitasking on social media with poor academic performance in learning memory tests and a high level of impulsive hyperactivity behaviour (Bradberry (2014). Impulsivity is a condition that makes students' cognitive level drift, making them lose focus easily (Bradberry, 2014). Multitasking makes students more impulsive and restless, thus distorting their memory function. Junco (2014b) contends that some types of social media platforms may not be detrimental to academic performance (as suggested in previous research) but intrapersonal factors such as multitasking, lack of self-efficacy, self-discipline and self-regulation may be causing the impediment. Attempting to focus on more than one unrelated task at a time interferes with awareness, memory, decision-making and task performance. To develop Junco's theory, Rosen, Cheever and Carrier (2011), and Wood, Zivcakova, Gentile, Archer, Pasquale and Nosko (2012) used an experimental design to test the effect of multitasking with social media on academic performance. In a controlled study on the impact of social media on academic performance, Rosen et al. (2011) randomly assigned students in multiple classrooms to one of three conditions, based on how many text messages were sent during a 30-minute-long videotaped lecture. Afterwards they completed a test assessing the retention of material in which students received no texts, four texts or eight texts and were asked to respond. All the messages came at the same time and students were expected to respond in a limited time. At the end of the test, it was discovered that Group 3 performed worse by one letter grade than Group 1. However, there was not much difference to the scores of Group 1 or Group 3. Rosen et al. (2011) found that students who opted to respond rapidly to text messages performed significantly worse than those who chose to wait for 5 minutes following the interruption to read or respond to the next text. "This suggests that we should be teaching our students meta-cognitive strategies that focus on when it is appropriate to take a break and when it is important to focus without distraction" (Rosen et al., 2011 p. 174).

In another study, Wood et al. (2012) assigned students to one of four experimental conditions that had students use social media platforms such as Facebook, text messaging, instant messaging or email during a 20-minute-long simulated lecture with three control

conditions. The researchers found that students who used Facebook scored significantly lower on the text of the lecture material than those who only took notes using paper and pencil. This result indicates that a paper and pencil test (PPT) is more efficient than a computer-based test (CBT). With the gradual migration from the use of PPT to CBT by the Nigerian Examining Board, one wonders how students can score higher in examinations.

4.4.1.4 Cognitive overload

Cognitive overload occurs when the total intended processing exceeds the student's cognitive capacity. Reducing cognitive load can involve redistributing essential processing, reducing incidental processing, or reducing representational holding. A major challenge for meaningful academic performance expectation is that it can require a heavy amount of essential cognitive processing, but the cognitive resources of the student's information processing system are severely limited. Conducting two competing tasks (combining critical thinking and writing with chatting) simultaneously snarls the brain process, a situation Junco (2012b) refers to as a 'cognitive bottleneck'. Many years ago, without any inclination that knowledge would expand so much so that it could overwhelm a performer, Welford (1967) coined the term 'cognitive bottleneck' as an expression for brain clog or snarl in the cognitive pathway as a result of overload. Performing two tasks at the same time slows down the brain processing system and thus impedes performance. The human brain is wired for performance. Bottleneck theory implies that performing more than one parallel task at the same time taxes the memory by clogging up the cognitive process and slowing down the processing organ, thus causing performance inefficiency (Junco, 2014a). Dual task or related tasks are similar to focused tasks with diverse perspectives, while unrelated tasks are those that demand multiple cognitive attention at the same time. Brain snarl, clog or freeze occurs when the processing demand evoked by performative tasks exceeds the processing capacity of the cognitive system (Junco & Cotten, 2011). The heuristic features of social media make it easy for students to switch from one activity to another within seconds, a situation Kirschner and Karpinski (2010) refer to as multitasking. Junco (2014a) asserts that students who engage in multitasking with social media tools as one of the tasks, such as texting while attending to academic activity, or switching between two auditory stimuli, are prone to cognitive overload. Multitasking activities such as texting, emailing and doing class work is not the only cause of cognitive overload which distract students during study. Also, social media also has the propensity to push out a plethora of content on a given topic at students. Voluminous content pushed at students on a given topic is capable of overwhelming and confusing students as it requires them to process tons of ideas

on one subject area. Such voluminous content can reach a threshold level where a student's working memory is overtaxed (Junco, 2012b) to the point that performance decline becomes visible.

4.4.1.5 Effect of multitasking and academic performance

Findings of the scholarly studies reviewed in Chapter 2 reveal that students report taking tweet breaks and occasionally refer to social media platforms on their phone in the middle of class proceedings. They also report that they multitask by means of listening to lectures and sending instant messages. Multitasking or divided attention is a process of performing dual or multiple tasks simultaneously, but how does the brain carry out such multiple, unparalleled tasks without one overriding or interfering with the others? Does multitasking produce efficient performance in all of the tasks, in some or none? To answer this question, one needs to understand the imagination or neuroscience description of how the brains of teenagers (students) work in a multitasking setting. McCann (2013) posits that the brains of teenagers, especially 21st century students, do not function exactly like those of older generations. A potential problem that may occur as a result of multitasking can be linked to what Sweller (1999) calls the split-attention effect, a condition evoked by processing dual activities that exceed the processing capacity of the cognitive system which may result into what Mayer and Moreno (2003) refer to as cognitive overload. However, in a scientific article, Pavlidis et al. (2016) report that texting is different from other kinds of distraction because it blocks the sixth sense. The sixth sense according to Pavlidis et al. (2016) is a subconscious corrector that is capable of counterbalancing diverse information coming into the brain. Does this apply to students when they are texting and listening in class? Pavlidis et al. (2016) used a simultaneous experiment to study the effect of cognitive, affective, psychomotor and mixed stressors on drivers' arousal and performance. In their study, they engaged 59 participants in a driving test using a driving simulator, then took them through a challenging stretch of a virtual highway under normal, non-stressful conditions. In another test, they engaged their participants under stressful conditions covering cognitive, emotional and sensorimotor stress. In the cognitive test, the drivers were asked to analyse mathematical questions while driving; in the emotional test the drivers were asked to respond to emotionally stirring questions; in the sensorimotor test, the drivers were asked to engage with their phone while driving. They found that in the sensorimotor test, all drivers drifted from their lanes because the sensorimotor stressor involved multitasking using texting. They note that drivers were more stable in their lane when they were cognitively and emotionally engaged as opposed to when they were manually and mentally tasked simultaneously. This finding

suggests that a similar occurrence can also take place in any academic setting in which students frequently receive calls and send text messages in the middle of a lecture or while reading. In their sixth sense analysis, Pavlidis et al. (2016) found that all stressors incurred significant increases in mean sympathetic arousal accompanied by significant increases in mean absolute steering, but only the sensorimotor stressor translated to a significantly larger range of lane departures, indicating more dangerous driving. In the case of cognitive or affective stressors, Pavlidis et al. (2016) observed a smaller range of lane departure, suggesting that there is an effective coping mechanism at work compensating for any erroneous reaction precipitated by cognitive or emotional conflict only. What is not said here is how efficiently the dual task is completed and indicates that multitasking can impact students' performance negatively or neutrally, but rather, Just and Buchweitz (2014) suggest that students possess the ability to effectively conduct some tasks at the same time depend on the individual. They contend that cognitive property that underpins effective performance in higher-level tasks is neural efficiency, suggesting that some students possess more cognitive efficiency than others.

   Just and Buchweitz (2014) argues that in some students, multitasking may cause performance degradation in communication that involved multitasking activity, causing the communication to be slower or more error-full. This occurs because the combined information flow from multiple tasks may exceed the bandwidth of the communication channels. Bandwidth is the maximal rate of data transfer supported by a communication channel. This brings in the individuality theory as they maintain that high performers are able to maintain consistent levels of performance as task difficulty increases without exhausting their cognitive resources. However, for low performers, Just and Buchweitz (2014) associate the decrease in performance with higher consumption of cognitive resources due to cognitive overload. Cognitive overload resulting from dual tasks and efficient strategies include the ability to stay calm and focused on key elements of the task at hand while ignoring or filtering out distractions. Does this call for students who use social media frequently while attending to academic activities to develop the skill of efficiency in carrying out two competing cognitive inputs simultaneously? Such discipline in an activity depends on the genetic make-up (intellectual) or behaviour (moral) of the students.

       Just and Buchweitz (2014), who believe that multitasking enhances cognitive function and thus can lead to more efficient performance, also acknowledge that some forms of high-level multitasking can exceed the limits and cause a reduction in dual task capacity which impedes cognitive performance relative to single task performance. However, they contend that if performing one task alone enhances cognitive function, then there may be an upper limit

on the amount of activation that can be evoked at any given time even by one task alone. According to them, performing two equal cognitive tasks simultaneously typically activates a substantial sacrifice on the performance efficiency of one task over the other, an effect they call 'under-additivity' of multitasking activation. They use the term under-additivity to describe a situation in which the brain networks for two tasks: spatial processing and auditory language comprehension which are relatively non-overlapping. The under-additivity of the activation and the performance reduction reflects the fundamental limitation on how much thinking can occur at a given time.

An argument needing explanation here is in regard to under-additivity. If performing parallel cognitive tasks simultaneously activates substantial sacrifice of one against the other, what happens when the tasks are un-parallel? How much information can students comprehend from a social media platform that overwhelms them with voluminous un-parallel content? An example of under-additivity of multitasking activation occurs when a student uses social media to engage in sending instant messages to friends while listening to the teacher in class, a situation that can interfere with their focus and impair performance. The theory by Junco (2012c) that says social media use during class and while doing homework by students could be detrimental to their academic performance contradicts Just and Buchweitz's (2014) claim which contends that multitasking promotes efficient brain function and thus enhances academic performance. Studies have shown unequivocally that academic performance is degraded when students engage in dual cognitively demanding tasks (Junco, 2014a). This questions Pavlidis et al.'s (2016) assertion that students have an inbuilt automatic system that works wonders until it is stretched beyond the limit. What is not known is the extent considered to be beyond the limit and the level of task – horizontal or vertical level. The lack of such understanding pits Junco's (2012c; 2014a) theories against Just and Buchweitz's theories on multitasking.

Putting all the theories in this section together, it seems sufficient to say that conducting multiple tasks simultaneously causes communication to be slower or more error-full, resulting into a situation that causes what Just and Buchweitz (2014) term 'bandwidth effect'. The bandwidth effect occurs when the communication channels are limited; exceeding the limit impedes the channel's maximum capacity rate of information transfer, thus slowing the ability and functionality of the brain. This indicates that there is an obvious upper limit on how much thought can occur at a given time because the resources available for the transmission of brain faculty activity is finite, and there is a limit on total processing capacity. Such erroneous processes in brain function can be overwhelming on the filtering process of the TRN and the correcting process of the ACC. Welford (1967) made an indelible, historical contribution that

paved way for the understanding of how excess information causes brain snarl by providing a concept that he termed 'cognitive bottleneck' (Welford 1967). All of the discourse above points to the fact that 21st century students need more teaching about interpersonal values (self-regulatory, self-discipline, self-efficacy and self-motivation) than structured knowledge to cope with distractions so as to perform excellently.

4.4.2 Academic performance as a function of the affective domain

It can be argued that it is beyond the scope of a school to measure the habits of students, therefore this should not have any bearing on rating students as merit or demerit (Sizer, 1996). However, students do not only engage in academic activities cognitively but emotionally, using intrapersonal values. The affective domain requires students to demonstrate attitudinal and relational qualities such as self-efficacy, self-control, self-regulation, diligence, morality, virtues, perseverance, and cooperation in order to be motivated. Atherton (2013) writes that way back Krathwohl, Bloom, and Mesia (1964) presented the affective domain as being characterised by value concepts. In their model, receiving is at the base of the pinnacle followed by responding, then valuing, organising and conceptualising, with value at the apex (Figure 14).
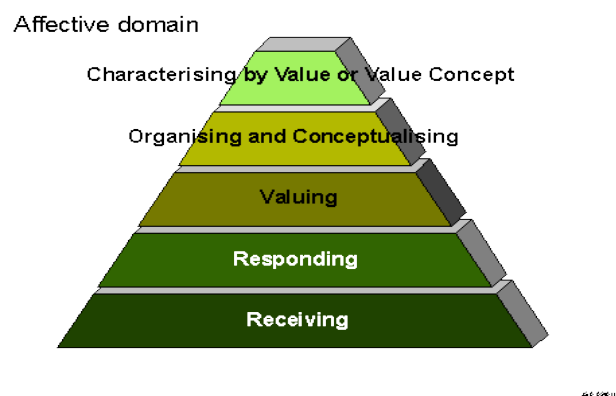
Figure 13: Affective domain

I take this value-based model to represent a top-down hermeneutic approach which practically means that students conceptualise valuable ideas, make sense of them based on their interpretation, then respond accordingly. However, what students are to be receiving is not clear here as the model is not a circle neither does it indicate that it is a continuum. If I take it as a bottom-top approach, it means that without recourse to what students ought to receive, the foundation of their hierarchical model indicates that students perform by responding first to

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whatever they receive before conceptualising and organising it into a valuable concept. This model is consistent with social media use by students whereby students receive whatever is pushed at them, respond to it, value it, conceptualise and use it to form an opinion that shapes their academic performance. Academic performance in this model is actuated by consistency, tenacity and conscious effort to achieve a goal. Academic performance in the affective domain relies on the cognitive skill of knowing what to learn and what to avoid which requires that students employ social and relational skills, intrapersonal values such as self-efficacy, self-discipline, self-esteem, self-actualisation, emotional intelligence, and motivation.

4.4.2.1 Academic performance as a function of interpersonal values

Self-regulation, self-monitoring, self-efficacy or self-disparagement and self-slighting are intrapersonal traits that regulate students to use social media prudently. Positive intrapersonal values are internal, self-reactive behaviours resulting from comparisons of personal effort with standards for specific performance. In this case, the objective magnitude of a grade does not matter as much as the perception of how such a grade is contingent on a particular course of effort in the performance. Students use their self-regulatory capability to provide the basis for purposive performance through the sub-functions of self-monitoring, judgmental process, and self-reaction (LaRose et al., 2001). Self-monitoring, according to LaRose et al. (2001), is the observation of one's own actions to provide diagnostic information about one's performance in relation to others within the same social environment. This judgmental process compares self-observations of personal effort, social norms and the evaluative process of the activity, particularly when the locus of control for the performance resides in their individual effort. The self-reactive function supplies the performative incentive through the satisfaction derived from accomplishing an activity that meets desired standards. In addition, dysfunctional forms of self-regulation may also affect academic performance. LaRose et al. (2001) contend that addictions mark the failure of self-regulatory functions. Deficient self-regulation is conceptualised as being the mechanism for so-called social media addictions. LaRose et al. (2001) posit that aside from self-regulation, self-slighting of personal accomplishments is another form of dysfunctional self-monitoring that reduces the self-reactive expectation to persist, and self-disparagement of student's capabilities can also inhibit performance. Self-regulatory mechanisms are also important in a medium that invites intense self-reflection. Self-disparagement of students' abilities to perform efficiently may negate the persistence of self-reactive expectations in the face of failure or adverse outcomes (LaRose et al., 2001). Thus, when students engage in self-slighting of their effort, it deprives them of the satisfaction of

successful performance. Self-disparagement and self-slighting may afflict even those with high levels of self-efficacy if they compare their abilities to unrealistic standards set by the most accomplished performer and by constantly adjusting and changing patterns.

Another important determinant of academic performance is self-efficacy, or a student's belief in their capability to organise and execute a particular course of action (LaRose et al., 2001). Students who perceive themselves as highly efficacious with reference to a particular task will invest sufficient levels of effort to achieve successful outcomes, whereas those with low levels of self-efficacy will not persist. Applying social-cognitive theory to social media usage means that expectations about the positive outcomes of social media use, such as encountering informative web pages or making valuable social contacts, should increase usage. Each type of incentive: sensory, social, status, activity, and self-reactive (LaRose et al., 2001) may make unique contributions towards students' academic performances. Expected negative outcomes, such as cyber bullying and infringement of privacy, would discourage social media use. Social media self-efficacy, or students' beliefs about their capability (LaRose et al., 2001) in using social media to accomplish useful academic tasks, should also determine usage and exposure to a medium that many users find troublesome.

Although performing in the affective domain requires more intuition than the does the cognitive domain, and is rooted in values, feeling, emotional presentation and character, Pintrich and DeGroot (1990) claim that self-efficacy is an intrinsic value that is positively related to cognitive engagement. Self-efficacy is students' influence over behaviour and thus is better than academic ability (Lepp et al., 2015). Students who report high academic performance apply greater effort to academic pursuits and are more persistent in the face of obstacles, exhibiting greater interest in learning through self-efficacy (Lepp et al., 2015). This category of students understands the value of social media and thus uses it to their advantage. Lepp et al. (2015) argue that self-efficacy positively correlates with virtually all measures of academic performance including semester grades, cumulative grade point average, homework, test scores, writing assignments and research. Lepp et al. (2015) say that self-efficacy is better than other commonly used socio-psychological variables such as task value, goal orientations, meta-cognitive and learning strategies. They explain the differential elements between self-efficacy for self-regulatory learning (SE: SRL) and self-efficacy for academic achievement (SE: AA), stating that SE: SRL is concerned with students' beliefs in their capabilities to proactively regulate their academic function on the path of academic achievement. This includes belief in the ability to resist distractions and create a conducive study environment (Lepp et al., 2015). Thus, SE: SRL is an important variable in the relationship between social

media and academic performance. Self-efficacy for academic achievement (SE: AA) describes students' belief in their capabilities to learn material elements from specific valuable content areas such as mathematics, science and arts (Lepp et al., 2015). This suggests that students who are worried about their low performance should pay attention to what they read on social media. Lepp and colleagues. (2015) validate that self-efficacy and self-regulatory learning influences self-efficacy and academic achievement.

4.4.2.2 Academic performance as a function of emotional intelligence

The construct of emotional intelligence (EI) has evolved over many decades. It was originally studied by Charles Darwin, an English naturalist and geologist as early as 1837 but was defined and theorised generally by Thorndike, an American psychologist, in 1920, then coined and implemented by Leuner[4] in 1966 (Bar-On, Handley & Fund, 2006). From Darwin's era to the present day, most descriptions of the construct of EI have expanded to include modern theories that include the ability to understand and to express oneself, the ability to manage and control emotions, the ability to understand others and relate with them, the ability to manage change, adapt and solve problems of a personal and interpersonal nature, and the ability to generate positive mood and to be self-motivated.

There are quite a number of models representing EI but the three major models that explicitly describe emotional intelligence are the Mayer-Salovey model, the Goleman model and the Bar-On model. The Bar-On model states that emotional intelligence is a cross-section of interrelated emotional and social competencies that determine how effectively students understand and express ideas and cope with daily academic demand (Mayer, Salovey, Caruso & Cherkasskiy, 2011). Emotional intelligence, according to Goleman (2011), is better than IQ because it carries within it social and emotional competencies. He argues that IQ contributes to 20% of the factors that determine academic performance, which means the remaining 80% can be credited to EI. However, Mayer et al. (2011) find this claim implausible, saying that such ideas are unrealistic and that there is no empirical evidence to support the claims. They argue further that although EI is a standardised intelligence that distinguishes those who are genuine from those who are warm and from those who appear oblivious and boorish, its standardised nature makes it an elusive concept as it lacks measurability and thus has proven to be resistant to adequate measurement in relation to academic performance. Out of the three models, the Bar-On model provides useful theoretical insights for my theoretical framework as

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[4] Leuner speculated that women may reject their roles as housewives and mothers due to lack of emotional intelligence, so he coined the term, emotional intelligence as a proposal to measure housewives who lacked emotional intelligence in 1966.

its definition of EI incorporates all intrapersonal characteristics mentioned earlier in this chapter as detrimental factors in relation to academic performance. Bar-On et al.'s (2006) description of EI covers the ability to understand and to express oneself, the ability to manage and control emotions, the ability to understand others and relate with them, and the ability to manage change, adapt and solve problems of a personal and interpersonal nature, the ability to generate a positive mood, and the ability to be self-motivated.

Even though emotional intelligence is said to be a predictor of academic performance, Mayer et al. (2011) warn that it does not impact academic performance because performance ratings are based on individual productivity and behaviour. The emphasis on changing behaviour to achieve desired outcomes and to meet established criteria is measured by instruments such as standardised examinations or other performance measures (Huett, 2004). In education, this often takes the form of drills and practice, habit-breaking, and reinforcement through rewards. Such cut-and-dried information-only approaches (Huett, 2004) do little to explain the complex nature of the behavioural patterns of students in translating their intrapersonal values into academic achievement tools. Although Mayer et al. (2011) argue that EI is more myth than science, they note that it provides the basis for competencies, enabling students to exhibit persistence at challenging tasks and have positive attitudes towards life that can lead to better academic outcomes and greater rewards.

4.4.3 Academic performance as social activity, and cultural process

The entire world is a stage (Goffman, 1956), and the basic stuff of social life is performance (Turner, 1987). Whether we approach academic performance from a cognitive, affective or psychomotor perspective, Jason Huett (2004) says there will always be a socio-cultural aspect of mutual influence between the students and their intrapersonal values that implicitly or explicitly influences their performance level. From the social-cultural perspective, Turner (1987) notes that social and cultural performances are infinitely more complex as they convey information through both verbal and non-verbal cues. He explains that the verbal medium is infinitely more complex and more subtle than the non-verbal, conveying various messages that are capable of communicating rich and subtle ideas and images aimed at fixing and framing the social structure or reality in a process or set of processes. Academic performance is the manifestation par excellence of such human socio-cultural processes.

Anthropologists like Schechner (1988) have created a dichotomy between structure and process, situating academic performance as a sublimation between conflict and the pleasure of reality or an extension of fantasy rather than a process in an activity. Turner (1987) describes

such a process as a means of understanding the reality of social change as an ever-to-be-repeated achievement through a process of regularisation, meaning that academic performance is not merely a role-playing activity but also a process of regularisation carried out by students within school tradition. In his regularisation and processualisation theory, Turner (1987) perceives school as consisting of all personalities of individuals constituted as a society or sub-society, bounded in consistent processes of regularisation that are made up of conflict, masking of commonality and difference, and situational modes of social coordination. Turner (1987) wraps the social-cultural domain of academic performance around the theory of regularisation and processualisation, contending that rituals, rigid procedures, regular formalities, symbolic repetitions of all kinds as well as explicit laws, categorisations, principles, rules and regulations are all cultural representations of fixed social reality or continuity in academic settings. Yet, at the same time, he says, all these struggles against mutability (are attempts to fix or alter socio-cultural realities because part of the process aimed at fixing social realities involves representing it as stable or immutable. This argument brings in the current academic setting where students' social media usage tends to alter the fixed socio-cultural realities that have existed over time in Nigerian academic settings. Weiss and Hanson-Baldauf (2008) note that the single biggest problem facing education today is that our digital immigrant instructors, who speak an outdated language (that of the pre-digital age), are struggling to teach a population that speaks an entirely new language, so they struggle against mutability. Performance process, according to Turner (1987), represents stability and continuity acted out and re-enacted as visible continuity that consistently promotes repetition while at the same time ignores the passage of time which is the very nature of change, and the implicit extent of potential indeterminacy of social relations.

Whether these notions of processualisation, regularisation and spatialisation are sustained by school traditions or legitimated by revolutionary edicts and force, they act to provide daily frames for the social construction of social realities within which the attempt is made to fix social life (Turner, 1987). There are some school cultures and traditions that are so regularised, repetitive and immutable to the point that they resist social realities and socio-cultural change. Such fixed realities negate the very purpose they aim to achieve because the exploitation of inter-determinacies in social-cultural situations and the actual generation of such indeterminacies leads to a condition that Turner (1987) describes as a process of situational adjustment. Perhaps such socio-cultural settings may be concerned with the interpretation or redefinition of rules and relationships by regarding a field of socio-cultural relations which may include networks and arenas as well as relatively persisting institutions as

a plurality of processes; some of regularisation, others of situational adjustment (Turner, 1987). However, whether the processes are unchanging or changing with the emergence of social media adoption by students, Turner (1987) notes that processes of regularisation and situational adjustment may each have the effect of stabilising or changing an existing social situation and order. This means that in the near future, the immutable socio-cultural realities in Nigerian secondary schools may be adjusted to accommodate the complex relationship between students' social media adoption, incorporating it into their academic activities.

Perhaps students' academic performance and grades that resonate as school social-cultural regularities and representations may be easier to handle analytically if the interlocking of the processes of regularisation, situational adjustment and factors of inter-determinacy are taken into account (Turner, 1987). However, the emergence of post-modern dislodgement of spatialised thinking and ideal models reduced cognitive and social structures from their position of what Turner (1987) calls 'exegetical pre-eminence' because post-modernism has informed a major move towards the study of processes, not as exemplifying compliance with or deviation from the normative etic and emic model, but as performance.

4.4.3.1 Academic performance as a function of socio-cognitive activity

The socio-cognitive theory framework explains social media use in terms of expected positive outcomes or gratification. Therefore, in socio-cognitive terms academic performance may be viewed as the outcome of an expectation. LaRose et al. (2001) link the cognitive domain with the social in a theoretical understanding, drawing on the gratifications sought, gratifications obtained formulation as an important mechanism in social-cognitive theory and enactive academic performance. Enactive academic performance, according to them, describes how students perform based on experience. In the social-cognitive view, interactions with the environment (social media environment) influences students' exposure by continually re-informing them about the likely social benefit of constant media consumption. Seemingly, the same process describes the relationship among gratifications sought, media behaviour, and gratifications obtained (LaRose et al., 2001). These are parallel pathways to understanding social-cognitive functions. Social-cognitive theory explains behaviour in terms of reciprocal causation among students, their environments, and their behaviours. The triadic causal mechanism is mediated by symbolising capabilities that transform sensory experiences into cognitive models that guide actions (LaRose et al., 2001). According to them, students' capacity for vicarious performance allows them to acquire rules for conduct without physically enacting any specific performance but rather by observing others. They argue further that when

direct experience with enacting behaviour affects perceptions, it leads to enactive performance. Consequently, they note that students may use such capacity to think of and to plan actions, set goals, and anticipate potential performative consequences. Through evaluations of personal experiences and self-assessments of their thought processes, students employ a self-reflective capability that helps them understand themselves better, their social environments and variations in situational demands. Performance expectations, according to LaRose et al. (2001), are judgements of the likely consequences of a behaviour that provides incentives for enacting behaviour and that expectations of adverse academic performance provides disincentives which perhaps are interpreted at a sensory level as lower grades. Sensory performance involves exposure to pleasing or novel sensations which give preference to enjoyable activities that provide the basis for improved academic performance.

The gratifications sought and gratifications obtained formulation of LaRose et al.'s (2001) social-cognitive theory seems to focus more on what students stand to gain from a process while ignoring other psychosocial and emotional intelligence skills which promote self-confidence, but the lack of these is a massive detriment to academic performance. Psychosocial skills according to Bradberry and Greaves (2009) are functions of IQ, and those who lack IQ are at a significant disadvantage in performing.

4.4.4 Academic performance as a function of the psychomotor domain

The psychomotor process is the skilled performance of motor activity (creativeness) that requires the coordination of complex movements with either minimum or maximum energy, depending on the activity. Academic performance in this domain requires practical demonstration of complex physical skills such as swimming, running, jumping, throwing, dancing, drawing, painting and writing, relying on fine motor skills such as dexterity, accuracy, handling, manipulating, and legibility. Academic subjects such as computer programming, physical education (sports and games), creative art (drawing and painting), visual art (drama and musical), and operating any machine, belong to this domain. Atherton (2013) identifies this model as consistent with academic skill performance, drawing attention to the fundamental role of imitation in performance.

Students performing in the psychomotor domain rely on naturalisation, articulation, precision, manipulation, imitation, coordination and balance, all rooted in articulation synchronisation from the cognitive domain for precise, effective and efficient processing of the sequence of thought that translates into motor skill performance (Figure 15).
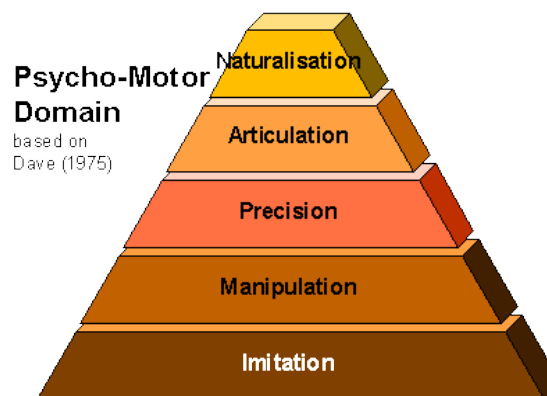
Figure 14: Psychomotor domain

Performing in this domain requires the physical presentation of skills in action-oriented performance such as naturalisation and articulation in drama, efficient use of musical instruments and singing, manipulating computing devices, cookery, and laboratory practical, precision in sports and games, and imitation at play. This underscores the fact that performance is both character and skill, and improvement depends less on just knowledge but motivation, discipline and focus. Academic performance in this domain requires high socio-cognitive and cultural input, low affective input, significantly low input on verbalisation but high on visualisation input. It also requires focus, patience and tenacity in practical demonstration of intrinsic knowledge, cognitive skill and technical prowess. Literally every life endeavour is performed in this domain. Psychomotor skill involves manipulation of materials, objects and elements (solid and solvent), transforming them from one state to another or one form to another depending on the substance in the life science laboratory. Academic performance in the psychomotor domain requires that students efficiently accomplish tasks in subject areas like creative arts, food and nutrition, computer studies, physical education, physics, chemistry, biology, agricultural science etcetera which are practical. This domain covers virtually every subject in school including play, games and sports. Students performing under the psychomotor domain rely on the cognitive domain for the effective and efficient processing of the sequence of their thought that translates into motor skill performance. Motivation, coordination, intellectuality and tenacity are key elements in this domain of performance as it involves repeated trials and error, especially in relation to the use of technological devices.

4.5 Poor academic performances as manifestation of social media addiction

From a social-cognitive perspective, addictions are another form of deficient self-regulation (LaRose et al., 2001). Social media users are aware that the time they spend online is excessive and disruptive but suspend their comparisons to desirable standards of conduct. The pursuit of interest against requirement is a form of deficient self-regulation that is not limited to extreme addictive cases and may affect social media usage even at moderate levels (LaRose et al., 2001). In clinical terms, whether excessive usage of social media by students is truly an addiction or not, it has become a controversial issue. In the absence of self-regulation, social media use and abuse may continue unabated, resulting in obsessive inconsistencies that may appear as addictive tendencies.

Attempts to distinguish outcomes from performance involving academic expectations have failed to produce more robust explanations of how students use social media, suggesting that they are related constructs. Although LaRose et al.'s (2001) study did not examine social media use but rather internet use, they argue that academic performance reflects current beliefs about the outcomes of prospective or future behaviour that are predicated on comparisons between students' performance and expected outcomes, which may ignore some important performative elements that motivate students to perform optimally. In this case, the most common activity that students seek are fun, entertaining, exciting, boredom-relieving activities that enhance their social networks, social interaction or communication, that are novel sensory, information seeking, and self-reactive – various forms of relaxation or escape routines (LaRose et al., 2001). Each of these is a major component of academic performance and has been found to be significantly related to addiction and distraction in several studies on students who use social media frequently. Addiction can be interpreted to mean habit, and it is in habitual usage that behaviour is revealed which in turn becomes visible as performance.

Since academic performance is more than merely a socio-cognitive function; the single-item measure of habit used by LaRose et al. (2001) fail to provide sufficient loadings on achievement factors. Even if habit is said to be a predictor of addiction, it does not appear to translate into efficient academic performance; rather, it can be interpreted as an indicator of efficient or deficient self-regulation (Huett, 2004), depending on outcome. Within the social-cognitive theory of LaRose et al., (2001) the symptoms of so-called social media addiction are really an indicator of habitual use stemming from ineffective self-regulation. The practice of talking about social media uses as opposed to its consequences, when eliciting the problems associated with student's social media adoption and usage, may also create a bias (Huett, 2004)

in favour of some students' performative prowess, due to individual differences. Negative as well as positive outcomes may cause addiction depending on the personality of the student, because personality is a predictor of academic performance (Wolfe & Johnson, 1995) and thus is considered a key factor in the academic context. Psychologists use the term personality to describe the unique and relatively enduring set of behaviour, thoughts, feelings and motives that characterise an individual (Mayer, 2003). Students' EI (Bradberry & Greaves, 2009; Goleman, 2011) as well as social engagement play key roles in shaping their personality in this regard as they contribute to students' emotional stability, thus acting as predicators of academic performance.

As grade 12 students prepare to progress to the university, self-employment and the world of work, they need to fully understand and develop the value of social skill. Social skills are equally important in building and maintaining valuable friendships that contribute to academic success. Junco (2014b) posits that students use social media to maintain relationships with friends they met in the past and new friends they make now, sustaining the bond, building on it and seeking out new academic information from them. He describes such practices of social information seeking as social capital development and relates them to students' perceived level of social capacity, emotional support, and improved self-esteem. I use Junco's (2014b) exhaustive evidence to show that improved social capital can help students feel connected to their institution, which is related to more positive academic improvement. Junco (2014b) emphasises the value of social capital, stating that social interaction is important for student's success and students who interact a great deal with peers have broad social ties and form reciprocal relationships with strong bonds in their network, are more likely to persist to graduation. The simple point is that social capital base of students transcends just classmates and school mates to a broader space that includes valuable contacts they make from their social media usage with people they know and those they have never met. Through their use of social media, they obtain general knowledge about cultures of places they have never visited, and an understanding of other academic knowledge that was unavailable to them prior to the emergence of social media.

4.6 Academic performance as a function of knowledge

Academic programmes in Nigeria are structured in a manner that sieve out students that are considered academically excellent from those who are not. The conventional way of identifying a student's academic prowess is through a standardised assessment procedure that covers what students ought to know by the end of a lesson which, in most cases, excludes what they learned

and already know from sources outside the school context. Sizer (1996) considers the much emphasis on standardised assessment regimen and argues that even when knowledge includes what students learn and know from school, what sorts of test are chosen, and what meaning do the scores on them in fact mean? Better test scores may provide a limited and challengeable yardstick that may not reflect students' knowledge. Epistemological belief studies have proven that students' belief regarding their successes and failures affect their subsequent effort and performance. This is why gaining insight into students' learning pattern and understanding their ideas about academic knowledge is imperative.

Among the epistemological studies by Buehl and Alexandra (2001) are narratives pertaining to the nature and form of knowledge which question academic knowledge and the processes by which such knowledge is defined. For instance, they explored the component element of knowledge and found that knowledge consists of truth, belief and justification. What justifies an activity as knowledge is the truth backed up by evidence. From the psychological perspective, they found a particular concern for the relationship between knowledge and schooling that was understandably driven by formal learning built on the standpoint of pragmatism, meaning that knowledge can only be understood in relation to the experience in which it is nested (Buehl & Alexandra, 2001). Therefore, as the nature of human experience became more central to philosophical discourse, questions about knowledge and knowing were cast in relation to a specific and common experience – schooling, thus raising concerns not only about what it means to learn and know or the process of learning and knowing, but also in how continued schooling might transform students, how it impacts their academic performance, and how it alters their approach to learning. Students may possess general beliefs about knowledge but still hold distinct beliefs about more specific forms of knowledge. Thus, students' belief about academic knowledge may be reciprocally affected by other relevant knowledge systems such as those in social media. In addition, students' belief and perception about academic knowledge[5] may well be linked to their interest, informing the reason to look critically at the definition of academic knowledge. What is knowledge? Is there a relationship between formal knowledge and informal knowledge? Buehl and Alexandra (2001) argue that a student's knowledge base consists of knowledge that is both formally and informally acquired. Academic knowledge acquired through formal schooled experiences can either complement or contradict experiential or informal knowledge. If so, what are the elements in knowledge that constitute academic knowledge from which academic performance is derived?

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[5] In this section, I use the words academic knowledge, academic activity, and curriculum interchangeably to mean the same thing

Sizer (1996) argues that: "The commitment to learning for all (not just access to schooling for all) is the necessary point of departure, whether or not every child is able to use calculus or speak at least two languages or leave school prepared to enter college or take a serious job or have a working grasp of details of democratic government (or of a moral society) and the conviction and respect to use them (p. 36). This suggests that how students perform depends on how academic knowledge is defined in relation to academic performance. The relationship between social media and academic performance depends on how academic knowledge is defined and interpreted in relation to students' interests because not only are they the final consumer of the curriculum but they also reveal the quality of education socially and in all facets of life. Sizer (1996) argues bluntly that "if students are not performing well academically, we must blame the school not the student" (p. 35). What constitutes academic knowledge and how is it defined? Who does such a definition benefit and who is left out? Are the academic activities planned by a group of students with shared intention? By individual students based on their needs, interests or desires? Or by teachers designing academic activities based on the curriculum criteria? On this note, let me draw in Habermas's (1978) critical theory of knowledge and human interests which argues that there are three primary interests in academic knowledge that generate academic performance, namely, technical, practical and emancipatory. He says that these three areas constitute what is defined as knowledge from which academic performance is derived. This suggests that the academic performance of students triangulates or revolves around these interests. Although my focus in this study is not on knowledge, the details of how students use social media for academic performance enhancement depends on the knowledge embedded in the media and how they identify, obtain, interpret and internalise it. What is the curricular definition of academic performance that links it to social media knowledge? Is there a relationship between social media knowledge and academic knowledge? I start my examination of how academic knowledge is defined with, first, the technical domain. This area of knowledge is aligned with the classical theory of Tyler (1949). The technical approach is a traditional, predictive method that is open to testing through application to realities based on knowledge and performance levels. Habermas (1978) asserts that technical interest seeks to control the environment through rule-following action based upon empirical, grounded laws. In this case, academic performance is rated based on adherence to set rules and conditions, and conclusions are drawn based on empirical analysis. This interest presents the academic performance in terms of "facts, rules and regularities" (Luckett, 1995, p. 20). Technical interest is defined by predicting what students should know and do, and the kind of knowledge it provides is driven by a causal explanation of ideas. Junco (2014c) says that

there is no outright relationship between social media and academic performance except a causal one. Therefore, if academic performance is defined based on the technical domain then knowledge has to be technically structured with rigid guidelines explaining the cause and effect of engaging with social media, with restrictions. Only exceptionally gifted students will perform academically well within this technical domain.

The practical domain is a hermeneutic approach defined by interpretation and understanding of ideas guided by what is right rather than causality (Habermas, 1978). The hermeneutics according to Cornbleth (1990) believed that knowledge exists everywhere out there and that students need to go and search for it, find it and apply it in academic situations. She describes practical interest as an ongoing social activity shaped by various discursive interactions and interpretation of ideas between teachers, students, and the context within and beyond the classroom. Based on this description, the practical hermeneutic approach can be said to be interested in the transference of the academic process from the classroom to real-life situations or contexts through mediums that facilitate the development of cognitive, meta-cognitive and social abilities, which are fundamental to continuous academic performance in today's knowledge-based society (Fitzpatrick & Donnelly, 2010). This domain comes close to academic engagement that links students and teachers through acceptable mediums within and outside of the school environment. This suggests that the practical domain promotes academic performance that is enacted through student-to-student, teacher-to-student contact and interactivity established and maintained through social media or telephonically. Although the practical domain is driven by the understanding of ideas, Grundy (1987) says its interpretive and hermeneutic features limit the kind of critical thinking that leads to holistic emancipation.

The emancipatory cognitive domain of Habermas has a fundamental interest in emancipating and empowering students to engage in autonomous action arising out of authentic insights of the social construction of human society (Habermas, 1978). This domain of knowledge promotes self-knowledge or self-reflection. It is knowledge without boundary, and academic performance is defined from the perspective of what students know and can do as opposed to what they are asked to do. It is a critical and empowering approach to ideological knowledge and how students learn, as it promotes open discussion of such knowledge for more detailed understanding and acceptance. For Habermas (1978), emancipation means independence from ideologies that are outside the individual and which can be used to manipulate the students at will. Habermas sees emancipation as a state of autonomy rather than liberty, arguing that if knowledge could outwit its innate human interest, it would be by comprehending, and that mediation of subject and object that creates philosophical

consciousness contributes to synthesis produced originally by interest (Habermas, 1978). This means that the student can be aware of academic needs, but reflexively chooses to do or engage himself or herself in what he or she thinks will benefit him or her the most and thus perform excellently. Such decisions are born out of reality arising from desire and the circumstances being faced by the student and not what he or she is influenced to engage in. The emancipatory interest advocates autonomous, conscious, self-reflection that leads to self-transparency and ultimately truth (Grundy, 1987). Truth in this regard is that students are ahead of their teachers technologically and that millennials possess the innate capacity and knowledge about social media tools (Bart, 2009). Truth is in teachers seeing millennial students as teachers of technological skills, and millennial students seeing their teachers as teachers of educational skills and values, with both parties coming together in academic settings to negotiate and discuss knowledge respectfully and cooperatively based on their understanding. In the emancipatory domain, the definition of academic performance will be informed by open and mediated relationship between teachers and students with respect to each student's academic views, needs and interests. It then follows that, for the school to emphasise the mere acquisition of information and the accumulation of facts or even theory in order to perform credibly, is not in the long run useful to students, for surely, both facts and theories change at an alarming rate. Eisner (2002) contends that if what is already known is emphasised, the student is in a poor position to perform adequately or deal with problems and issues that will inevitably arise in the future, many of which cannot be even envisioned at present. Proffering a solution to such problems, Eisner (2002) asserts that the most effective way to deal with such problems is not by trying to store bodies of knowledge in students' memories but rather by strengthening those cognitive processes that can be used later to solve unforeseen problems or challenges they will face either as students or in life outside of school. Sizer (1996) wonders why those who are not directly affected by the curriculum structure deserve the power to decide and have full control of what those who are directly affected need to learn in order to perform optimally. Who does the knowledge benefit and who should decide what should or should not count as knowledge? The constructivists, especially Siemens (2004) view academic knowledge as student-centred rather than content-centred. Fitzpatrick and Donnelly (2010) argue that such a personally targeted approach means that students can perform better than is possible from an abstracted approach where there is a common objective for all. They also consider academic performance as a deep rather than surface process, and a productive rather than a reproductive task. It then follows that performative activity that is driven by the practical domain with the aim of emancipating students will encourage a real understanding of content so as to enable authentic

production of facts rather than mere memorisation. This process depends basically on the ability and performance capacity of each student. It is essentially the ability of individual student to appropriate and assimilate content, and to give it personal meaning rather than replicating information. However, while considering the individuality principle in academic performance, it is important to avoid extreme individualism which Turner (1987) says only understands a part of a person. Furthermore, academic performance rating that ignores the individuality principles in their entirety promotes extreme collectivism which Turner (1987) says only understands humans as a part whole.

4.7 Conclusion

A combination of theories brought to light the real meaning of academic performance thus enabling me to question assertions claiming that students have an inbuilt automatic system that works wonders until it is stretched beyond limits (Pavlidis et al., 2016). Such theories ignore personality, individuality and behaviourism theories. They also reveal that personality is a unique and relatively enduring set of behaviour, thoughts, feelings and motives that characterise an individual (Mayer, 2003), and that it is a predictor of academic performance (Wolfe & Johnson, 1995). Emotional intelligence skill (Bradberry & Greaves, 2009; Goleman, 2011) is a function of personality, is revealed through behaviour, and the level of expression differs from one individual to another, hence academic performance level differs accordingly. Combining more than one existing theory enables me to conceive that level of academic performance depends on tenets such as the magnitude and level of the task, as well as the physical ability, mental capacity and socio-cultural orientation of the students, all of which are congruent with the individuality principles.

In the previous chapter I defined academic performance, based on Turner (1987) and Elger's (2007) theories, as an activity with levels, a process of learning and a product of knowledge. In this chapter, I continued with their theory, analysing academic performance as a function of the cognitive, affective, psychomotor, social and cultural domains, drawing on Habermas's (1978) knowledge and human interest. These domains open up discussions that link other theories, stretching the conversation into the consideration of how Habermas's (1978) theory defines the functional relationship between academic performance and academic knowledge in relation to students' interest. If, for example, a particular student's knowledge interest is in beading of fashionable jewellery, shoes, handbags and purses, and she finds such knowledge on social media (YouTube), this will make her attached to the media. If she finds her passion in a context that is outside the classroom because it is absent in the school

curriculum, does it count as knowledge? If she performs excellently in such psychomotor skills, is she assessed, rated and graded as an excellent performer academically? Has our definition of academic performance ignored Habermas's theory of knowledge and human interest and thus excluded some students with potential? Which category of students has such definition left out and who does it favour? It is therefore sufficient to say that the episteme of the relationship between social media and academic performance depends on the curricula definition of academic knowledge itself.

Chapter 5: Research Design and Methodology

5.1 Introduction

In the previous chapter I described the theoretical foundations for this study through the lens of the functionalists. This chapter describes the theories that guide the methods used to conduct the study through the lens of the socialists. Earlier functionalists and socialists like Durkheim (1893) and Garfinkel (1967) considered how different component parts of a system work together for the efficiency of the whole system. Garfinkel's (1967) ethno-methodological orientation reveals how interactivity between members of each unit of society shapes social structure through practical sociological reasoning. Like an architectural outline, this chapter throws light on how the research study was conducted, revealing how all the sample, plans, measures and procedures came together to address the research questions in ways that optimised the validity of data and maximised the trustworthiness of the findings. It took direction from the underlying sociological assumptions of research design and data collection (Ahmad, 2014). The evidence from this chapter paves the way for understanding how to link two learning contexts for performance efficiency. I adopted an exploratory methodological strategy of enquiry that moves beyond the underlying philosophical assumptions to research design, data collection and analysis (Myers, 2009).

5.2 Section 1: Research design

Research design is a strategic framework developed by the researcher as a guide for addressing a research problem (Terre Blanche & Durrheim, 1999). It is a plan of action which connects the purpose, the objective and the research questions in order to achieve the goal of the study. My purpose is to explore two social realities in the life of students with the sole aim of understanding how students adopt and use social media as part of their daily routines, and to see if this usage has any influence (negative or positive) on their academic performance. Students are therefore the focal subject in this study, and the most suitable approach that enabled me to achieve my purpose is qualitative because the "basic strategies of qualitative research are applicable to the daily lives of students" (Ramparsad, 2001, p. 289) and how they learn (Figure 16).
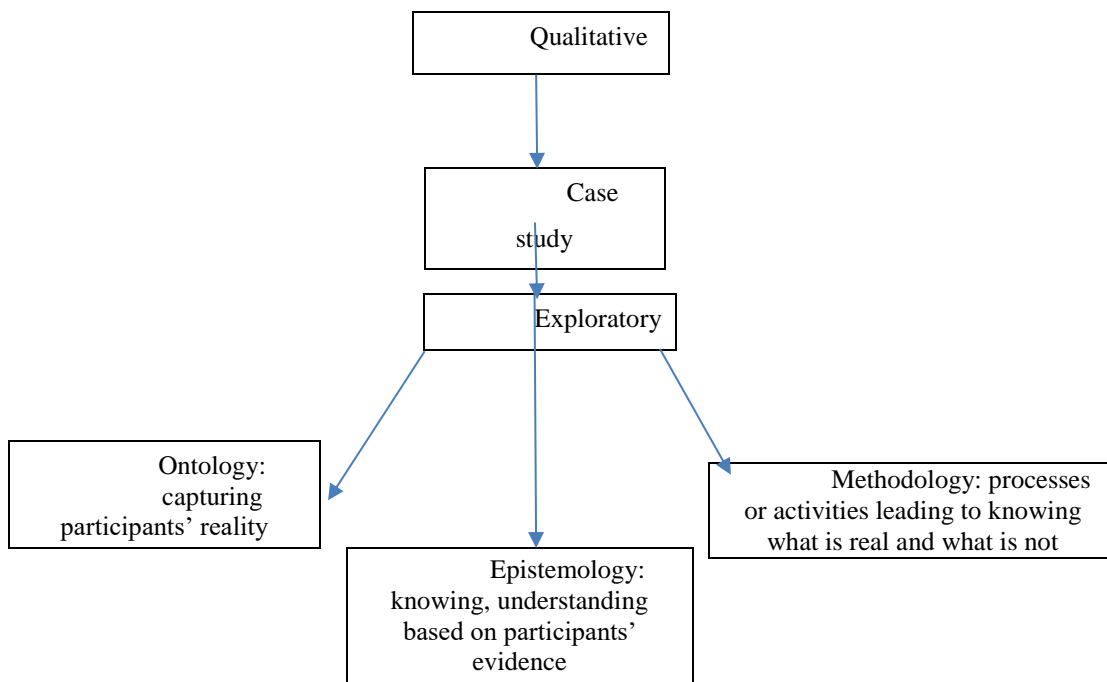
Figure 15: Research design distribution

5.2.1 Qualitative study

The essential processes in this study included investigating and documenting in detail the unique academic experiences of students in the use of social media tools and how that experience related to their academic performance. For a detailed understanding of the complexity of social behaviour of students, and to reveal the interrelationship of their multifaceted interactions, a qualitative approach was required. This qualitative study was aimed at studying students' everyday use of social media in order to become more familiar with how and why they use it, and how they benefit from using it. Denzin and Lincoln (2005) refer to qualitative research as an activity that locates the researcher in the world because it consists of a set of interpretive, material practices that makes the world visible. This study was aimed at understanding social and academic practices among grade 12 students who use social media frequently, and how such practices relate to their academic performance. A quantitative research approach would not have been the most appropriate way of researching social media engagement by students in relation to their academic performance, because it is difficult, if not impossible, to predict with accuracy the complex behaviour of teenage students (Ahmad, 2014). Furthermore, the use of quantitative research could obscure some insights and experiences of participants that I needed to understand in order to address the complexities of social media activity and the contextual factors required for academic performance in an

academic environment. This required the use of a method that was suitable for information gathering and analysis of the factors (Ahmad, 2014) surrounding students' use of social media and their academic performance. To obtain in-depth information that assists in answering all the research questions and achieves my objectives, I considered the qualitative paradigm to be the most appropriate. Thus, this qualitative research takes on an exploratory case study approach designed to unearth the relationship between two social realities – social media and academic performance – with the aim of revealing the influence of the former on the latter including its bearing on the academic success of students.

5.2.2 Case studies

How can knowledge of the ways in which children learn and the means by which schools achieve their goals be verified, built upon and extended? This is a central question for educational research which fits appropriately into the case study method. To understand and interpret a phenomenon in terms of activities and its actors requires a subjective approach that describes and interprets in detail the natural event being studied. A case study approach uses a specific instance that is designed to illustrate a more general principle (Nisbet & Watt, 1984). It is the study of an instance in action (Adelman, Jenkins & Kemmis, 1976), providing a unique example of real people in real situations, enabling readers to understand ideas more clearly than simply by presenting them with abstract theories or principles. Cohen et al. (2011) describe the influence of case study in qualitative study as enabling readers of research findings to understand how ideas and abstract principles fit together.

This is a case study of students focusing on social media to the detriment of their academic function. The starting point of this case study is to investigate the effect of social media usage on academic performance of students and the cause of such effect. In my opinion, case study is more suited to studying students than experimental design (Ramparsad, 2001, p. 289). Case study does not only establish cause and effect, but also enables the observation of the effect in a real context, recognising that context is a powerful determinant of both cause and effect. Furthermore, Cohen et al. (2011) argue that case studies investigate and report the complex dynamic and unfolding interactions of events, human relationships and other factors in a unique situation. They consider that a case study has several benefits, particularly negotiating access to people, and that it is valuable when the researcher has little control over events.

5.2.3 Exploratory study

This qualitative research employs an exploratory approach to data collection with the aim of becoming familiar with the basic facts, setting, and concerns regarding students' use of social media. My intention was to develop a well-grounded picture of the situation that would lead to the development of tentative theories, generate new ideas, conjectures or a hypothesis (Ahmad, 2014) that would determine the feasibility of conducting the research. The research explored various ways in which students understand and use social media for academic purposes. I consider an exploratory approach to be appropriate for understanding students in their educational, social and cultural contexts (Myers, 2009), and to interpret that phenomenon in terms of the meanings students bring to it (Denzin & Lincoln, 2005). This means exploring social media contexts in relation to the subject matter with the intention of making sense of and describing that phenomenon in terms of the meaning students, academics and society in general bring to it. The aim of this research was to understand the research problem, because very little is known about it (Domegan & Fleming, 2007). Ahmad (2014) warns that exploratory study rarely yields definitive answers because it is aimed at addressing the what, why, and how questions, for example: why do students who engage with social media either excel or perform poorly academically? Ahmad (2014) argues that exploratory research provides insights that guide the researcher to determine questions and refine issues for a more systematic inquiry, and also enables the researcher to develop techniques and provide direction for future research.

This exploration leads me to rely on information from two sources, i.e. primary and secondary sources. The primary source is the group of grade 12 students participating in the study. The secondary source is the use of electronic resources for the theoretical foundations, and information from journals and scholarly work by other researchers, including experience, surveys and analysis. My reason for using secondary sources was to obtain background information from previous similar studies, in order to be economical and quick. A preliminary review of previous studies helped to clarify issues in the early stages of my research and enabled me to obtain background information from different perspectives and situations that are similar to my research problem. The primary source was the data, that is, self-reported accounts of students' experiences regarding the research problem which is the most reliable source of information needed to answer the research question and achieve my objective. Therefore, to hear directly from students how embedded they are in social media activities and in academic activities comparatively, and the resultant effect, using qualitative case study methods, serves as the basis for data generation.

5.2.4 Ontology of the study

A review of the literature revealed that the relationship between social media and academic performance is a hotly contested subject. In order to ascertain the reality of the subject I needed to weigh the opinions of the protagonists and the antagonists. Buehl and Alexandra (2001) identified two conceptions of social reality: ontological and epistemological assumptions.

Ontological assumptions are concerned with the very nature or essence of the social phenomena being investigated, thus invoking questions such as: in what way does students' use of social media impact on their academic performance? Is the impact a result of students' consciousness and personal values, or does social media impose itself on students' consciousness from without? Is it sufficient to say that too much social media usage by students causes them to fail or that social media causes students to perform outstandingly? Some arguments might establish the likelihood that a cause brings about the effect, or that an effect has been brought about by a cause (Cohen et al., 2011). What are the causal processes at work in connecting the cause with the effect and *vice versa*? An in-depth analysis of connection between cause and effect needs to be established in this study. There could be more fundamental reasons behind a student's strong or weak academic performance that are yet to be known. That is what this study seeks to expose (Figure 17).
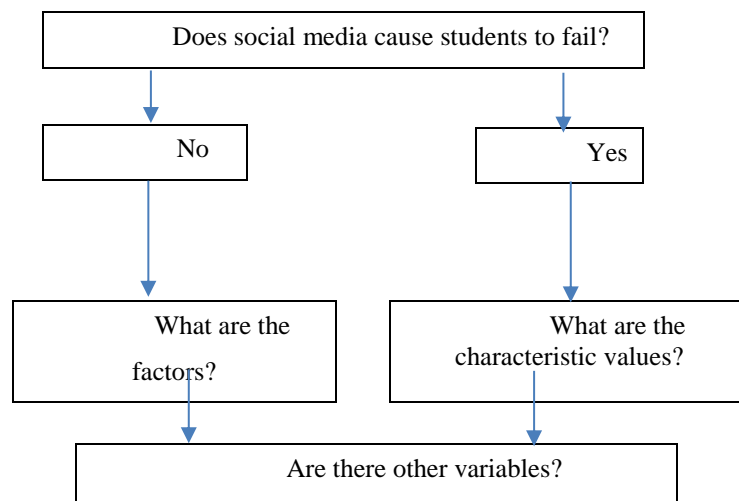
Figure 16: Ontological assumptions in this instance

The nominalist-realist perception (Cohen et al., 2011) underpins the ontology of this study. How I approach this argument profoundly affected how I went about uncovering the knowledge of students' social behaviour in relation to their academic performance. This imposed on me an involvement with students who I consider to be the object and subject of this research –

object in the sense that the debate is focused on students, and subject because students' qualitative academic performance rating is tied to social media usage. This suggests that the reality of the matter can only be found from the students themselves. Students became the reliable source for my investigative journey towards discovering the actual relationship between social media usage by students in relation to their academic performance. By obtaining self-report accounts (Junco, 2014b) from students about their experiences on the topic I attempted to understand their viewpoint, the reasons why they engage with social media, and how their everyday interaction with social media affects their academic performance.

5.2.5 Epistemology of the study

Epistemology relates to "knowledge, and how we come to know things" (Taylor, 2002, p. 93); it is the "theory of knowledge" (Mason, 2002, p. 16). An assumption identified by Burrell and Morgan (1979) is of an epistemological kind. Many students graduate from secondary school with no concrete idea of who they want to be or what they want to do, whether to be self-employed or be employed by others, or what to study at university. Since epistemological studies seek answers to the questions that interrogate the very nature of academic knowledge and learning, including the processes by which such knowledge is defined (Burrell & Morgan, 1979), it becomes necessary to know how academic knowledge is defined, from which academic performance is derived. Obtaining accurate information that reflects the reality of the research problem required that I make students both the object and subject of my exploration. The epistemological position of this research is driven by the following questions, as presented in Figure 18.
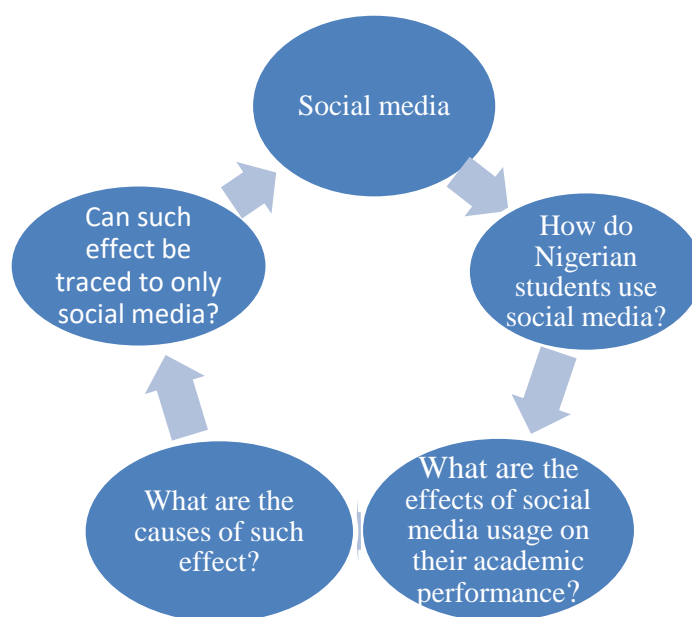
Figure 17: Epistemological distribution in the study

Everyone's way of seeing or knowing is of equal value when constructing meaning with others. Students' belief about their success or failure affects their subsequent efforts to perform adequately, which, in turn, affects the very basis of knowledge: its nature and forms; how it can be acquired and how it is communicated to other students. Cohen et al. (2011) question whether it is possible to identify and communicate the nature of knowledge as being hard, real, and capable of being transmitted in tangible form, or whether knowledge is of a softer, more subjective, spiritual, or even transcendental form, based on experience and insight of a unique and essentially personal nature. In the context of this study, it is necessary to determine the extreme positions of these issues in relation to the reality of social media knowledge and the nature of academic knowledge, in order to know if they are intrinsically linked or not. Understanding students' ideas of what academic knowledge means to them can provide insights into their learning patterns in relation to their academic performance.

My exploration led me to investigate social media platforms used by students in order to interrogate and understand what students do on social media and explore the relationship between the use of social media and student academic performance on the one hand, and the relationship between social media learning and school learning on the other hand.

5.6 Section 2: Methodology

Methodology is the process that leads to knowing what is real and what is not. The aim of methodology is to help us to understand, in the broadest possible terms, not the products of scientific inquiry but the process itself. Therefore, 'methods' are a range of approaches used in educational research to gather data which are to be used as a basis for inference and interpretation, explanation and prediction (Cohen et al., 2011).

Educational issues require a methodological approach that provides the broadest and deepest understanding of learning (Ramparsad, 2001, p. 289). My aim in this study is to understand in detail the complexity surrounding social media and learning, and then "produce rounded and contextual understandings on the basis of rich, nuanced and detail data" (Mason, 2002, p. 3). The methodology that governed this research is aimed at understanding social and academic practices among grade 12 students who use social media frequently, and how such practices relate to their academic performance (Table 3).

Table 3: Research method distribution table

Category	Description
Type of study	Qualitative, exploratory case study
Location of study	Abuja, Nigeria
Participants	12 students
Data gathering tool	Interview questions
Data gathering strategy	Triangulation - Facebook and face-to-face interviews
Data processing	Transcribing, coding and thematising
Data analysis	Conversation analysis

I relied on information from students about their social media use and how this relates to their academic performance. A conversational approach (Pomerantz & Fehr, 1997) using Facebook was employed for the generation of data. This was originally aimed at avoiding the discomfort that accompanies face-to-face interviews. However, face-to-face interviews were later adopted when the Facebook context did not generate as much data as envisaged.

5:6:1 Context of study

This study adopts the qualitative case study in a conversational method with senior secondary school (SS3) students in a Nigerian private Secondary School located in the Federal Capital Territory (FCT) Abuja. The research location represents the typical context needed for a study of this nature. First, Abuja is the seat of the Federal Government of Nigeria. It is in this city that the Universal Basic Education policy was planned, formulated, and announced to the entire nation. Secondly, due to the present of multinational companies and government establishment, schools in Abuja is believe, host students from upper middle class to the rich of the Nation. As a result, the schools are considered well equipped with reasonable number of computers, constant electricity supply and access to internet.

5:6:2 Rationale for choice of location

This research was conducted in Abuja, Nigeria. As the Federal capital city of Nigeria, Abuja is home to major stakeholders in the socio-economic and political sectors makes Abuja schools are well resourced. Also, the multicultural, multi-lingual and heterogeneity of the city of Abuja, coupled with my thinking that parents are well informed gave me the reason for choosing the location for the study. Although I had difficulty finding a school that would accept research on the topic of social media due to the perceived nature of the topic, I was able to gain access to a school that I had no prior contact with. It is a typical model of private school that I consider

a grade 'A' category in the Federal Capital Territory (FCT) Abuja. The students are articulate and familiar with technological tools. It was an appropriate location for this study.

My rational for putting this research in one institutional setting is to afford me the enablement to gather focused data and information on the social and cognitive aspects of student's activities so that I can coherently interpret and analyse it towards achieving my research aim

5:6:3 Limitations

A major drawback in this study was that many secondary school managers in Nigeria federal capital territory still live in denial that their students use social media. Gate keepers of schools I visited refused me access to their students after reading through my letter of intent. Those who granted me an audience used exhaustive evidence to convince me about the corruptive and distractive tendencies of social media platforms. If participants report that their parents purchased the smartphones they used, it then follows that the gate keepers may have bought phones for their children for social interaction, yet, each party consciously argued with complete honesty while at the same time carefully avoiding inconvenient realities with genuine intentions, even when they knew that their arguments were insincere. These digital immigrants (Prensky, 2001a) made it extremely difficult for me to find a school that was willing to grant me full access to their students, and those who did, asked to join the interview session, a ploy aimed at checking to ensure that their students were adequately protected from being corrupted in the process. However, with persistence I was able to find a secondary school that was cooperative and friendly.

5.7 Selection of participants

The focus of this study was on students, so, participants' multiple perceptions, meanings and activity on social media are at the core of the basis for which I understand, analyse and interpret as data. The qualitative framework in this study entailed the selection of students as participants and the evaluation of their perspectives on their academic performance in relation to their social media use. Participants for this study were recruited from a secondary school in Federal Capital Territory (FCT) Abuja. Only senior secondary school (SS3) students preparing for West African Senior Secondary Schools Certificate Examination (WASSCE) and National Examination Council (NECO) were selected for the study. Given that the majority of this class of students were between the ages of 17-20, this sample reflected a clear distinction between

what Prensky (2006a) refers to as 'digital natives' and 'digital immigrants'. An introductory letter outlining the intention of the study was given to all participants, followed by an introductory post on the group's Facebook page directing participants to what was expected of them. Those who consented to participate and who met the specified requirements were asked to respond to a total of 23 questions, with the exception of the introductory questions which were designed to ensure that participants met the guidelines for the study. Participants had the option of not responding to certain questions if they did not want to. Access to questions remained open throughout the duration of data generation period and was closed at the completion of the process.

My interest was to achieve a deep understanding of what students think about social media, and to describe in great detail the perspectives given by each of the research participants. The primary focus of this study was on students in order to obtain a reliable account of how social media impacts academic performance, which required conversations with students themselves. The reason is because students' perspectives, based on their own conceptions, shape their perception of what social media is all about and is required so that interpretation, description and analysis of the processes can be valuable (Ahmad, 2014). Twelve participants were selected from among senior secondary school (SS3) students to represent Nigerian students. Pseudonyms were picked by each of the participants as listed in Table 4.

Table 4: Participants' statistics

Pseudonyms	Age	Gender	No. of subjects	Favourite-best subject	Academic performance
Neka	18	Male	9	Commerce	Very good
Princess	18	Female	9	Government	Very good
Michael	19	Male	9	Physics	Very good
Dickson	17	Male	9	Computer	Fine
Testimony	17	Male	9	Computer	Good
Pearl	17	Female	9	Computer	Good
Leez	19	Female	9	Computer	Improving
Anabel	18	Female	9	English & literature	Fair
Silver	17	Male	9	Physics, computer science & technical drawing	Very good
Mez	18	Male	9	English & literature	Fair
Joel	18	Male	9	Commerce	Improving
Bash	17	Female	9	Physics	Very good

The performance index above is based on participant's account

5.7.1 Rationale for sampling method

It is difficult to obtain a reliable data on academic progress that links two major activities in a students' life using large population. The population size chosen is ideal for the research, as it will afford me the opportunity to meet each student on a one-on-one basis, spending quality time to draw out rich data. My focus is on the richness and trustworthiness of data because, it will enhance my analytical process. The rationale is intended for an in-depth understanding of the issues and to use the sample size to make generalisation. Also, considering the rigor involved in transcribing interviews, a manageable number of ten participants is an ideal sample. A manageable population of twelve students is ideal in enabling me understand the research problem better and to extract quality unambiguous data.

5.8 Data generation plan and limitations

Turner (2010) says that the open-ended question approach to data collection reduces biases. Open-ended interview questions in a conversational method will be used to collect thick, nuance data. I will create a focused group Facebook account whereby I will post questions to the selected participants. Each participating student will be requested to open a Facebook account using fictitious, and the account will be restricted to the participants only. Facebook is chosen for its spatial enablement in allowing students to present their perspectives in detail. It will also afford me the opportunity of asking follow-up, probing questions where needed by clicking the reply, or clicking the like button to show appreciation.

Table 5: Strategies for data generation

Questions	Plan
For what purpose was the data being collected?	To explore the relationship between social media and academic performance, to understand why students use social media, and to understand how it impacts on their academic performance.
Who-what were the source-s of data?	Twelve senior secondary school (SS3) students.
Where and when was the data collected?	Data was collected from two contexts. (1) Facebook because the study was about social media usage by students. (2) Face-to-face interviews in a classroom at the participants' school. The first activity took place after school, while the second activity took place during the long holiday.
How was the data produced?	Simple but explicit open-ended questions were posted on Facebook for participants to respond to in their free time. The same questions were administered to participants in face-to-face interviews where I began with a broad question and then narrowed down to more specific questions as we progressed. Interviews with participants lasted for approximately 2 hours depending on how responsive and

	articulate the participant was. The interview process lasted for 12 consecutive working days. I interviewed one participant per day.
Was there any problem when producing data?	The Facebook context produced short answers that were grossly inadequate for the research problem, supporting the reason for face-to-face interview sessions.
Was there a pilot test?	Prior to the actual collection of data, a pilot test using sample questions was posted on Facebook for non-participants. The purpose was to be sure that participants could access and post answers to questions without difficulty, as well as to ensure adherence to the research rules and ethics.
Justification	This was a qualitative study aimed at exploring a phenomenon in detail. The appropriate method was face-to-face in their natural context – online on Facebook and face-to-face in a classroom at school.

A major limitation arose when I requested for participants' academic performance records. I needed to correlate selected students' responses with their continuous assessment record in the school, unfortunately, I was not allowed access to their academic or continuous assessment record by the school authority. Such record would have provided a methodological benefit for the study in that "texts constitute a major source of evidence for grounding claims about social structures, relations and processes" Fairclough, 1995, p. 209). Students' performance record would have provided the evidence for various academic activities including their ratings. Students' progress report is a more valid indicator of academic performance as valued by the school. Grades reflects various assessment and performance of students' examinations, papers, class work and discussions, homework and assignments, assessed by multiple teachers over the course of students (Duckworth & Seligman 2005) annual schooling. Matching each student's opinion on the matter against his or her performance index would have revealed more in-depth understanding of each participant's academic standing in relation to their understanding of social media usage. Although it is cumbersome to extract concise information for transcription from overwhelming data, I need rich data that will answer the research questions and this approach will enable the participants express in detail.

5.8.1 Data generation instrument and limitations

The concepts being tested in this research were social media and academic performance of students who use social media. A structured, open-ended interview protocol containing a list of predetermined questions was used as the only data generation tool to procure information from participants.

Table 4: Data sources and key research question

Data sources	Students who use the social media
Number of participants	12
Data collection Instrument	Open-ended, unstructured interview questions
Data collection tool	Facebook and face-to –face interview
Research question 1	What social media platforms do students at a Nigerian secondary school use?
Research question 2	What activities do students at a Nigerian secondary school engage with on social media platforms?
Research question 3	What relationship exist between social media activities and academic activities?
Research question 4	How does social media influence the academic performance of Nigerian high school students?

Prior to the actual data generation moment, a pilot test was conducted to ascertain the possibility, usability and accessibility of the tool on Facebook before proceeding to generate data. Data was procured using two pathways: Facebook and face-to-face, using the same interview. Turner (2010) contends that using open-ended questions to generate data reduces biases. Therefore, to reduce biases, I structured a series of extensive, multiple open-ended interview questions which I posted on to a Facebook group account, opened in order to generate data for this study. Each participant was also required to open a Facebook account with an anonymous name in order to access the group account and to respond to the questions. Based on the informed consent signed by participants, they all understood that they had a right to privacy which covered their right to refuse to answer any question or participate in the study.

Having signed up to participate in the study, I expected free responses and cooperation from participants. Surprisingly, the initial data procurement procedure through Facebook did not meet my expectations as it produced short answers like yes and no to questions that required a more extensive response. It was difficult to get detailed answers from participants to the questions on Facebook as they all responded with short answers. Even questions that I that I knew they could respond to more extensively produced very brief answers. Some participants saw others as neutral source of information and so posted answers based on other participants' responses, suggesting that effective conversation had not taken place. Ten Have (1990) warns that although Facebook offers interactive potential, the mere use of Facebook does not guarantee a participant-centred, rich environment because its value depends on how and for what purpose it is used. According to Ten Have (1990), this statement does not imply a determinist view of the technology. In addition, four participants were selective and avoided some questions, while four participants stopped after responding to only a few questions. When it became obvious that the data generated through computer-based-conversation on Facebook was insufficient and grossly inadequate for the purposes of the research, I sought permission from the ethical clearance committee to utilise face-to-face interviews. In the face-to-face interviews, I administered the same questions to the same 12 participants. To my amazement, all 12 participants participated actively in the face-to-face interviews. The conversations were robust and provided more detailed answers than had been posted online. The second phase of data generation through face-to-face conversation provided nuanced data as it elicited more interaction than Facebook. This suggests that social media text does not reflect or enact and embody the overall conversation as much as physical conversation does, thus affecting the power relations in so-called conversations on social media. The question is: were the participants afraid to respond in detail on social media or did they have other unforeseen problems such as distractions, grammatical construction or typing skill? I found a distinction between Facebook posting and conversations and face-to face speech competence (oratory). Ten Have (1990) refers to Facebook communication or posting as a degraded form of idealised competence in conversation. Also noteworthy is the fact that participants claimed that the face-to-face context made them partakers in the conversation, but that Facebook disempowered them because they were not in control of the conversation. According to Ten Have (1990), participants in face-to-face conversations demonstrate their competence by showing that they know, and how they know what they know, by connecting indexical particulars in context-specific information in a reasonable manner with generally available knowledge.

5.8.2 Exploratory interview

To further justify the data generation techniques, Cohen et al. (2011) explain that the use of interviews in research are a move away from seeing human subjects as simply manipulable, and data as somehow external to individuals. It also regards knowledge as generated between humans, often through conversation. The interview is an interchange of views between two or more people on a topic of mutual interest and is human interaction for knowledge production. According to Cohen et al (2011), the interview emphasises the social situatedness of research data. Cohen et al. (2011) argue that knowledge should be seen as constructed between participants, generating data rather than capta. As such, the interview is not exclusively either subjective or objective but is inter-subjective. It is an activity that enables participants and interviewers to discuss their interpretations of the world in which they live, and to express how they understand situations from their own point of view. In these senses the interview is not simply concerned with collecting data about life: it is part of life. Because qualitative research seeks qualitative knowledge expressed in normal language in a real-life situation, data was generated using one-on-one exploratory interviews with open-ended, responsive questions. Open-ended questions have a number of advantages: they are flexible; they allow the interviewer to probe so that she-he may go into more depth if she-he chooses, or to clear up any misunderstandings; they enable the interviewer to test the limits of the respondent's knowledge; they encourage cooperation and help establish rapport; and they allow the interviewer to make a truer assessment of what the participants really believes. Open-ended situations can also result in unexpected or unanticipated answers which may suggest hitherto unthought-of relationships or hypotheses (Cohen et al., 2011). During the face-to-face interview, participants did not need to be motivated to discuss their thoughts, feelings and experiences because they understood the topic and knew exactly what to say because social media is their milieu. Furthermore, the absence of a cassette recorder or video camera promoted a relaxed atmosphere accompanied by confidentiality, anonymity, privacy and trust**.**

5.9 Section 3: Data coding

Data analysis starts with coding. Coding is the analytical process through which the qualitative data being gathered are reduced, rearranged, and integrated to form theory. The analysis of qualitative data is aimed at making valid inferences from an often-overwhelming amount of data. According to (Creswell, 2012, p. 243) "coding is the process of segmenting and labelling text to form descriptions and broad themes in the data". It entails data reduction, data display

drawing and verifying of conclusions (Ahmad, 2014). Although there are no set guidelines for coding data, Creswell (2012) suggests that since qualitative analysis begins when you code data, the analyst should work towards narrowing data into a few themes. This means dividing the data into segments called categories. Categorisation is the process of organising, arranging, classifying and labelling coded units into segments. It entails examining codes for overlap and redundancy (Ahmad, 2014), collapsing codes and using these to build broad themes that make sense. This process, according to Creswell (2012), enables the analyst to identify and distinguish specific data that is useful from that which does not provide evidence for the study. Categorising and coding main ideas in the data, putting similar themes together under appropriate codes and arranging and categorising them according to their codes facilitates the identification of participants who responded to the same question with similar answers and those with opposing opinions. This is followed by displaying the reduced data in a condensed form such as charts, tables, graphs, diagrams of phrases, and drawings.

5.9.1 Data processing

Data processing involves preparing data for presentation and discussion (Zhang & Wildemuth, 2009). Data from all the conversations is copied into textual format accordingly and sorted based on the order of research questions for analysis. Creswell (2012) advised that "the first step in data analysis is to explore the data. A preliminary exploratory analysis in qualitative research consists of exploring the data to obtain a general sense of the data, memoing the ideas, thinking about the organisation of the data, and considering whether you need more data" (p. 243). To make sense out of the conversations (electronic and oral) that took place between me and all the participants required that I read through the data, studying them in detail to understand the story lines, noting major themes and highlighting them in readiness for coding. Themes according to Turner (2009) represent the phrases, expressions or ideas that are consistent and common in the data. Creswell (2012) says that "Themes are similar codes aggregated together to form a major idea in the database, they form a core element in qualitative data analysis. Like codes, themes have labels that typically consist of no more than two to four words" (p. 248). There are different categories of themes – ordinary themes (those expected in the data), unexpected themes, and hard-to-classify themes (containing ideas that do not easily fit into one theme or which overlap with several themes). Major themes are primary ideas that represent the major issues in the data, while minor or secondary themes represent minor ideas. The ability to sort data based on themes makes it ready and easier for analysis (Zhang & Wildemuth, 2009).

5.10 Section 4: A method of data analysis

A method of CA designed by Ten Have (1990) is adopted in this study. The act of conversation is as old as humankind. It is the act of articulating words to make meaning or sense to the listener, hearer or reader, as it comes orally or textually, spoken or written. Conversation is a means by which humans express ideas, intentions and feelings and it is carried out by talking, speaking, interacting, discussing, communicating, explaining, chatting, or questioning, thus making humans to be social beings. Conversation is an interactive, dialogic and communicating activity that occurs between two or more persons, and like performance it takes place in private spaces and in open spaces with larger groups who may be co-conversationalists. Conversation occurs based on the social arrangement between participants and this arrangement shapes how the conversation is structured. Because words shape the way conversations are structured, making meaning in a conversation requires that words are selected and articulated carefully. Words of excitement are different from words of disappointment and words that express anger are different from words which express joy.

There are words that I use interchangeably to express the same idea which may not exactly have the same meaning. In order to cohere my argument on CA, I consider the operational meaning of conversation, discussion, interaction, communication, talk and speech. These six approaches provide the ideational meaning that defines how I use the term conversation. Even though to converse or chat is synonymous with communicate, speak, discuss, and interact, it is different from 'an address' or 'a speech'. Conversation is different from talk or speech because whereas the latter are monologues and unidirectional, conversation is dialogic, interactive and multidirectional, involving multiple participants communicating ideas in a discussion. Talk becomes conversation when it elicits response and promotes discursivity and interactivity. Talks as conversation or talk-in-interaction (Ten Have, 1990; Mercer, 2010) stimulate responses, with the talker passing on an idea to a listener and that idea triggering the listener to respond communicatively. Thus, conversation is defined as a reciprocal event that requires at least two objects and two actions, because conversation occurs when the objects and events mutually influence one another (Fitzpatrick & Donnelly, 2010). This suggests that mere talk to produce a sentence, no matter how well formed or eloquent the outcome, does not by itself constitute communication. Only if elicits a response can it be said that communication or conversation has taken place (Gumperz, 1982). From all definitions, it can be said that conversation is an activity involving the articulation of words to make meaning in a sentence or sentences. It is the mechanism through which societies establish and sustain

social structures and social relations. Conversation is synonymous with social systems and ideologies that include the creation of "social identities, social relations and systems of knowledge and belief" (Fairclough, 1995, p. 131). Conversation is the means by which societies organise, structure, function and sustain social realities. Social activities rest upon effective conversation between humans, engaging their cognition in ways that reveal eloquence and oratory skill, bringing about the need for conversational analysis as a research method.

5.10.1 Approaches to conversation analysis

Conversation analysis, according to Ten Have (1990), is a research tradition that grew out of ethnomethodology, with some unique methodological features (Atkinson & Heritage, 1984). Ten Have (1990) defines ethnomethodology as the study of social order, constituted in and through the socially organised conduct of society's members. Conversation analysis is used to study the social organisation of conversation or talk-in-interaction. Ten Have (1990) gives a chronological detail of the genesis of CA, explaining that it was inspired by two traditions, Garfinkel's (1967) ethnomethodology which is an analysis of how people use mundane conversation to understand themselves and construct social order; and Goffman's (1956) conception of interaction order. Herring (2010) reports that Sacks, Schegloff and Jefferson (1974) build on Goffman's tradition and further developed CA to include textual (non-verbal) analysis. Thus, CA (Pomerantz & Fehr, 1997) or analysis of talk (Mercer, 2010) is the analysis of social interaction albeit verbal or non-verbal. The verbal which is basically oral, relies solely on auditory senses while the non-verbal is basically visual, taking the form of written text, with the exception of braille (Ten Have, 1990). Both Pomerantz and Fehr (1997) and Mercer (2010) describe CA as a method of investigating the structural process of social interaction between humans, whether verbal or non-verbal, formal or informal.

Conversation analysis may then be conceived as a specific analytic trajectory which can be used to reach a specific kind of systematic insight (Ten Have, 1990) in the ways in which members of society do interaction. Atkinson and Heritage (1984) write that CA is a disciplined way of studying the local organisation of interactional episodes, and that its unique methodological practice has enabled its practitioners to produce a mass of insights into the detailed procedural foundations of everyday life. Because CA is aimed at understanding how text-based social interaction is carried out and used to make sense, its overall key principle is understanding how participants use words to make meaning and how coherence is maintained. The essence of what they are saying is that the central goal of CA research is the description

and explication of the competences that ordinary speakers use and rely on in participating in intelligible, socially organised interaction.

5.10. 2 Data analysis

Cohen et al. (2011) argue that in qualitative study data analysis is almost inevitably interpretive; hence data analysis is less a completely accurate representation but more of a reflexive, reactive interaction between the researcher and the decontextualised data that is already an interpretation of a social encounter. They emphasised further that the great tension in data analysis is between maintaining a sense of the holism of the interview and the tendency for analysis to atomise and fragment the data and separate it into constituent elements, thereby losing the synergy of the whole. In interviews the whole is often greater than the sum of the parts. There are several stages in analysis, for example, generating natural units of meaning then classifying, categorising and ordering these units of meaning. Therefore, to actively participate in the analysis sustainably, I employed a method of CA which Gumperz (1982) says requires the researcher to have knowledge, skill and abilities that go considerably beyond the grammatical competence needed to decode short isolated messages. This is because it is impossible to automatically respond to everything that is read in the communication. So, in order to constitute a reasonable meaning out of the conversation, I reflect on Garfinkel's (1967) assertion that indexical particulars have to fit into a specific type of communication in a specific context. The reason for this is that personal and socio-cultural factors, including the separation of utterances from sentences, make conversation context dependent, rendering it impure (Turner, 1987) with respect to both the grammatical structure and the meaning it conveys.

Data was analysed under four main categories: language, factor, contexts and performance. Data analysis was carried out in two stages that I referred to as levels. Level one is the qualitative description of themes. Level two is a micro-analysis of the conversation that considers the language used by students to make meaning in the conversation. This is an inductive data analysis that reveals the usefulness of the social media context – participants' perception of their social media behaviour, their impression about their usage as described by participants. It identifies and analyses variables in the conversation that act as factors in the context that enhances their academic performance in order to reveal how the conversation on the context (social media) plays a role in their academic performance. Language analysis involves getting into the participants' world of speech to identify how they coin language to make sense among themselves. Factor analysis is the analysis of variables that occur frequently in the data. Cohen et al. (2011) define factor analysis as a way of determining the nature of

underlying patterns among a large number of variables. Factor analysis is particularly appropriate in research such as this which is aimed at identifying the relationship between two variables. Factors that are responsible for poor or good academic performance among students who use social media constitute the major issues analysed in this segment. Context here represents social media and school contexts. Context analysis is carried out comparatively to know how they relate, while performance analysis is aimed at comparing the usefulness of both contexts in relation to students' academic performance.

5.11 Section 5: Validity, reliability, credibility, authenticity and trustworthiness

Validity refers to the extent to which qualitative results are accurate and can be generalised or transferred to other contexts (Ahmad, 2014). In qualitative data, validity is addressed through the honesty, depth, richness and scope of the data achieved, the participants' approach, the extent of triangulation and the disinterestedness or objectivity of the researcher (Cohen et al., 2011). Table 6 is a tabular indication of measures that were taking to ensure credibility.

Table 6: Quality assurance measures

Category	Description
Trustworthiness	Trustworthiness in this qualitative study was aimed at ensuring rigour, credibility, dependability and to allow transferability through justifiable findings so that the research can repeated in the future (Zhang & Wildemuth, 2009).
Reliability	Reliability is essentially a synonym for consistency and replicability over time, over instruments and over groups of participants. It is concerned with precision and accuracy (Cohen et al., 2011). One way of ensuring reliability in this research was to administer the questions by using the same words to each and every participant, maintaining the same format and sequence. Data that was procured from students proved to be reliable, thus providing findings that are accurate, dependable and valid.
Validity and reliability	For more reliability and validity, findings were organised around three key principles – protection (participants and data), preservation and accuracy. Participants' responses were carefully preserved in the very form they were given without interference in the form of correcting, restructuring, or rejecting any response. The degree to which the research findings and conclusion are sound is a reflection of the realness of the data.
Credibility	Findings are an offshoot of a rigorous academic exercise that reflects all the conditions stated above.
Authenticity	Data represents accurate accounts provided by participants.

This study relied on primary data generated from a sample of students representing Nigerian students, referred to here as participants. The data was trouble free because it came directly from each participant's response to critical questions set for the purpose of addressing the research problem. In addition, the use of data posted on Facebook served as a control mechanism against invalid data which is data at variance with my theoretical foundation and

research objective. In the case of any changes during the process of data procurement, reliability and stability are ensured by testing such changes against the theoretical foundation of the study to avoid theoretical generalisation, while at the same time establishing guarantees that analytic conclusions will not arise as Ten Have (1990) and Zhang and Wildemuth (2009) describe as artefacts of intuitive idiosyncrasy. The combination of both face-to-face and online posted data enabled repeated and detailed examination of particular events in interaction and hence greatly enhanced the range and precision of the conversation that were engaged in. The use of posted data has the additional advantage over face-to-face conversational data in providing me and readers of research reports with direct access to the data about which analytic claims are being made, thereby making them available for public scrutiny in a way that further minimises the influence of individual preconception and promotes validity. However, such a negotiated structure is not quite clear with face-to-face data analysis because Ten Have (1990) says the processes of interactional negotiation and accommodation is an ongoing activity demanding carefulness so that data presentation and interpretation are not altered or influenced by the researcher. Interpreting data from a biased perspective may lead to omitting valuable sections during data analysis which will ultimately result in invalid conclusions, leading to recommendations beyond the scope of data.

5.12 Section 6: Ethics

The essential purpose of ethics, according to Terre Blanche and Durrheim (1999), is to protect participants. They contend that qualitative interviews should be done only with informed consent that explicitly states how confidentiality will be achieved with a signed agreement between researcher and the participating parties. I signed a confidentiality and non-disclosure statement and submitted it to the ethics committee, promising that I would conduct the study with utmost protection that promotes confidentiality between all participating parties (participants, their institution and myself), and promising that participants in the study would not be asked to engage in unethical behaviour or activities throughout the duration of the study. Thus, to adhere to ethical compliance and maintain the code of ethics of the university, permission to conduct the study on grade 12 students of a private secondary school students in Nigeria was first requested from the institution where the study was carried out. Before I engaged in the data gathering process, I ensured that the sampling plan, interview protocol and identity of participants were not compromised by assigning anonymous names that protected the confidentiality of both the information and the anonymity of the participants. Ethical

measures undertaken to ensure that participants were adequately protected is outlined in Table 7.

Table 7: Ethical compliance measures

Category	Description
Confidentiality	Participants were all assured of protection of identity and confidentiality. Pseudonyms were selected by participants themselves for the study and were used throughout the study.
Anonymity-confidentiality	Information and identities of participants were adequately protected through the use of pseudonyms chosen by participants themselves which were used throughout the process of the research.
Privacy	Participants right of privacy, and right to withdraw, to dignity, to discretion and to determination were assured and maintained.
Deception	The entire truth about the purpose of the research, data collection method and ethical conditions were explained explicitly to participants, and this open approach was maintained throughout the course of the study.
Betrayal	No information provided by participants was disclosed in a manner that revealed their identity or contravened confidentiality and trust.
Informed consent	A detailed explanation of the purpose and procedure of the research was provided and signed by the gate-keepers, participants and their parents.

The procedure for data collection was explicitly documented in letters of request for permission delivered to the principal, students and their parents, including a consent approval from the principal of the school. In the letter, I introduced myself, provided a brief background to the topic and the aim of the study. In addition, a consent letter was issued to all participants outlining the rules of the process, and they were given information regarding the purpose and benefit of the research and reminded that participation was optional. They were informed that their comments and identity would be adequately protected including the right to withdraw at any point in the exercise without penalty. Based on my request, permission was given before students were recruited and engaged for the study (see Appendices). My inability to procure enough data from Facebook for the research informed my reason to seek permission from the ethics committee to conduct face-face-interviews with the same group of participants, using the same interview protocol. Permission was granted and all 12 students participated in the exercise fully and joyfully.

5.13 Conclusion

Although the focus of this research is on social media, of primary importance is the role social media plays in student's academic performance. In this chapter, I have described the main features of the study, that is, the design features and methodology. Also, in this chapter is a

detailed description on how data was generated and how a method of CA was employed for data analysis including the reason it was preferred and how it was used. I explained the problems I encountered during data collection and how I rescued myself in the process. A full description, interpretation and analysis of the conversations is presented in the subsequent two chapters, with evidence provided to support findings.

Chapter 6: Data Presentation and Analysis

6.1 Introduction

In the previous chapter, I discussed the methodology of this study, enumerating the various steps and processes involved in data procurement with detailed description of each. In this chapter, I apply a qualitative description and analysis to the conversation between me and all participants. Data analysis in this chapter is segmented into two levels. In level 1, I de-contextualise the data, revealing all the major themes in the data, coding and interpreting them accordingly. This is followed by both wording and graphic analysis to reveal how all four research questions are addressed. In level 2 of my analysis, I re-contextualise the data, analysing it by means of quotes from participants comparing the regularities between participants' emic viewpoints. I present the views of participants, revealing all the complexities, similarities and contradictions in the data.

6.2 Level 1 – coding and analysis

Table 8: Main themes in data and their categories

Participants	Social Media Used	Device	Activities	Distraction	Academic performance
Michael	Facebook, Twitter, WhatsApp, Instagram, YouTube, Snapchat, messenger	Phone Laptop	Multitask, socialise, updates academic watching videos, looking up recipes, storing pictures	No	Very good
Neka	Facebook, Messenger, WhatsApp, YouTube	Phone	Multitask, information, socialise, entertainment, academic	No & yes	Very good
Princess	Facebook, Messenger, Twitter, WhatsApp, Instagram, YouTube, Skype, IMO Snapchat,	Phone	Multitask, socialise, academic, communicate, updates, tutorials, skill acquisition	No	Very good
Silver	WhatsApp, YouTube, Instagram, Snapchat	Phone	Multitask, search, communicate, updates, socialise, skill acquisition	Yes & no	Above average
Testimony	WhatsApp, Facebook, Messenger, YouTube	Phone	Multitask, socialise, academic, communicate	No	Good
Pearl	Facebook, Messenger, YouTube, WhatsApp, Snapchat	Phone Desktop	Multitask, socialise, research, update,	Yes	Very good

			entertainment, communicate		
Bash	Facebook, YouTube, Messenger, WhatsApp	Laptop Phone	Socialise, research, communicate	No	Very good
Mez	Facebook, YouTube, Messenger, WhatsApp, Snapchat	Phone	Socialise, academic, communicate	No	Improving
Joel	Facebook, WhatsApp, Messenger, YouTube	Phone	Multitask, socialise, academic, communicate	No	Very good
Dickson	Facebook, WhatsApp, Messenger, YouTube, Snapchat	Phone iPad Laptop	Multitask, research, socialise, update, academic, communicate	Yes & no	Very well
Leez	Facebook, WhatsApp, Messenger, YouTube, Snapchat	Phone iPad Laptop	Research, socialise, update, skill acquisition	Yes	Improving
Anabel	Instagram, Facebook, WhatsApp, YouTube, Messenger, Snapchat, Twitter	Phone	Multitask, academic, skill acquisition, update, communicate	No	Improving

Table 8 provides the major themes and sub-categories that emerged from my conversation with each participant. Terms presented in the table describe the social media platforms they use, the devices through which they access social media, what they do on the platforms, and the benefit they derive from using social media for their academic performance.

6.2.1 Research question 1: what social media platforms do Nigerian secondary school students' use?

Major themes that surfaced in data addressing this question are presented in Table 9.

Table 9: List of platforms used by students

Social Media	Total Number of participants	No of participants who used the platform
Facebook	12	11
Twitter	12	03
YouTube	12	12
WhatsApp	12	12
Skype	12	01
Messenger	12	12
Instagram	12	04
IMO	12	01
Snapchat	12	08

Table 10 provides the major social media platforms that the Nigerian students use. The table shows that Snapchat is gaining popularity among secondary school students in Nigeria.

6.2.2 Research question 2: What activities do students at a Nigerian high school engage with on social media platforms?

Table 10: Comparative analysis of what participants do on social media and the devices used in social and academic settings

Activities	Categories	Context	Device	Reasons for device preference
S **O** **C** **I** **A** **L**	Entertainment (music, watching games and sports, playing video games)	YouTube	Phone	Portable, affordable, mobile, convenience, economical access
	Chat (with friends, teachers and family)	Facebook, Twitter, Skype, WhatsApp. Messenger, IMO	Phone	Portable, affordable, mobile, convenience, economical access
	Take and post photos	Facebook, WhatsApp, Messenger, Instagram	Phone	Portable, affordable, mobile, convenience, economical access
	Meet old friends, make new friends	Facebook, Twitter, WhatsApp	Phone	Portable, affordable, mobile, convenience, economical access
A **C** **A** **D** **E** **M** **I** **C**	For updates and general knowledge	Facebook, Twitter, WhatsApp, YouTube, Messenger	Phone	Portable, affordable, mobile, convenience, economical access
			Phone, laptop	Ease of access, detailed
	Reading, researching, obtaining information, collaborating, personal learning	Facebook, Twitter, WhatsApp, YouTube, Messenger	Phone, laptop	Ease of access, detailed
	Watch tutorials, skill acquisition	YouTube	Phone, laptop	Ease of access, detailed
	Studies, posting and answering questions	Facebook, Twitter, Skype, WhatsApp, YouTube, IMO	Phone, laptop	Ease of access, detailed

Table 10 presents participants' accounts of their involvement with social media, the devices they use in accessing it and the benefit of the technologies. Figure 19 illustrates social media activity by percentage of students. Data suggests that students typically use social media for entertainment, socialising and academic purposes, and that they do so mostly on their phones. The two major categories that emerge from Table 10 as activities Nigerian students do on social

media as reported by participants, are social and academic activities. Each of the major themes have sub-categories. Socialising is an umbrella term used by participants to describe the main activity they say students use social media for. Socialising cuts across other activities such as chatting, posting photos, communicating, interacting, meeting people, making new friends and staying in touch with friends, family and acquaintances. Participants all report that with their phone they have easy access to any information they want, anytime, anywhere because the phone is portable, affordable, mobile, convenient and economical. So, when participants say they use social media for social purposes, it is either to engage in all or some of the above or to entertain themselves with the features on social media. A subordinate category of the social category is entertainment which serves as an umbrella term for social activities such as listening to music, playing video games, watching games and sports.

Sub-categories that emerge from the academic category are studies, exploration, collaborative and personal learning, research, investigation, reading, communication, skill acquisition, updates and general knowledge. In addition to all of these, participants report that they post and answer academic and other topical questions that invite answers with various views which expand their ideas and their knowledge base. Participants provided lengthy and detailed accounts describing the merits rather than demerits of social media in relation to academic function. Participants' accounts suggest that social media is an academic tool to them and is therefore useful in enhancing their academic performance. For instance, Michael says that on Twitter he uses hashtags that direct him to educational handles and follows educational sites such NASA. Princess reports that "we have online lessons which have been made possible through social media platforms like Skype". This suggests that social media is not only about entertainment but also about education and information for students. All participants emphatically say they use social media more for learning and socialising than for other activities. Analysis of feedback from participants about the activities they engaged with on social media is illustrated below in graphic form.
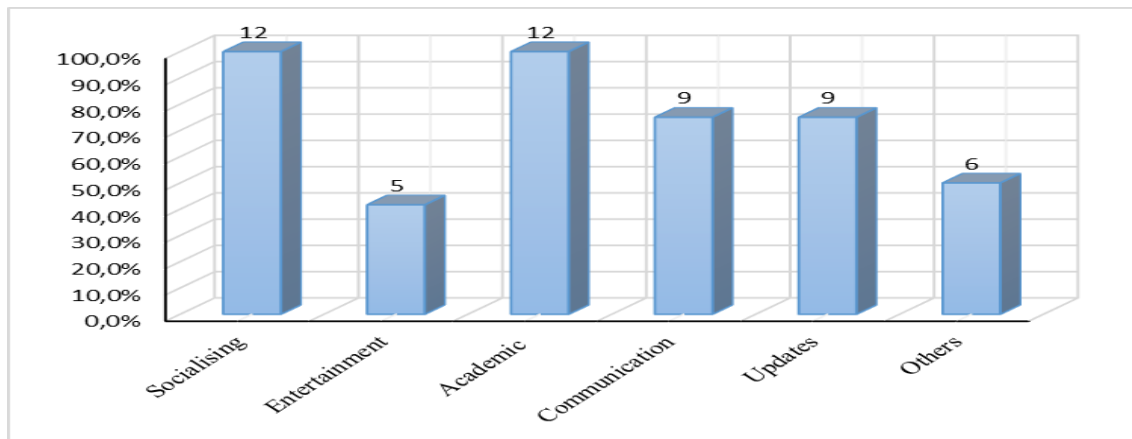
Figure 18: Social media activity by percentage of participants

6.2.3 Research question 3: what relationship exist between social media activities and academic activities?

Table 11: Comparative categorisation of social media activities and academic activities

Category	Learning & Knowledge Levels	Approaches	Difference
Social media activities	Cognitive	Critical practical	Encourages independence, rooted in emancipation, empowerment, authenticity, rationality and freedom, and it is current. Learning from others. Providing inspiration and insight
	Affective	Practical-critical	
	Psychomotor	Practical-critical	
	Social	Social-critical-practical	
	Cultural	Cultural-critical	
Academic activities	Cognitive	Technical	Set morals. Promotes discipline, encourages dependence, rule following, driven by culture and tradition, devoid of students' interest. Limits creativity and exploration. Lack inclusivity.
	Affective	Technical	
	Psychomotor	Technical-practical	
	Social	Technical	
	Cultural	Technical-practical	

In Table 11, coding arises from participants' accounts relating social media activities to academic activities, in line with Elger (2007) and Turner (1987) (see section 4:3) and drawing on Habermas' (1978) three classical theories of knowledge and human interests (areas that constitute academic activities from which academic performance is derived). The main categories describing the relationship between social media activities and academic activities are learning and knowledge levels, similarities, and differences. The categories referred to most frequently by participants were creativity, morality, inclusivity and discipline. Students used language that reflected independence, empowerment and emancipation, authenticity, freedom, and rational and critical thinking to compare social media and academic activities. They

described social media learning as current and emergent, inspiring, and providing insight by providing constant updates, therefore evoking a passion for learning both individually and from others.

On academic activities, some participants found limitations in traditional academic activities which they report as promoting dependence, rule following, being driven by culture and tradition, is devoid of students' interests, limits creativity and exploration, lacks inclusivity – all of which creates room for incompetency and leads to examination malpractice. The category referred to most frequently by participants was social media activities. Participants' language reflected descriptions, interpretations, assumptions and accolades regarding the heuristic approach of social media and its limitless ability to meet their academic needs at anytime, anywhere, with or without assistance. Their conversation about social media emphasised its capability to enable them to see, think critically, explore, locate knowledge independently, reach out to other students, improve their creativity and self-reliance, and thus boost their self-esteem. Although both categories reveal an active presence of cognitive activity, social media tends to be stronger on socio-cultural activities than affective and psychomotor skills because it is driven by virtual reality with a minimal level of physical contact and weak on tradition. Comparatively the participants used more clauses to describe the academic benefits they derived from social media than they did for traditional classroom learning. This suggests that social media is becoming more meaningful and useful to students than the traditional classroom in motivating them to study more and play less, and so is capable of enhancing their academic performance.

Table 12: Preferred learning context

If you have to choose between social media and traditional classroom learning which would you prefer?						
Categories	Social media learning	Traditional classroom learning	Social media learning	Traditional classroom learning	Social media learning	Traditional classroom learning
Participants	6 prefer social media learning	6 prefer classroom learning	Reasons for preference	Reasons for preference	Reasons for rejection	Reasons for rejection
Functional features			Comprehensive. Broad, inclusive, current, affordable, convenient. Open. complements school teaching	They procrastinate. Lack discipline, self-efficacy. Prefer face-to-face interaction with teachers		Specific. Narrow, limited learning area, excludes special needs

The major categories from which sub-categories emerged were social media-to-classroom contexts. A comparative report by participants about their preferred learning context reveals a sharp divide among participants as six report that they prefer social media and six prefer classroom learning. Those in favour of social media learning said it was because it provides additional support for their academic function towards high academic performance. Table 12 indicates seven themes associated with the merits of social media learning and five themes associated with the demerits of classroom learning. However, they all agree that they combine social media learning with traditional classroom learning. Michael reported that a combination of social media, books and face-to-face with teachers contributed to his excellent performance. The other six participants allude to the fact that both contexts facilitate reasoning, thinking, and creative writing skill, but they preferred classroom learning because social media learning challenged their personal values. For convenience, the divided opinion outlined in Table 12 is further highlighted graphically in Figure20.
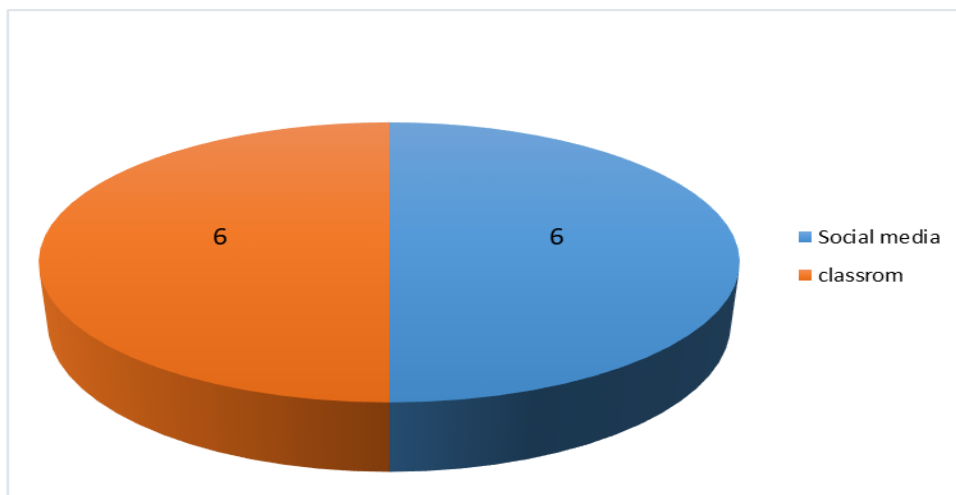
Figure 19: Preferred learning style by percentage of participants

Figure 20 shows an equal split with six participants saying social media learning is preferable and six saying traditional classroom learning is preferable. Pearl said "I procrastinate a lot" and that she lacks the capacity to discipline herself, therefore she prefers face-to-face interaction with teachers. This suggests that whereas some prefer to use social media mostly for their academic function, some students rely on teachers for their academic excellence, although they do also use social media. Both contexts involve practical and critical approaches to academic activity rather than the tradition of the classroom setting only which is basically cultural and technical in practice with minimal outreach. Surprisingly, none of the participants who said

they prefer the traditional classroom learning provided any reason for rejecting social media learning. In summary, my interpretation would be that in general students prefer to employ a combination of social media learning and academic learning.

6.2.4 Research question 4: How does use of social media influence the academic performance of Nigerian high school students?

Participants responded to this question in detail and with elaborate explanations. This indicates that they looked forward to an opportunity to really express their love and passion for social media.

Table 13: Major themes on the impact of social media and academic learning.

Impact	No. of Participants	No. of Responses
Less understanding	12	3
More understanding	12	8
No effect	12	1

Table 13 represents level of understanding of subject content, of which three participants report that their understanding of subject content was minimal when they employed social media compared to when they employed traditional teaching, while eight of the participants reported that social media contributed to their understanding of subject content, which in turn resulted in enhancement and increased effectiveness in their academic performance. One of the participants, namely Michael, said there was no significant impact. Participants however, did not say social media was more or less useful to them in a particular subject. Michael, who said that he complemented his adoption of social media with conventional learning methods, also reported that "social media use in conjunction with more conventional learning methods just increases the efficiency with which I learn and also retain information for more enhanced academic performance". This implies that there is a relationship between social media activities and academic activities.

Table 14: Impact of social media on academic performance

Subject	No. of Participants	No. of Responses
Positive change	12	10
Negative change	12	1
No effect	12	1

Michael said "not really, I don't feel my grades themselves have changed as much as the time it takes for me to acquire the information necessary to have good grades". As can be seen from Table 14, 10 out of the 12 participants said that they noticed a positive change in their academic performance since they started incorporating social media into their academic learning while one said their academic performance declined due to their engagement with social media, and another one said that there was no significant difference. Those who said their grades suffered due to their social media usage claim that they were either distracted or addicted to the media.

6.3 Level 2: micro-analysis

The main aim of this micro-data-analysis is to look beyond the surface of the conversation to a deeper level to grasp an understanding of how participants choose and articulate words to make meaning. In this level, I strengthen my analysis by employing a micro-analytical approach which González-Lloret (2011) says conversation analysts should adopt when analysing conversations. In this study this approach involved critical analysis of the language used by participants, the contexts of both social media and school and the factors surrounding the contexts and their usage, and the bearing of all of these variables on students' academic performance. In doing so, I conduct a systematic comparison across multiple modes of conversation as suggested by Herring (2010) with the aim of discovering each participant's orientation in the conversation so I can make meaning of the overall structure of data. I analyse and refine the variables (technical or situational) (Herring, 2010) that shape the conversation in ways that reveal details in the data.

Conversation analysis is about utterances and how they are used, in which location or context in a conversation, and the functional role of the word or language in use, and how it is used in communicating ideational meanings. I therefore start my inductive analysis with the language used by participants.

6.3.1 Participants' social media language

Efficient language analysis requires the understanding of how to find common ground in the conversation, or being able to infer what is meant, a skill that Herring (2010) refers to as 'grounding'. This means analysing the language (Herring, 2010) used by participants and using it to make sense (Atkinson & Heritage, 1984). It also means getting into students' world through the participants to see how they construct their online language and use it to make meaning. Thus, anything said is understood in terms of the meaning it represents and interpretations and analyses are made accordingly. This language analysis is aimed at

unearthing how students use language on social media that has become a part of them, and how they coin it to make sense in academic and social settings, and its impact on their academic performance. My analysis of participants' language is not directed at uncovering hidden meanings, but to strategically project and instantiate with concrete evidence what I actually observe in their responses and the meanings produced in and through the interaction, in order to describe the terminology used to achieve them. Thus, this language analysis examines the words used by participants and how they are structured to create meaning in the data.

Computer-mediated conversation with participants provided abundant data on how students use language to make meaning in conversation (Herring, 2010). There is observable evidence in the posted data that there is little or less recourse to formality in their construction of sentences as it common now for students to coin their own words and use these as their generational language. For instance, when Pearl 'retain' to express a noticeable deepening of their knowledge and understanding of a subject's content as a result of their complementing social media usage with their normal classroom activity, I note based on perception, that what they meant to say was that they 'acquire' and not that they 'retain'. Other cases include the use of abbreviations such as 'ar', 'bt', 'cos', 'u', 'r', 'nd', 'dis', 'nd', 'cause' and 'cus', as is evident in data. For example, Bash used "as dis social platforms ar" to illustrate his point. Bash was not the only one with this practice as nearly all participants used lexical components and abbreviations in place of words. Another instance is revealed in Neka's and Mez's postings when they wrote 'am' in place of I am. Also, Princess used 'cause' often in place of because, and in some cases, she just used 'cos' while Pearl said 'cus' instead of because. Neka, Fawkes, and Bash prefer to say it's rather than it is. Neka would rather use 'info' in a sentence instead of information just as Bash would say 'wont' in place of won't or will not. Such practices constitute a major feature of how students use lexical components to interact on the social media. Yeboah and Ewur (2014) say that due to minimal space on social media platforms, 76% of the students who use WhatsApp and Twitter create their own social media language so as to squeeze as many words as possible into a small space. Is squeezing words into a defined space intended to save time with fewer words, or is it passing private messages in a coded form, or is it done out of ignorance? Yeboah and Ewur (2014) argue that even though the phone is installed with spelling and correction tools, students still bypass such tools to form their words like 'u', 'gdnite' for good night, 'good pm' for good afternoon, and 'good am' for good morning (see section 2.5.8). These abbreviations impair their English language usage and spelling skills, a practice that has become a habit that they bring into the academic setting which in turn negatively affects the way they write academic examinations. The literature review

stressed that students who habitually code or abbreviate written words may gradually lose writing and spelling skills, and that such regular practices cause failure in subjects that require accurate spelling and adequate articulation of words, thus being detrimental to their overall academic performance.

6.3.2 Academic performance – enhancing and detrimental factors

Factors in this context are items that keep re-occurring in the data which may take more than one value or factor (Ahmad, 2014). There are notable factors identified in the data that serve as significant value regarding what social media provides in the academic life of students. Factors identified in the data include addiction, distraction, determination, focus, procrastination, generational gap, school tradition and culture, updates, restricted curriculum, individuality and entrepreneurship. There are layers in the variables that can be grouped under three categories, some of which I ascribe to students, some to the school programme and the some to the social media context. The aspects of focus, distraction, addiction, determination, procrastination, generational gap, updates, entrepreneurship and individuality can be categorised under students' values. The aspects of restricted curriculum, culture and tradition can be categorised under school programme, and the aspects of culture, addiction, updates and entrepreneurship can be categorised under social media. These factors are at the core of my analysis in level 2.

A second set of variables that participants talked about were the various platforms they employed and the devices through which they accessed them. Participants all said social media was a real tool for research because it provides access to information in real time. Michael explained that YouTube is like being in the class, which is useful to students who cannot afford to be in school due to financial need. YouTube features allowed him to play the same video repeatedly until the knowledge had been grasped. Neka, Nelson and Princess described social media as broad in content, providing more knowledge than textbooks, and that it is affordable and accessible to those who have financial constraints. They say it is convenient and provides easy access to academic information anywhere, anytime. My perception is different from these descriptions by the students of their use of social media because for the most part when I see young people, I see them with earphones listening to what I assume is music, both in public and in private. If I assume the private engagement is for academic purposes, how should I interpret such engagement occurring in the public arena? All participants said they engage with social media on their phone. With intermittent calls and messages flowing into their phones, is it possible for them to ignore the distractions and stay focused on the academic activity they

have elected to carry out on their phone? Aside from these main factors, there are similar factors that presents themselves as variables in the data. These are entertainment, chatting, gaming, socialising, storing photos, coordination of events and psychological improvement, which participants listed as valuable uses of social media. Social media, according to Michael, is useful in keeping a record of events, dates and files.

On which device do Nigerian secondary school students store the pictures and files Michael is referring to? Figure 21 is a graphic from a Microsoft excel spreadsheet indicating percentile analysis of students and their preferred device.
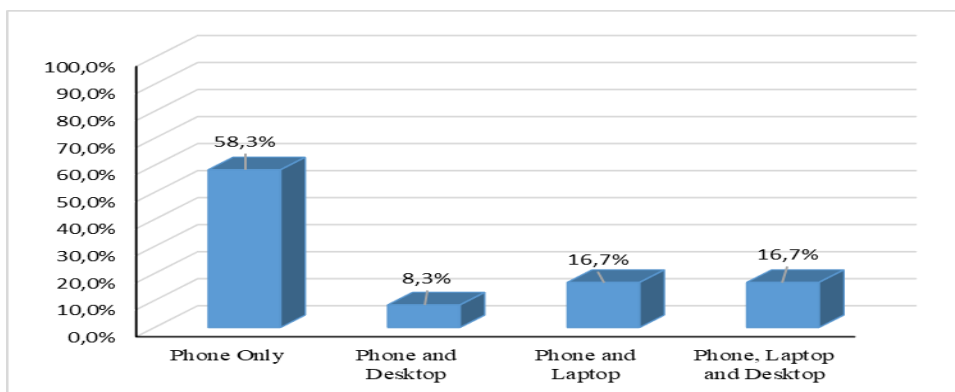
Figure 20: Social media devices by number of participants

Are Nigerian secondary school students permitted to use their phones in school? Participants all say no to this significant question, signalling both disobedience to school rules and a conflict of interest. If so, when do they use social media? For instance, Dickson said "Whenever I receive an alert that someone is trying to reach me or pass on information or update, I engage with the phone in class".

Some participants reported that they multitask, with some saying that they were addicted to social media. Joel said:

> I use social media always, even in class. I post messages to my friends and receive messages. I have friends on Snapchat and we chat a lot. Each time I receive an alert from them I am tempted to respond promptly. It keeps me occupied, makes me feel as if I have company all the time. I get carried away and forget that I have homework.

This suggests a serious lack of discipline. In addition, Michael said:

> I use it anywhere, sometimes they seize it but they return or if they don't, I get another one, I can't function without my phone because I have to chat with my friends and browse the internet.

These cases are indications of addiction and distraction to be detrimental to their academic accomplishments. Joel and Dickson's account about how they multitask with social media in academic settings suggests that they lack interpersonal values and motivation for academic function, all of which are detrimental to academic performance.

The issue of distraction and its impact on students' academic performance surfaced frequently during the literature review, and was assessed in this study. Table 15 shows how participants responded to the issue of distraction.

Table 15: Social media – academic performance tool or inhibitor?

Subject	No. of Participants	No. of Responses
Social media distracts me from studying	12	3
Social media attracts me to study	12	6
It does both	12	2

Table 15 shows that just as any normal environment is a medium laden with distractions, so is the social media environment. The literature review emphasised that using social media concurrently with studying can have a deleterious effect on academic performance. In other words, trying to implement two cognitively demanding tasks simultaneously can have a negative impact on both the effectiveness and the efficiency of carrying out the tasks (see section 2.7.1). Some of the participants were honest enough to accept that their use of social media can be distracting but stated that with determination and focus they were able to use the media to their advantage. Even so, research indicates that the mind snarls and the brain freezes when it is distracted and forced to perform dual tasks simultaneously. Conducting two or more competing tasks (such as critical thinking and writing while chatting) snarls the brain processes, a situation Welford (1967) and Junco (2014b) refer to as 'cognitive bottleneck' (see section 4.4.1.4). This analysis is further presented in a pie chart in Figure 22.
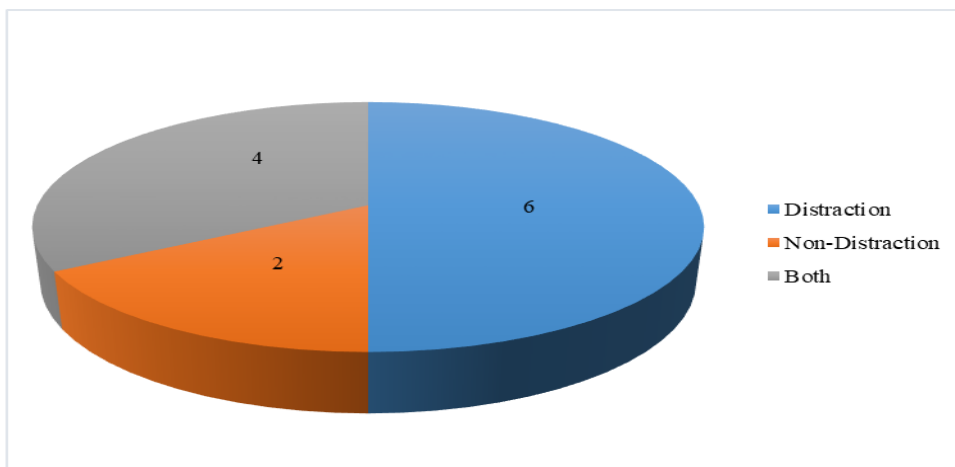

Figure 21: Participants perception regarding distraction of media

As indicated in Figure 22, six of the participants reported that they were not distracted by social media, that in fact it attracted them to study more. Michael's conversation with me on the issues of contextual distraction was very compelling. He argued that:

> Distraction is a flaw in human character rather than a flaw in social. It depends on how it is used. Browsing YouTube to watch video game unrelated to content in class is no different from going to the library and studying the wrong books. At the end of the day, both scenarios see you learning something irrelevant and therefore detrimental. I see social media as a means to the end. Based on what means you apply; your end will be either negative or positive.

Michael's argument can be taken further to mean that students' interpersonal values play a key role in determining the relationship between social media and their academic performance.

With a hint of confidence, Princess said "it all depends on the kind of person" and Pearl said "it's all about determination and focus". What all of these add up to is that social media on its own is not the root of all distraction, but students' interpersonal values such as self-regulation, self-efficacy, self-discipline, and motivation are the major contributing factors in academic life of students who engage with social media. This is taken further critically by Princess who argued that:

> In as much as it has its positive side it also has its negative side. Social media is addictive thereby causing distractions and a whole lot of vices go on in social media, but it can be out of place to say because of vices there is no relationship between social media activities and academic activities

However, individual students' needs and purposes differ depending on interest and how they are wired. Leez and Anabel reported that social media did not distract them from studying as they had a different opinion about social media and its distractive tendencies. To Leez, everyday life in school is not creative enough, making school rather than social media a distraction. She said: "I want to be an entertainer, sing and act movies and school is distracting me because they have no such place for students like me". Anabel said:

> From all indication, sometime I think secondary school programme not social media distract me. School subjects are like one-size-fits-all. Subjects programmed and arranged in ways that simply split students into three pathways of learning – art, science and vocation. Even within this dichotomy, there is a huge difference as some art subjects that are more practical than others. I am not wired to study and perform excellently in science and so cannot compete favourably with those who are. I excel in my area of interest and will continue in that area no matter what.

Anabel spoke from a rational point of view which implies that there are students who simply cannot find their needs and desires in the school curriculum, so they resort to social media.

6.3.3 Perspectives of traditional and social media context and students' learning

Fitzpatrick and Donnelly (2010) posit that conversation does not take place without context. This constructivist viewpoint is relevant for online conversations as well. The fundamental reason for context analysis is that students' social behavioural patterns are situational, and context dependent, informing the need to study and analyse the contexts that shape their learning behaviour. Context here represents social media platforms and technological devices

used by students to access them on the one hand, and the classroom context on the other hand. This contexts analysis considers a comparative analysis of classroom and social media contexts and presents an analysis of other variables that occur regularly in data that serve as factors that hinder or facilitate a student's academic performance.

Social media is a socio-interactive arena and participants alluded to the fact that it enables them to meet and socialise with people they know and those they do not, read articles posted by people they know and those they do not, share pictures, ideas, updates and in the process, gain insight and learn from a range of ideas. Participants also report that social media helps them to improve their typing skills, encourages them to write and to read more, meet new friends, connect with lost friends, chat and sustain relationships. However, since academic activity is laden with details that require context to make it valuable, does it the follow that students are gradually replacing the traditional contexts and hard copy text books with social media? On the issue of books, participants responded to this question with contradictory opinions. For instance, Neka said "sometimes I get info that is not found in my textbook from the social media platform. And that helps me a lot". Contrary to this, Michael said "a lot of knowledge can still be gained by books". On the issue of context, Testimony, Michael, Princess, Neka and Pearl all said that social media, especially YouTube, enables them to better understand the concepts they struggle with and helps them to solve academic problems. Michael described YouTube as "an invaluable educational research tool that is like being in a classroom but even better because you can pause and repeat as many times till you get all the facts".

On the classroom context, Testimony said:

I love school because its rules and regulations guide us to be focused and better and teachers are there to guide us towards achieving good education but good education is beyond what only school can offer.

Princess reported that:

Social media usage helps with desk top computer in school for electronic exams. With literature, I watch drama, poetry and prose on YouTube which helps me a lot in the subject. In English my phone is useful in that it automatically correcting my grammar. I also watch some tutorials that teaches English language on YouTube.

My interpretation of their accounts is that social media is as much a tradition and a culture to students as classroom context is to schools, and that using both in a complementary fashion both provides better results. Thus, whichever one student choose to rely on more does not alter their academic performance.

I asked participants if they had to choose between social media and traditional classroom learning which they would prefer. A cheerful and approachable Princess provided a detail account about the usefulness of social media:

The main aim of every academic activity is to educate and I cannot over flog how social media has influenced my academics positively. Every academic activity whether carried out within the four walls of the classroom or outside the classroom educates the people involved. Social media activities also educate the users in the sense that a whole lot of useful information are posted on social media on a daily basis. We have daily access to both local and foreign information on social media if properly used. Secondly, both school and social media create room for socialising during in both scenario, students get to meet other students, socialise. Another relationship between both activities is seen in the case of learning. In both cases, various forms of learning take place including vocational skills. We have online lessons which has been made possible through social media platforms like Skype. This is more common abroad where you can sit in the comfort of your home and receive lessons that are also logged onto Skype. A full lesson can go on with every student online receiving teaching at the same time just like a physical classroom where academic activities take place. Academic activities prepare your mind and whole being for the future to be a better person. It prepares you morally also as you have adults teaching you and dishing out words of wisdom the difference is that schools provides moral rules that disciplines us so we can be good citizens which social media does not media you lose your focus. Both contexts are related depending on how you decide to use it. They both seek to direct students towards their passion and help in creating interest in their peculiarity". on its own unless to find such features on your own which requires discipline and moral will on my part just the way I obtain information in school. Academic activities can either make or mar depending on how it is presented or received. You choose a wrong course or allowed to be coarse by school tradition and culture against your purpose, you may spend more time struggling to cross to the next dimension. Similarly, if you follow the wrong crowd or friends on social.

The biggest challenge is discipline. Princess summarised this by comparing school learning and social media learning contexts in ways that suggest that optimal academic performance requires self-discipline, self-regulation, self-efficacy, motivation, mastery, avoidance and proper time management. While I tried to keep track of all she was saying as she spoke, exuding an 'I know what I am talking about' demeanour, Princess's narrative indicates that social media is an alternative learning context to the traditional school context. Her description presents social media as a 'Janus-faced' (a double-edged sword) as her explanation about the usefulness of social media pointed to topical issues such as "current" "vast" "personal values" while at the same time she warned that "if you follow the wrong crowd or friends on social media you lose your focus". In addition, she said that:

Social media activities also educate the users in the sense that a whole lot of useful information are posted on social media on a daily basis. We have daily access both local and foreign information on social media if properly used.

In other words, social media is an unlimited academic resource providing students with the opportunity to access information that is current and vast if they understand and know how to use it, but not without the application of personal values. She compared what she does on social media with other students in relation to their classroom engagement when she said:

A full lesson can go on with every student online receiving teaching at the same time just like a physical classroom where academic activities take place.

Morality, wisdom and discipline are essential values in every social setting, as explained by Princess as she reflected on the social media context:

It prepares you morally also as you have adults teaching you and dishing out words of wisdom the difference is that schools provides moral rules that disciplines us so we can be good citizens which social media does not on its own

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unless to find such features on your own which requires discipline and moral will on my part just the way I obtain information in school.

Regarding the notion that social media corrupts students, Princess said that the classroom context also corrupts, arguing that:

> Academic activities can either make or mar depending on how it is presented or received. You choose a wrong course or allow to be control by school tradition and culture of school against your purpose, you may spend more time struggling to cross to the next dimension. Similarly, if you follow the wrong crowd or friends on social media you lose your focus.

Both contexts are related depending on how you decide to use them. They both seek to direct students towards their passion and help in creating interest in their peculiarity. Princess was cheerful, willing and ready for the conversation so I enquired from her whether the use of social media influences the academic performance of Nigerian high school students. She responded:

> It cannot be over flogged that this is 21st century are jet age. Social media, example, Facebook was created by students for students. Almost everything is done online, almost every Nigerian student is on WhatsApp. Students creates WhatsApp groups where information about assignments, lessons and anything that has to do with academics are stated, allowing students to ask questions on the group chat and get answers to their questions. This to great extent influences my academic performance. There are students who are not bold enough to ask questions in class but can ask their mates on the group chat and get answers. Educative information such as current affairs, history etc are also posted on every social media on a daily basis, Blackberry messenger and Twitter are other social media platform that has various channels that provide useful information that could affect every student's academics positively. A typical example is the green news channels where you can read news and provide study tips that could help every serious minded student. It is a general knowledge that study groups assist students and help them understand better what they weren't able to understand in class, some students understand better from their colleagues. Students assign topics to themselves and study privately and discuss when we meet. Now, due to distance and fatigue after a hectic day in school, everybody might not be available for the group study and discussion but can still be done online using SKYPE and IMO. This has worked for so many students including me. The use of social media influences my academics a great deal.

In a nutshell, what Princess is saying here is that she uses various social media platforms to solve academic problems, suggesting that social media positively influences the academic performance of Nigerian high school students. Amidst all the heuristic features conveying enormous academic benefit as described by her is the responsibility of prudence because students are distracted at every twist and turn. Princess was extraordinary and fun to be with comparatively. Her conversation can simply be summarised to mean that social media was created by students for students and so they use any platform available to them for any purpose that is of interest to them, including academic tasks.

Although Joel said that the information on social media can be overwhelming, leading to less understanding, Dickson argued that this is no different from the school curriculum which has too many (23) subjects for grades 7 to 9 students, and that the classroom's restrictive and conservative approach projects grades more than knowledge. When comparing both contexts, Michael defended the classroom context by saying:

> School structures the subjects and give me a direction which I take into my private study time, complementing what I learned in school with social media ideas on the internet. Like I said earlier, the social media is like a library where I go to obtain more information and not my classroom.

He argued further that:

> Sometimes even though you can pause and play to learn at your own pace on YouTube as a learning tool, there may still be something that elude your understanding on Facebook, I simply scroll down to the comments section of the video and post question there or even read other comments from other users who may even ask questions I didn't know I should ask.

Both Michael and Princess appear to be saying the same thing but using different words. Occasionally, Michael's words tend to portray emancipatory factors while at the same time suggest reliance on teachers for improved performance. Explanations so far confirm Buehl and Alexandra's (2001) argument that a student's knowledge base consists of knowledge that is both formally and informally acquired. Academic knowledge acquired through formal schooled experiences can either complement or contradict experiential or informal knowledge. Thus, students possess general belief about knowledge but still hold distinct belief about more finely specified forms of knowledge.

Whereas Michael, Pearl and Joel look forward to teachers and schools for academic excellence, some participant say they perform well with or without the help of teachers. My one-on-one conversation with Dickson, Leez, Anabel and Mez revealed a set of participants that distinguished themselves by proving to be stubbornly smart and laden with dreams that are outside of the school programme. They expect that the school programme will promote creativity, encourage them to exhibit what they know, reveal their talent, enable them to answer questions that test their general knowledge and understanding rather than memorisation and retention of facts, numbers and symbols. I could tell from their expression and presentation that they were proud of their school and although they knew that the school programme would not prepare them for the life they envisaged, they were willing to follow the routines of school with the hope that it would provide them with leverage. However, Dickson, Leez, Anabel and Mez had a contrary stance with firm opinions which they took further to the level of entrepreneurship, emancipation and talent or interest, as recounted by Dickson:

> Schools have killed creativity and they are very rigid in their ways and they expect every student to adhere to their structured rules. That impression is been corrected since I started using social media. I now view social media as classroom, knowledge production and exchange centre.

I asked Leez if she thought her use of social media made her more knowledgeable than her teachers. She said:

> There is a generational gap between me and my teachers. Teachers who use social media like I do are ahead but, I think that teachers who use social media sparingly are far behind time and will not be able to guide me effectively in my journey towards my dream.

Although there is a music and drama club in school, Leez said that "everything that is done there [school] is skewed towards grade not talent". Exuding independence, she continued:

> In everything I do, I remind myself that I have a career to pursue so I feel like I am wasting my time to attend lessons that do not feed my ambition. I will rather watch talent hunt on YouTube to equip and encourage myself.

Although Leez also believed that both contexts have the capability and capacity to educate students, her point can be interpreted to mean that the formal setting structures academic programmes in ways that exclude special students with specific talents or interests, ability and disability. She said:

> School benefits only those whose school programmes are designed to benefit, as for me, apart from socialising with friends, there's little to gain. Schools have killed creativity and they are very rigid in their ways and they expect every student to adhere to their structured rules. That impression is been corrected since I started using social media. I now view social media as classroom, knowledge production and exchange centre. Nigerian policy on education says education is every child's right, yet access to quality, education is exclusively for the rich. Social media becomes the only opportunity for those of us who cannot afford quality education.

My understanding suggests to me that Dickson and Leez benefited minimally from school activities. Leez complained:

> Exam is another reason I hate school. You see, schools use exam to manipulate students to submission. Do what I say and you will pass my text or exam otherwise you fail and repeat the class. There is too much emphasis on examination and score than student's individual interest and ability. We are not accessed and rated according to what we know and capable of doing.

I perceive the complaint by Leez to mean that either academic activities should not be assessed or that if such assessment be conducted, the process should take cognisance of what students know and can do based on their passion or interest. This means that academic activities should be driven by the individuality principle. If my hunch is correct, what then is the purpose of academic activity and performance? Princess had argued that "the main aim of every academic activity is to educate". On performance, she emphasised that "I cannot over flog how social media has influenced my academics positively". In her comparative analysis, she posited that "every academic activity whether carried out within the four walls of the classroom or outside the classroom educates the people involved". Her explanation leaves no room for doubt about the relationship between social media and academic performance.

Furthermore, I enquired from Anabel to know what she would prefer if she had to choose between school and social media. She said:

> What do I need school for when I can get both general and specific knowledge from the social media? School subjects structured and arranged in ways that simply split students into three pathways of learning – art, science and vocation. Even within this dichotomy, there is a huge difference as some arts subjects that are more practical than others. I am not wired to study and perform excellently in science and so cannot compete favourably with those.

I commented to Anabel that some students devote a considerable amount of their time to social media activities, following people without learning anything reasonable, then asked her if she did the same. She replied that "there is no time I go on social media that I do not learn

something". I ask if she was pressured by the amount of knowledge pushed at her by social media each time she clicks for any information, because sometimes too much knowledge can lead to less understanding, and she said "no". Her narrative bore a hint of independence and satisfaction while at the same time exuded confidence with a sense of emancipation. I further enquired from her if she thought that such learning counted as knowledge, and should be graded in school. She replied:

> That's the point. Teachers think that because we spend time on social media that we are not learning anything reasonable and so we are likely to perform poorly in examinations. What they don't know is that knowledge is everywhere, the issue is that what school want is to learn is different from our need. I want to be a communicator and it has nothing to do with mathematics that is a requisite subject and so I must pass to in order to be what I want to be in life. I hate maths, and I cannot tie my life around a school subject that is designed to stop me from what I want to be. We are all leaders in our own little way so, how do I lead a life if I don't have a chance to lead myself? I have an aim and I have purpose, I go for anything that drives me towards my purpose, my dream my aim in life and ignore whatever tends to distract me no matter what. So, school or anybody can't use maths to kill my dream.

Some participants were remarkably resilient. They were clear about what they expected from school to lead a good life. Sounding as though she did not need school for any reason, Anabel said:

> I don't hate school it's just that I am in school to learn and I want to learn what will benefit me in future, I want to learn what I want to learn, know what I want to know so I can be what I want to be in life. I want to contribute in my own little way and make an impact in my world. I feel that I owe myself a duty like and that drives me so I want to prepare myself early. We live in a fast pace world, I don't want to be left behind.

I asked Anabel if social media was compared to an organised, well planned academic programme, which one would she prefer, and she said that her choice would depend on the content and presentation features of the well-prepared program. She went on to say that:

> In grades 7 to grade 9, I had to grapple with 18 compulsory subjects, how possible is it for me to understand 18 subjects under compulsion? It's not possible for me". Implying that the current school curriculum content assigns numerous subjects in junior class with limited knowledge area that can only benefit students whose interest and talent are in such knowledge. Based on her high expectation of school I asked if she thinks school have the capacity to accommodate every student's interest and she says "that' why social media is there to complement in areas that school cannot cover.

I asked if she would prefer fewer subjects with narrower knowledge content and she answered by saying that:

> No knowledge is narrow, each knowledge content is either broad or deep in their own detail. What frustrates me rather is restrictions and limitations. I wish school can provide the opportunity and an enabled environment for students like me to cultivate and focus on the pathway that leads us to the area of our interest; encourage and assist us in pursuing our dream so that on graduation, we will know exactly where we are going and what we are going to do there.

From all indications, her arguments seemed to be premised on the life she would lead after school, as she said that:

> The virtual world is different from the real world. I do not want to be in a situation whereby after graduation from the university, I have to wait for government for employment whenever they have a chance for me or burden my parents for my livelihood. Our generation is not as lucky as previous generations in terms of job opportunity. Population has quadrupled, the number of universities has increase exponentially, turning out large number of graduates every year.

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> The labour market is over saturated with limited employment opportunities. My dream will not only make me self-reliant but an employer which will be my contribution to the society.

I take the 'virtual world' as referring to the contexts of social media and school and the 'real world' as referring to the society she would later live in, depend on and contend with. Anabel may have been either concerned with the unknown (the socio-economic challenges facing her based on her perception of the current state of employment stagnation in society, and thus be planning her education towards how to avoid it), or may have been simply ambitious. She provided her reason for the passion for social media as follows:

> I want to be a television presenter or a talk show host and Oprah is my role model, I want to be like her. Anytime I watch her show it encourages me to study more and I start reading articles related to Journalism online.

I asked if her parents were in support of her ambition. She answered "no", complaining that:

> In Nigeria, most parent can be obstacle sometimes. Maybe because they are of a different generation. My parents want me to study so-called "prestigious course" like law, medicine or engineering. I am squeamish, I can't withstand the sight of blood talk more of tearing flesh. I know what I want and what I can do best. It's my life, no parent loves an unsuccessful child, if I do well, I will make them proud if I don't, I am an embarrassment and a disappointment. It is better for me to disappoint them now than to disappoint them later, but I do so carefully, negotiating with them about my desire with utmost respect. So, it's not a matter of support but understanding.

The realities that Anabel exuded are enough to change the way parents and schools perceive students' use of social media and how schools conduct academic learning and rate students. Although my overall understanding of this category of participants' conversations coupled with general comments from them regarding their love for social media makes me assume that the participants generally preferred social media to school, my analysis revealed a 50% preference for formal academic activities and 50% for social media learning. This balanced opinion on preferred learning styles is put forward along with strong claims from opponents of organised academic activities and school learning that question the school curriculum. This was articulated by Dickson who said:

> Schools are good and teachers are invaluable assets to education but there is a generational gap between us and teachers. We the youths want to explore and we want schools to change towards that direction.

Is it the manner in which the school curriculum is programmed or the generational gap between students and teachers that is the crux of the matter between this category of students and their academic issues? Leez stated that:

> I love teachers and school but I don't like when school dictates to me what I must study without caring whether I am interested in the subject or not. I feel that schools are too rigid for our generation and it is killing exploration and creativity. We are in a democracy and democracy mean freedom of choice, I want to be free to explore my world.

This means that rather than use social media to complement teachers' efforts it should be the other way around. According to her, social media is more flexible:

> I choose the time that is convenient for me to learn on my own or with friends, to learn what I want to learn without control.

However, does social media usage contribute to more efficient academic performance or are Dickson and Leez's narratives intended to discredit schools' well organised programmes and teachers' collective efforts? Are their parents' aware of all of these claims? If yes, are they in support of their children's ambitions or they are on the side of the school? Leez said her parents were not in support of her ambition. She said:

> They want me to be a lawyer to succeed my Mom. My Dad is a politician and my Mom is a lawyer and they want to relive their dreams through me, so anything outside of being a lawyer, is diversionary and so my regular use of social media a distraction to them. So, in pursuit of my dream, I find a convenient and safe place where I go for tutorials – YouTube.

Leez is not the only one whose teacher and classroom is social media, as Anabel also says she wants to be a television presenter and talk show host, so she follows Oprah on YouTube for tutorials. My conversations with Leez, Dickson and Anabel pointed to the fact that some students lack what Mayer and Moreno (2003) refer to as 'essential processing', a learning pattern that involves using a great deal of cognitive capacity in selecting, organising, and integrating words and images. This category of student is probably comfortable with Mayer and Moreno's (2003) 'incidental processing' which refers to a minimal cognitive process that requires making sense of the presented material, primed by the design of the learning task. For example, adding background music to a narrated animation may increase the amount of incidental processing to the extent that the students devote some extra cognitive capacity to processing the music.

Amidst all of the claims loaded with utopian ideas against organised formal educational context by antagonist participants, there were still some kind words put forward in favour of school and its organised programme by protagonist participants like Silver, who said that:

> Schools are there for a reason, it better to get basic training from school first then study online, but if you are financially low, you may not be able to meet the financial demands of formal schooling so you rely on social media.

Some participants depended solely on social media for direction, but some participants like Pearl did not. She said:

> Although I love to search the social media for academic information, I will prefer school learning any day. I procrastinate a lot and whenever I get online to search for something related to my studies, I find myself checking my email, or responding to a comment on Facebook, or replying a friend on WhatsApp or Snapchat and so on first, and then stay on, socialising till some other engagements takes me away, which makes it will extremely difficult for me to rely solely on social media for my academic learning.

Here she was saying that she looked to teachers and school for guidance and success.

Similarly, with an outlook that revealed loyalty, submission and reverence for teachers, Pearl testified that:

> I get more and good information about what I have been taught in class and in my further research or study. Also, when I read other people's comments on social media, I am challenged to read so I that I can also post good comments laden

> with ideas that will benefit others too. Also, I try to careful of what I post and before I post, I edit my comments so that I don't make a mockery of myself.

Noticing that she was inter-digitising as she was grappling to express herself, I ask if she was afraid of pure academic function and she said "no". She continued, using a tone that can be described as *sotto voce* because of how low she sounded, and explained:

> Social media actually guide me towards locating solution to my academic problems. When I go on social media, I get inspiration that can provide insight for the project from people and it helps a lot. I and my friends set a time when we will meet in our group account on social media to discuss our assignment and seek help on the topic from seniors and other people so that we present a good work. We do not write the same thing verbatim. We simply gain ideas and broad knowledge on the topic generally, then we present the answers based on our understanding of the subject in our own words individually.

Implicitly, social media was being used by Pearl to complement her academic activities for better performance. I enquired whether she would prefer a 'teacher-less classroom' or 'a class-less school' or 'a school-less community' and she responded:

> Without school I will not have focus, I cannot discipline myself to study. School disciplines me and prepares us for external examinations and the certifications we need to progress in life.

Pearl did not think there was any alternative to traditional school learning. She was not alone on this position, as Joel said something similar:

> I prefer teachers because they guide, lead and direct us and school is good because it is formal and organised and regulates us by coordinating lessons and provide the insight that we take to the social media.

However, he went on to say that:

> When teachers re-direct us to online sources, we get confused due to the various information you receive on the same topic there. So, to be able to manage all into an understandable form, I have to learn, unlearn to be able to understand what you already learned in school.

This suggests that social media provided too much information that overwhelmed him, making it difficult to understand some simple topics, causing him to learn a topic repeatedly as though he lacked the capacity to assimilate and retain it.

Although some participants perceived social media as a means to an end, others perceived the academic context as the real means to academic enhancement. Participants like Anabel identified role models and mentors that she followed on social media as she said:

> I also follow Oprah Winfrey. I want to be a television presenter or a talk show host and Oprah is my role model, I want to be like her. Anytime I watch her show it encourages me to study more and I start reading articles related to journalism online.

Contextual analysis saw a balanced argument providing insight with compelling views from both sides of the divide with strong opinions from those who said they would rather stick with social media. Their argument was basically in favour of entrepreneurship and the life they envisioned rather than that projected by the collegiate. Those who said they prefer organised learning still used social media to support their academic engagement, strengthen their academic performance, and upgrade their academic level. Their objectives were to acquire

intellectual curiosity, critical thinking skills and the ability to apply what they learned from school, social media or both contexts in real life.

6.3.4 Social media's impact on students' academic performance

This academic performance tracking and analysis methodology is aimed at revealing the performance of students who use social media. However, because academic performance is not an event but a process in an event surrounded by tradition, tracking and analysing it can alter the true meaning it holds (González-Lloret, 2011). This is because the structures and interpretation of academic performance, the resources in social media, and the approach employed by students in their encounters with the media are all processes that are interrelated. All of this is an event that is interpreted as the difference or variation in students' academic performance. A typical example can be found in Michael's account when he said:

> I can't really attribute any positive change in my grades to my use of social media because I strive to maintain good grades by going to the library or meeting one on one with teachers. Social media use in conjunction with more conventional learning methods just increases the efficiency with which I learn and also retain information.

He went on to say:

> Sometimes even though you can pause and play to learn at your own pace on YouTube as a learning tool, there may still be something that elude your understanding on Facebook, I simply scroll down to the comments section of the video and post question there or even read other comments from other users who may even ask questions I didn't know I should ask.

In summary, one can say that the approach employed by students in their encounters with social media, coupled with the nature and quality of the resources they obtained from social media, structured their academic performance. Data analysis of academic performance as reported by participants is presented graphically in Figure 23.
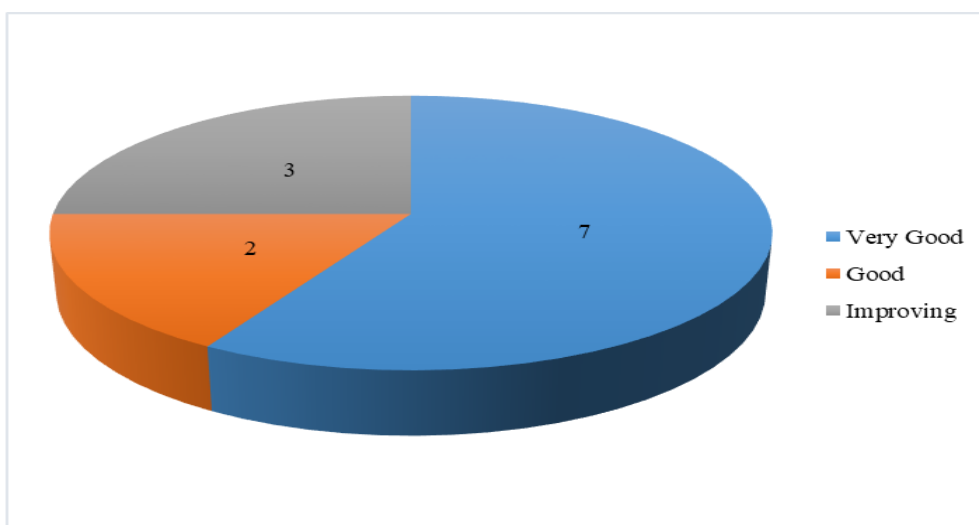

Figure 22: Academic performance by percentage of participants

For proper tracking and analysis of the conversation, this analysis is further categorised under two sub-headings: social media as a facilitating or detrimental tool.

6.3.4.1 Social media as a facilitating tool

The results that have emerged from my interpretation of the authentic and interactive data (González-Lloret, 2011), based on my understanding, reveals an improvement in participants' academic performance as a result of their ability to integrate social media sources into their academic activities. As Neka said "I get information that is not found in my textbooks from social media platforms. And it helps a lot". This indicates that social media enabled him to access vital academic information that he may not have been able to reach any other way. There are two conditions by which we evaluate how information is obtained, especially from social media. The first is the quality (viscosity) of the information and the second is the quantity and the speed (velocity) with which it is coming. Earlier in the analysis of context we heard Joel's report in which he complained that:

> Even when teachers redirect us to online sources, we get confused due to the various information you receive on the same topic there. So, to be able to manage all into an understandable form, I have to learn, unlearn to be able to understand what you already learned in school.

Putting Neka's claim side-by-side with Joel's argument suggests that social media is an emergent information mode, whether it has viscosity or velocity, and thus requires attention and skill. If this is correct, how does Neka 'get' and transfer rich information from social media and use it to improve his academic performance? How do social media platforms enable students to perform well academically? Neka gave an account of the heuristic nature of social media is when he said that:

> There are educational pages on social media … so I simply go to the page … and they put a website on that page that contains some of the info that I need. All I then do is to click on it … and get the info.

This comment implies that he increased his academic functionality through the use of social media. He said that to support his learning and strengthen his academic performance he "could obtain info … e-books ... and educational materials from social media". This conversation revealed that Neka understood how to use social media tools to navigate, obtain valuable academic information online, and he had the ability to actively participate in constructing his knowledge based on his experience with the media rather than relying solely on his teachers. Participants all said that social media aided their performance towards excellence, and that they regulated themselves between study time and socialising with a study time-table which they adhered to. Testimony testifies that with social media, he studied with friends in a group and shared ideas online, and if anyone missed a class, study time enabled such a student to "cover-

up" what was missed. This means that social media guides students in creating their own knowledge bases and solving their everyday academic problems rather than relying on teachers alone. I asked participants "How would you rate your academic performance since you started engaging with social media?" Some participants responded that they were doing well and that their grades had gone up. Prior to the emergence of social media, knowledge and learning was carried out efficiently and effectively, so why the over-reliance on social media? Couldn't a simple face-to-face conversation provide even more valuable information with more detail? Michael responded:

> Not really, in days gone by I would strive to maintain the best grades I could by going to the library or meeting one on one with the teacher anyway. I don't feel my grades themselves have changed as much as the time it takes for me to acquire the information necessary to have good grades. Social media use in conjunction with more conventional learning methods just increases the efficiency with which I learn and also retain information.

My understanding and interpretation of Michael's account, drawn from his pre-use to now-use of social media for academic purposes, is that he worked hard to earn his grades and so his infusion of social media had no significant impact on his academic performance since he used it as additional support and not necessarily for enhancement, because he relied more on an organised context.

6.3.4.2 Social media as a detrimental tool to academic performance

Regression occurs when students start to notice a gradual or drastic decline in their academic performance which could be due to various reasons ranging from lack of finance to lack of concentration, lack of understanding, or distraction. I asked Mez "do you have any challenges in any subject and how do you cope? He said:

> Yes, except in English and literature, I am struggling in the rest. I study with friends who take time to explain areas they are good at. I also meet teachers for one-on-one explanation and I consult the social media.

The same question was asked of Anabel and she said:

> I struggle a lot especially in maths yet I underperform, it makes me look stupid but I know I am not. I am simply not cut out for it and no longer want to waste my time on it.

I further asked all participants if their social media usage distracted them from studying or attracted them to study. Silver said "in all honesty, it does both". Pearl said "it's all about determination and focus, for me, it attracts me the more". Unsatisfied with the responses from participants, I rephrased the question to ask "do you think your regular use of social media is a distraction and thus detrimental to your academic performance?" Michael said: "it depends on how it is used" because distraction "is a flaw in human character rather than a flaw in social media itself". Testimony said: "it all depends on the kind of person". Pearl said: "somehow, time-taking", meaning that social media can be a weapon or a tool depending on how it is

employed. In all, six of the participants indicated no detrimental effects, hindrance, encumbrance, or retardation to their academic performance as a result of their engagement with social media. Rather, they reported an increase in their academic functioning leading to excellent performance. The remaining six had a contrary view, especially Anabel who said she struggled in her academic functioning due to the manner in which the school programmes were designed. I asked her if it is the structure of school subjects that makes her struggle academically, or if the school programme is too big or too complicated. She responded:

> Something like that, school subjects are like one-size-fits-all. Subjects structured and arranged in ways that simply split students into three pathways of learning: art, science and vocation. Even within this dichotomy, there is a huge difference as some arts subjects that are more practical than others. I am not wired to study and perform excellently in science and so cannot compete favourably with those who are. I excel in my area of interest and will continue in that area no matter what.

I asked if she could use social media to learn and improve in the areas she had trouble with. She replied:

> Maybe, but I struggle a lot especially in maths yet I underperform, it makes me look stupid but I know I am not. I am simply not cut out for it and no longer want to waste my time on it.

From her complaint, it can be deduced that the Nigerian school curriculum contains limited knowledge areas, yet she said:

> In grades 7 to grade 9, I had to grapple with 18 compulsory subjects which was too much for me to handle thereby causing a great decline in my performance.

Perhaps her trouble may have originated in the numerous subjects she had to grapple with, as well as content that was at variance with her academic interest. To Anabel "vocation in the curriculum simply means what is in the subject, nothing more" because it is restricted with limited scope of knowledge. She would have preferred a vocational curriculum that was open, allowing for each student's creativity and knowledge. This implies that creativity is intricately linked with academic performance, so that academic performance is not extrinsic but a mind-set. Analysis so far reveals that academic progress for some participants rests on a progressive curriculum that is student-centred, i.e. defined and driven by students' interests. However, a school cannot teach everything. Sizer reasonably argues that:

> "… the schools cannot be expected to carry such a load alone and influences beyond their doors count for much or most of a child's world … who are we adults to tell an adolescent that he must learn what we want him to learn" (1996, p. 36).

Social media presents a hands-on tool for students in areas which schools cannot reach or accommodate due to time and spatial reasons.

6.4 Conclusion

My face-to-face conversation with participants was insightful. Narration was comparatively more detailed and concise than Facebook conversations, providing enough to cover all the

essentials of the research. Participants' entire conversations centred on knowledge and skill acquisition and empowerment through social media, rather than creating a dichotomy between school and the media. A major issue that surfaced in the data was personal effort. Participants attributed their academic success to their hard work, consulting teachers and researching on social media. This suggested that neither social media nor academic learning was the sole contributor to their good grades. It was as much about ownership and self-actualisation and academic improvement based on what they knew and could do, along with a minimum of socialising.

Although the literature review suggested two conflicting opinions put forward by protagonists and antagonists on students' use of social media, this chapter reveals compelling evidence in favour of the academic benefits associated with social media features. Furthermore, some participants reported that social media enabled them to work as a group, posting and answering questions, seeking assistance from teachers and each other within the privacy of their group account. My analysis revealed two categories of participants. The first are those who reported that they relied on academic learning but used social media learning to complement their academic activities. Participants, especially Princess and Michael, participated in a lengthy and conversation which described the benefits and positive aspects of social media, compared to the traditional classroom academic context, but said they used social media to support their academic functions. The second category of participants had their reservations about academic learning. Conversations with Leez, Mez, Dickson and Anabel revealed their lack of interest in the school curriculum, providing the reason why they performed below expectation. They specifically stressed the notion of life skills, destiny, focus, vision, passion, dreams, hopes, aspirations and talent, which, in their view, social media provided and academic learning lacked. Their narration suggests that social media sets the trajectory for their life, shapes their minds, builds their dreams, expands their visions, focuses them on the path towards achieving their destiny and gives them hope. The analysis of narration by participants reveals that the relationship between social media and academic performance is linked to the differences between the structures of what is considered academic performance on the one hand, and the existing tension between students' interests and institutional expectations of them on the other hand. Throughout the conversations, participants did not mention that they faced or suffered any kind of unethical practices such as bullying and harassment in their use of social media.

I have analysed the conversations and my interpretations are based on the understanding addressed by my research questions. Each factor in both levels 1 and 2 captures a certain

amount of overall variance in the data. Factor analysis, performance analysis and contextual analysis explain the correlation between variables that are the main themes in this research thus answering all the research questions. Finally, the data gathered was information obtained first-hand from students themselves. I found sufficient meaning in the data and I now feel confident to offer my distinctive conversation in detail. I will present my findings as a preparatory base for synthesis and thesis in the next chapter.

Chapter 7: Findings, Synthesis and Thesis

7.1 Introduction

In Chapters 3 and 4, I presented the concepts and theories that are at the core of this study. Chapter 5 deals with the research design and methods adopted for the collection, coding and analysis of data. In Chapter 6, I presented and analysed data in a manner that responded to and addressed all the research questions. Outstanding themes that surfaced in the data were highlighted and outlined in the analytical process to support the findings that I present in this chapter. This case study concludes with a framing extracted from the emic account of participants, and the overall meaning derived from the case. The result of my analysis provides the findings that I present in the order of the four research questions.

7.2 Participants' perspectives on social media and their academic performance

The focus of this study was on students and their social media usage in relation to academic performance, which is linked to traditional academic learning and social media learning. Therefore I reflect first on the academic definition of knowledge in order to understand what constitutes traditional academic learning and social media learning from which the students' academic performance is derived. During my conversations with participants, they discussed the challenges they faced in their academic work and the impact of these challenges on their academic performance. Some participants' conversations centred on issues relating to their vision, passion and their future. I noticed trends in the participants' description of experiences with school authorities and their social media usage. I also noted that students committed themselves, making a personal commitment and effort to study both in groups and individually, and adopting various methods of learning in order to achieve improved academic performance.

Several insights were generated in this research that dealt with the critical questions. I start with the list of social media platforms used regularly based on self-reports of participants, namely: Facebook, Messenger, Twitter, WhatsApp, Instagram, YouTube, Skype, IMO and Snapchat. Although Snapchat, IMO and Messenger did not appear in my literature review as social media destinations for students, participants mentioned them in addition to those found in the literature as platforms they used to communicate with each other, to gather information about various topics, and to carry out discussions for their academic benefit. According to the participants, these discussions expand their creativity, build their analytical skill, develop their

critical and evaluative capacity, including how to manage, evaluate and synthesise multimedia streams of information. These platforms also helped to expand their social circle, improve their cognitive skills, and build their psychomotor skills and proficiency in using technological devices. Participants expressed their passion for social media platforms, acknowledging that against all barriers erected by school authorities, they used social media at home via laptops, tablets and smartphones provided by their parents. Participants all reported that they used their devices for entertainment, socialising and academic purposes. The smartphone, in particular, provides quick and easy access coupled with the fact that it is portable and affordable.

Contrary to my initial understanding of students' use of social media, and the assumption that students use social media for entertainment and socialising and not for academic purposes, the data revealed that students used social media heavily to pursue their vision and passion. 'Socialising' is an umbrella term used by participants to describe their main activity when using social media. Socialising includes other activities such as chatting, posting photos, communicating, and interacting, meeting people, making new friends and staying in touch with friends, family and acquaintances. Participants reported that socialising was not the only activity they used the social media for; they also used it for academic purposes, ranging from studying and communicating with friends on academic matters, updating themselves, watching tutorials on academic and vocational skill-based topics, and obtaining current information relating to their academic pursuits and research. They said social media provides an opportunity for the extension and continuation of classroom activities among students and teachers. Analysis of participants' reports revealed that social media enabled students to compare notes on difficult assignments, have tutorials amongst themselves, and have meaningful, concise conversations with a wide range of people who are knowledgeable on any topic.

Some participants reported that in addition to academic activities, communication, and entertainment, social media made them into explorers for example, Michael said he follows NASA on Twitter. They want to explore their world and they want the freedom to do so. This means that the students are exposed to various attractions, distractions and corruptive temptations. This makes it imperative for schools to reflect on the reality of their students' use of social media, rather than operating in denial. Students are already using social media and are ahead of us in this matter.

7.3 Digital natives in a digital world seeking academic gratification

Turner (1987) describes academic activity as a diachronic process aimed at developing students' cognitive, affective, conative social and cultural skills. However, the emergence of social media in the post-modern era has redefined the process of learning so that students now view leaning based on the 'distillation of world view' (Turner 1987), rationalising ideas and on their own volition choose what they want to learn and what they do not want to learn. For instance, participants, particularly Princess, Neka and Michael, say they use social media as a learning tool for radical knowledge acquisition. Their emic account portrays social media as an emancipatory tool that they use to achieve knowledge that affects their personal lives positively. They report that social media activities encourage independence, promote emancipation, empowerment, authenticity, rationality and freedom. It is emergent, providing current knowledge that is comprehensive, inclusive, and affordable, and provides quick access to educational content. Participants described an emancipatory element about social media which enabled them to learn conveniently and efficiently, at their own pace and in their own space. They reported that the most effective part of social media was the wide access to a variety of information sources, leaving them with the ability to explore widely and choose what is required. This empowering quality makes social media useful and complementary, thus enriching students' knowledge and enhancing their academic performance. Learning and knowing naturally occur whenever students engage on social media, which is useful to students who cannot afford formal schooling. Some participants like Michael and Neka reported that they were unbiased as to which context enhanced their performance, that they consulted social media but relied on teachers and school programmes to enhance their academic performance. Other participants said that they were willing to violate school rules in order to search for what they considered truth or reality, and to pursue their needs and interests. Their account revealed that they related to social media as if it were an external objective reality (Cohen et al., 2011) or a natural setting for academic benefit. This suggested that goal-oriented, independent students see social media as an open arena where collections of knowledge (academic and non-academic [if such exists]) are stored. Because reality (as described in section 2.4) can be both objective and subjective, it provides a different definition of the relationship between social media and academic performance which can also be viewed in the pathways of objectivism and subjectivism. Students can consciously act to change their circumstances but their ability to do so is constrained by various forms of social and cultural practice (Terre Blanche & Durrheim, 1999) within the traditional school context. Some students may choose to ignore

such constraints and focus on doing what they think is in their best interest in order to improve their general performance, which may or may not always translate into meeting school expectations. The academic realities are in levels but the most critical that cannot be dispensed with is students' ability to use knowledge and skills acquired from social media in the academic context, and to translate the experience from both contexts into academic excellence. Students may not all agree with the academic plan, but in the long-run, life experiences will train them to understand and appreciate the validity of what they rejected at an earlier stage.

Some participants say they record the classroom sessions and play them repeatedly until they grasp the knowledge. According to Michael, YouTube is an invaluable platform; whenever he uses it, he feels as though he is in a classroom session. Princess warned that social media can be an academic tool or weapon depending on how it is used, which means it is not suitable for students who procrastinate and lack discipline. On the other side were emotional presentations from participants like Dickson, Mez, Leez and Anabel who suggested that there was little or no relationship between social media activities and academic activities. This set of participants reported that academic activities encouraged dependence and over-reliance on teachers, driven by the following of rules embedded in culture and tradition, devoid of students' interest and limiting their creative and explorative skills. They found academic learning restrictive, narrow and specific with limited learning areas, thus excluding students with special needs. They argued for a review of the school curriculum to include their needs, aspirations and interests. They said that studying numerous subjects that lead them nowhere is a distraction and waste of time and money, and that they felt excluded by the design of the secondary school curriculum. Such participants see social media as a dynamic entity that links them to the world of knowledge and creativity, and they feel that they have no choice but to be decisive about what knowledge is necessary and what is not. They see themselves as different, therefore their needs and interests should be prioritised, that a one-size-fits-all approach benefits only those who are gifted in such academic programmes. For instance, Mez complained saying:

> I am not good at intensive mental tasks. I like practical activities with minimal mental tasks and do excel in that. So, I would have still look for a therapeutic training centre and enrol there for training. Except English and Literature, I am struggling in the rest. I study with friends who take time to explain areas they are good at. I also meet teachers for one-on-one explanation and I consult the social media. What they teach is not what I want and that's why I am struggling. I can't wait to complete my secondary school so I can focus on what I learn on the social media.

Some argued that the number of subjects which students need in order to perform according to expectations are extremely large and exclusive. The intriguing part was that they complained that there were too many subjects yet they demanded more learning areas. With the steady increase in population and the overwhelming demand for education, do secondary schools in

Nigeria have the space and ability to cater for the needs of individual students? An all-inclusive curriculum challenges a well-planned academic programme in favour of democratic learning. This has been criticised as it creates an idealistic view that schools have the capacity and facility for every student to learn what they want. It is not just a matter of which approach or context makes them happier but which context uses their desires to drive their passions, or their talents to address their individual needs. All students can perform but perform in what area? There are layers to this argument that I presume would mean that schools should adopt one of two approaches. The first is the hermeneutic approach, which is a liberal system whereby each student proposes what they want to study because it is important to them, and therefore must be adopted as knowledge. The second is the traditional approach that Leez refers to as 'one-size-fits-all'. Social media technology, by contrast, triggers students' imaginative skills, enabling them to visualise possibilities that have not been considered or introduced to them in school. What school offers as knowledge is not comprehensive enough to accommodate their desires. Schools' academic programmes, practices and operationalisation are not structured to accommodate every student's interest. Leez, Anabel, Mez and Dickson's request or expectation of school raises contradictions with one side seeking to know who the curriculum is designed to serve and the other side showing concern about the unrealistic demands on schools to provide learning areas that will meet the academic needs of individual students. Let me respond to the first part with an unanswered question that has been asked before by Gultig, Hoadley and Jansen (2002): who does the curriculum serve? Is the curriculum designed to serve the market, the teacher, or the student? Should teachers still tell students that "they must learn what we want [them] to learn" (Sizer, 1996, p. 36)? I consider the curriculum to be similar to a menu and the classroom to be like a restaurant. If my metaphor is correct then the students deserve the right to ask for what they want.

I address the second part with a question as well, seeking to know how schools can broaden their curriculum so that it includes every student's interest as well as the essentials, constructing it to meet the various needs of each participant. The question is: how possible is it for schools to design a curriculum that satisfactorily meets every student's expectation? Not all Nigerian schools have the capacity to provide all the options to the satisfaction of all the students. Such a proposition cannot be sustained. As stated by Sizer (1996), "Schools cannot be expected to carry such a load alone" (p. 36). Eisner (2002) considers the possibility of a liberal approach to academic learning with a series of factual questions, asking: what would we expect to find in a school that emphases a personal relevance orientation to the curriculum? How would time be used? How would students be evaluated? What modes of teachers would

be employed? What kind of contents would be studied? Accepting that it is unreasonable and unrealistic to expect that schools should carry the load of meeting every student's academic need, Princess says "that's why social media is there to assist schools". Will social media assist teachers evaluate students' performance in school? Eisner (2002) contends that

> "What we would find in some schools that are genuinely concerned with personal relevance is the places where interests and the demands of the task define the amount of time students spend in each course. We would also find small classes perhaps with fifteen students that were organised around a common set of interests and included students of different ages who shared that interest" (pp. 119-120).

Providing a personal-relevance orientation to a curriculum whose major focus is on the educational development of the individual student would be complicated as the academic performance rating of the process would require evaluating how meaningful the task was to the student. This would mean paying attention to the process in which students were engaged to know what the student learnt from the process, how well they learnt, what the students were believed to have learned from the process or activity, how the students thought the work could have been improved, and the ideas they formulated that might be pursued in forthcoming projects (Eisner, 2002). Such differentiation of academic content for students of different intellectual abilities and interests ultimately leads to a kind of social stratification that makes it increasingly difficult for students to communicate with one another. The absence of a common educational grounding in school would mean that what students discuss are topics provided by social media, a scenario that academic rationalists (Tyler, 1949) perceive as unorganised and laden with distractions and unethical practices. Education programmes that are devoid of a common structure will in the long run undermine the very foundations of a social democracy and undercut the common intellectual base that a nation needs. Perhaps, most importantly, differentiation of programmes for individual students of different ability creates a self-fulfilling prophecy that sets limits on aspirations, forecloses the total population with the kind of intellectual repertoire that optimally fosters the development of rationality (Eisner, 2002). However, this does not eliminate the primacy of students' contributions to the academic programme. Without the participation and contribution to the availability of real choices from students, Eisner (2002) says that "schooling is likely to be little more than a series of meaningless routines, tasks undertaken to please someone else's conception of what is important" (p. 117). Connecting this explanation to my analysis indicates that the multifaceted narratives and their associated problems are not located in either a democratic curriculum or a personal relevance curriculum, but in adaptation and implementation.

Another issue that kept re-occurring in the data is the asymmetric power relationship between social media and academic activities that is premised on knowledge content and

students' interests, which I assume is due to the absence of students' contribution towards the planning and development of the school curriculum. An aspect of the data analysis revealed that a progressive curriculum is that which is student-centred, defined and driven by their interests. Mere knowledge acquisition or being talented in a given area does not necessarily translate to good performance in any context, whether that be a social media context or a traditional context. Michael reasoned that:

> I cannot really attribute any positive change in my grades to my use of social media because I strive to maintain good grades by going to the library or meeting one -n-one with teachers. Social media use in conjunction with more conventional learning methods just increases the efficiency with which I learn and also retain information.

What resonated in his assertion was that he combines both contexts (social media learning and traditional learning for academic efficiency. He also said that "school structures the subjects and give me a direction which I take into my private study time, thus, I complement what I learned in school with social media ideas on the internet".

Analysis reveals that a critical benefit that any social setting provides, especially social media, is that it equips students for life while an academic setting prepares students for employment. Students need discipline, sound work ethics and good morals to be efficient in every facet of life, which social media may not provide. Social media can expose students to better choices in life, but students also need refined character and integrity to relate efficiently and accommodate others, and affective domain skills. Participants did not mention these characteristics and skills as part of what they learn from social media, yet these are necessary in sustaining a business or employment. Participants who desire to be entrepreneurs may not have realised that they need to gain this knowledge from academic settings. Just as social media activities are used to complement academic activities as reported by some participants, academic activities can also complement and refine social media activities for better overall academic performance. Thus, collaboration between these contexts is better in promoting academic excellence than keeping them separate.

Participants' conversations all pointed to one thing – gratification. Participants expected gratification from both school and social media contexts the same way teachers expected higher academic performance from students. LaRose et al.'s (2001) theoretical argument draws on the gratifications-sought-gratifications-obtained formulation as an important mechanism in enactive academic performance. They describe enactive academic performance as the way in which students perform based on experience which includes interactions with the environment (e.g. the social media environment) and how this influences them by continually re-informing them about the likely social benefit of constant media consumption (see section 4.4.3.1). This assertion is consistent with the theory of Elger (2007)

which presents three axioms which he says promote optimal performance, namely: immersion in an enriching environment, engaging in reflective practices and the performer's mind-set (see section 4.3). This triadic causal mechanism is mediated by symbolising capabilities that transform sensory experiences into cognitive models that guide actions (LaRose et al., 2001). An enriching environment is relative as it depends on the mind-set or interest of the student. Whereas some students believe that the social media environment is more enriching than the school environment, others claim that the school environment is more enriching than the social media environment. Some students perceive that both school and social media are enriching environments capable of providing them with knowledge and skill so they are zealous and passionate about both. This category of student is motivated to deliberately follow instructions given by teachers, spend more time learning on social media with minimal time on entertainment and socialising, and are said to achieve excellent performance. To some, school academic programmes do not contain the kind of knowledge that drive their vision; rather than engaging in reflective practices, they slip into a state of disenchantment, lack of passion, and lack of interest. In this case, the most common activities for such students on social media are fun, entertaining, and exciting, that is to say, boredom-relieving activities. They spend time broadening their social networks, engaging in social interaction or communication, seeking information and as a means of relaxation or escaping (LaRose et al., 2001) from routine. These students spend much time socialising and pursuing their own pleasure and interest, indulging in activities that are not considered academic. Each of these factors can negatively impact academic performance. Such factors have also been found to be significantly related to addiction and distraction in several studies on students' who use social media frequently. Addiction can be interpreted to mean habit, and it is in habitual usage that behaviour is revealed which in turn becomes visible as performance.

Sometimes, students' capacity for vicarious performance allows them to acquire rules for conduct without physically enacting any specific performance but rather by observing others. When direct experience with enacting behaviour affects perceptions, this leads to enactive performance which, as a consequence, may enable students to use such capacity to think about and to plan actions, set goals, and anticipate potential performative consequences (LaRose et al., 2001). By immersing in an enriching environment, engaging in reflective practices and using evaluations of personal experiences and self-assessments of their thought processes, students can employ a self-reflective capability which provides a better understanding of themselves, their social environments and the variations in situational demands. Performance expectations are judgements of the likely consequences of a behaviour

which provides an incentive for enacting behaviour. Expectations of adverse academic performance triggers disincentives (LaRose et al., 2001) which perhaps are interpreted at a sensory level as lower grades. Social media contains sensory performance features that exposes students to pleasing or novel sensations that trigger preferences for enjoyable activities that provide the basis for enjoyable learning and improved academic performance.

7.4 Social media or school as distraction not school

Elger (2007) provided four tenets that he claims enhances student's academic performance as: students' motivation, their mind-set, their immersion in enriching environment and engaging in reflective practices. The tenets suggest that academic performance is a triangulated activity between students' personality, the learning context and the skill they come with and that which hope to achieve from the context. In Elger's (2007) performance axioms for effective performance can be further focused to mean that the performer's mind-set is 'student-centred' whereas immersion in an enriching environment is 'knowledge-centred' and engagement in reflective practices is 'assessment-centred'. The assessment centred is linked to my conversation with participants on distraction which revealed that they were sharply divided with six out of the twelve claiming that social media distracts them and six claiming that it does not distract them from performing their academic role. Princess noted that social media has the propensity to distract while Michael said this is not the case, that distraction is a normal flaw in human character which can be checked if the student is motivated by the context. Anabel said that the school programme is a distraction, not the social media. Distractive as she thinks, she refuses to accept that school provides daily frames for the social construction of social realities within which the attempt is made to fix social life (Turner, 1987). However, since everything is affecting everything else, even our thoughts are creating our reality (Kehoe, 1987), so anything can be a distraction. The performer's mind-set of Elger (2007) surfaced in the data as Princess argued that to be distracted means that the student has a questionable interpersonal value and interest. This means that the value students get out of social media and formal school largely depends on the motivation and the value they to put into it and this directs and dictates how they use it and their academic outcome.

Karpinski and Duberstein (2009) argument that every generation has its distraction, but Facebook is a unique phenomenon is disputed by some participants as they had a contrary view of Facebook usage. For instance, Anabel and Destiny said they self-regulate between socialising and academic responsibility, adhering to their time-table. This suggests that students with sound self-efficacy skills understand what is of value and what is not, and with

their own volition carry on effectively without supervision. Social media or any learning context with social relations demands prudence and challenges the self-efficacy skill of students for them to be able to sort through all of the distractions. On the issue of time wastage, some participants spoke from a determinist viewpoint which I interpret to mean that there is time for everything. They reported that they know when to study and when to relax with social media and so self-regulate between social media activity and academic activity. Michael summarised this when he described social media as a "means to an end. Based on what means you apply; your end will be either positive or negative". The focus words here are the 'means' and its 'application' which confirms Kirschner and Karpinski (2010) and Demola's (2012) argument that social media is not the root of all academic evil because, if social media did not exist, students might spend their time engaging in other activities that can interfere with their academic performance.

7.5 Relationship between students' personal values, social media usage and academic performance

Whereas Nigerian parents and other stakeholders spoke from a vicarious position on the matter, participants spoke from the perspective of their direct experience, and the reinforcement and gratification they get from the media. Leake and Warren (2009) claim that Facebook fans do worse in examinations, and Kirschner and Karpinski (2010) argue that social media could inhibit students' academic performance because it appears that students do not recognise the enhanced functionalities of the social media applications they own and use. However, participants reported that social media features contain elements that are user-friendly, that they understood how to use them, and that they used them for their academic advantage.

Regarding addiction (Kandell, 1998; Griffiths, 2000; Hall & Parsons, 2001; Osuagwu, 2009) and distraction (Young, 2004; Bergstrom, 2008; Kessler, 2011), Michael said that he could not really attribute his good academic performance to his use of social media. He also argued that:

> Addiction and distraction are flaw in human character rather than a flaw in social media. It depends on how it is used. Browsing YouTube to watch video game unrelated to content in class is no different from going to the library and studying the wrong books. At the end of the day, both scenarios see you learning something irrelevant and therefore detrimental. I see social media as a means to the end. Based on what means you apply; your end will be either negative or positive.

Everything has an influence on everything else, even our thoughts and actions are shaped and controlled by everything in our environment, thus creating our reality (Kehoe, 1987). It is therefore unreal for us to think that social media on its own causes students to perform poorly,

and that they should stand on the side-lines (Kehoe, 1987) and merely watch things happen, when they know that technology through the social media has brought simplicity and understanding to learning. While some participants said social media, especially Facebook, enables effortless collaborative learning among students who decide to share ideas together, some said social media had provided them with entrepreneurship knowledge and skills, with others sticking to school tradition. Presumably, what all of this means is that participants chose not to remain on the fence between tradition and modernity, but to take responsibility for their academic function, doing whatever they could, using any mean that seemed morally right and affordable to achieve academic excellence. Participants reported a remarkable improvement in their academic performance after they incorporated social media into their studies. However, this statement does not apply to all participants and certainly cannot be generalised to include the whole population of Nigerian students as their views constitute both subjective and objective (Cohen et al., 2011) realities in this study.

This study also found that a contributory factor to excellent academic performance was personal effort. Michael attributed his academic success to hard work, consulting teachers and doing research on social media. He said:

> I can't really attribute any positive change in my grades to my use of social media because I strive to maintain good grades by going to the library or meeting 1 on 1 with teachers. Social media use in conjunction with more conventional learning methods just increases the efficiency with which I learn and also retain information. I don't feel my grades themselves have changed as much as the time it takes for me to acquire the information necessary to have good grades.

In addition, Princess said:

> Every academic activity whether carried out within the four walls of the classroom or outside the classroom educates the people involved. Social media activities also educate the users in the sense that a whole lot of useful information are posted on social media on a daily basis. We have daily access to both local and foreign information on social media if properly used. Secondly, both school and social media create room for socialising. In both scenario, students get to meet other students, socialise. Another relationship between both activities is seen in the case of learning. In both cases, various forms of learning take place including vocational skills. We have online lessons which has been made possible through social media platforms like Skype. This is more common abroad where you can sit in the comfort of your home and receive lessons that are also logged onto Skype. A full lesson can go on with every student online receiving teaching at the same time just like a physical classroom where academic activities take place. Academic activities prepare your mind and whole being for the future to be a better person. It prepares you morally also as you have adults teaching you and dishing out words of wisdom the difference is that schools provides moral rules that disciplines us so we can be good citizens which social media does not on its own unless to find such features on your own which requires discipline and moral will on my part just the way I obtain information in school. Academic activities can either make or mar depending on how it is presented or received. You choose a wrong course or allowed to be coarse by school tradition and culture against your purpose, you may spend more time struggling to cross to the next dimension. Similarly, if you follow the wrong crowd or friends on social media you lose your focus. Both contexts are related depending on how you decide to use it. They both seek to direct students towards their passion and help in creating interest in their peculiarity.

Princess and Michael said the same thing but in different ways. Michael based his improved performance on his personal effort while Princess credited social media with a strong inclination to personal values of motivation, discipline, self-efficacy and the desire to succeed.
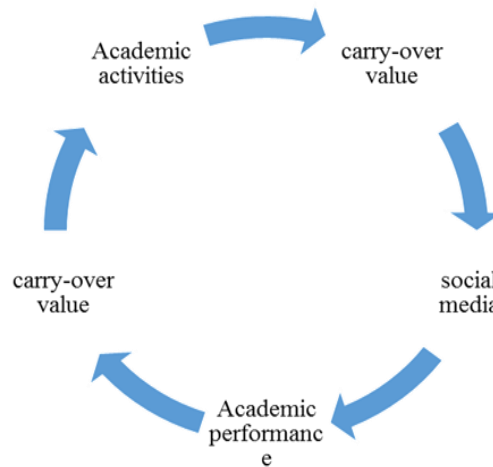

Figure 23: Relationship between students' personal values and academic performance

This indicates that the value students bring to and place on their academic activities has a significant influence on how they use social media, and as a consequence, they carry over the value they derive from using social media into their academic functions, as illustrated in Figure 24.

Princess's disruptive evidence in conjunction with Michael, Neka and 's narratives presents social media as an enabling context that increases the chances for students to obtain valuable academic knowledge and helps them to improve and achieve better academic performance, but this does not occur in the absence of focus, skill and strategy. In other words, social media enabled participants to learn more, know more, and do more, indicating a relationship between social media and academic performance, especially if the academic activities from which academic performance is derived include students' interests. This narrative is presented in layers as a comparison between academic performances of students when they complement their academic activities with social media activities, and those who do not, as reported by participants.

7.6 Digital immigrants and digital natives in a traditional learning context

Elger (2007) define context as an academic performance index represents team learning which enhances individual and collective performance and the level of engagement elevates the level of motivation and learning thus elevates the level of academic performance. However, finding that emerged from the data was the seeming disparity between students' interest and

school demand. Some participants, like Anabel, Lez and Mez, said they want to be entrepreneurs, providing employment opportunities rather than searching and waiting endlessly for employment. They wanted knowledge and learning activities that would provide the enablement they needed to drive their vision. What was termed 'play' previously is now the effective and efficient way seeking of knowledge. Schools are yet to acknowledge, accept and include this approach in the curriculum for those students who are intellectually different, thus causing their gravitation towards social media where they find their passion. Both Turner (1987) and Lewis (2013) agree that performance is understood by looking back over a process in time and not just the immediate moment, because the meaning of every part of a process is assessed by its contribution to the total result.

Another notable claim that emerged from the data as a controversial perspective was that teachers do not know their students and so do not understand their academic needs in detail. Such a claim is debatable as a study by Amin (2008) reveals that sometimes teachers want to know their students better but students will not let them for unknown reasons. Are students and teachers strangers or friends? For instance, Dickson says schools are good and teachers are invaluable assets to education but there is a generational gap between students and teachers. Leez said:

> I love teachers and school but I don't like when school dictates to me what I must study without caring whether I am interested in the subject or not. I feel that schools are too rigid for our generation and it is killing exploration and creativity. We are in a democracy and democracy mean freedom of choice, I want to be free to explore my world. We the youths want to explore and we want schools to change towards that direction.

Whether the notions of rigidity mention by Leez as practiced in school is driven by processualisation, regularisation and spatialisation are sustained by school traditions or legitimated by revolutionary edicts and force as described by Turner (1987), there seems to be some school cultures and traditions that are so regularised, repetitive and immutable to the point that they resist social realities and socio-cultural change. This does not seem to benefit leez in this post-modern era that is currently is regulated by social and cultural factors rooted in a set of loosely integrated processes, with students adopting and using social media in pursuant of their educational and entrepreneurship needs.

When I asked Neka if he was permitted to use a phone in school, he said "no, but like any human being, I want to be in control of my life and so I use social media for learning either in group or in private". Teachers who know and understand their students will identify their talent (especially digital talent) and tap into it because students are ahead of teachers technologically. Kofi Annan, the former United Nations Secretary General (1997-2007) contends that a society that cuts itself off from its youth severs its lifeline, but a society that engages their interests,

enlists their talents and liberates their energies, brings hope to the entire world. When asked why they are not allowed to use phones and the internet in school, Michael replied that "teachers claim it distracts me from focusing on lessons and other classroom activities". Testimony said "my teachers don't like it. They say it makes us not focus on lessons". Bash said "they say it will corrupt us. That there are bad things that people our age should not see or know that are on social media". The heart of schooling is found in the relationship between students, teachers and ideas. Students differ in so many ways and serious ideas affect each one in often interestingly different ways, especially as they mature. For instance, Mez reported: "I am not good at intensive mental task. I like practical activities with minimal mental task and do excel in that". It follows then that teachers cannot teach a student well if they do not know the student well enough.
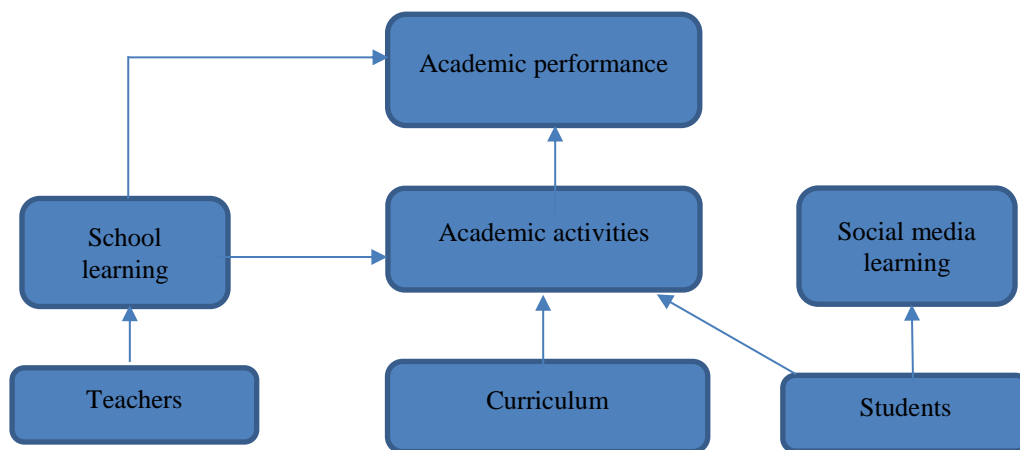
Figure 24: No relationship between social media activities and academic activities

Figure 25 illustrates the situation where academic activities do not connect with social media learning, hence there is no relationship between social media and academic performance.
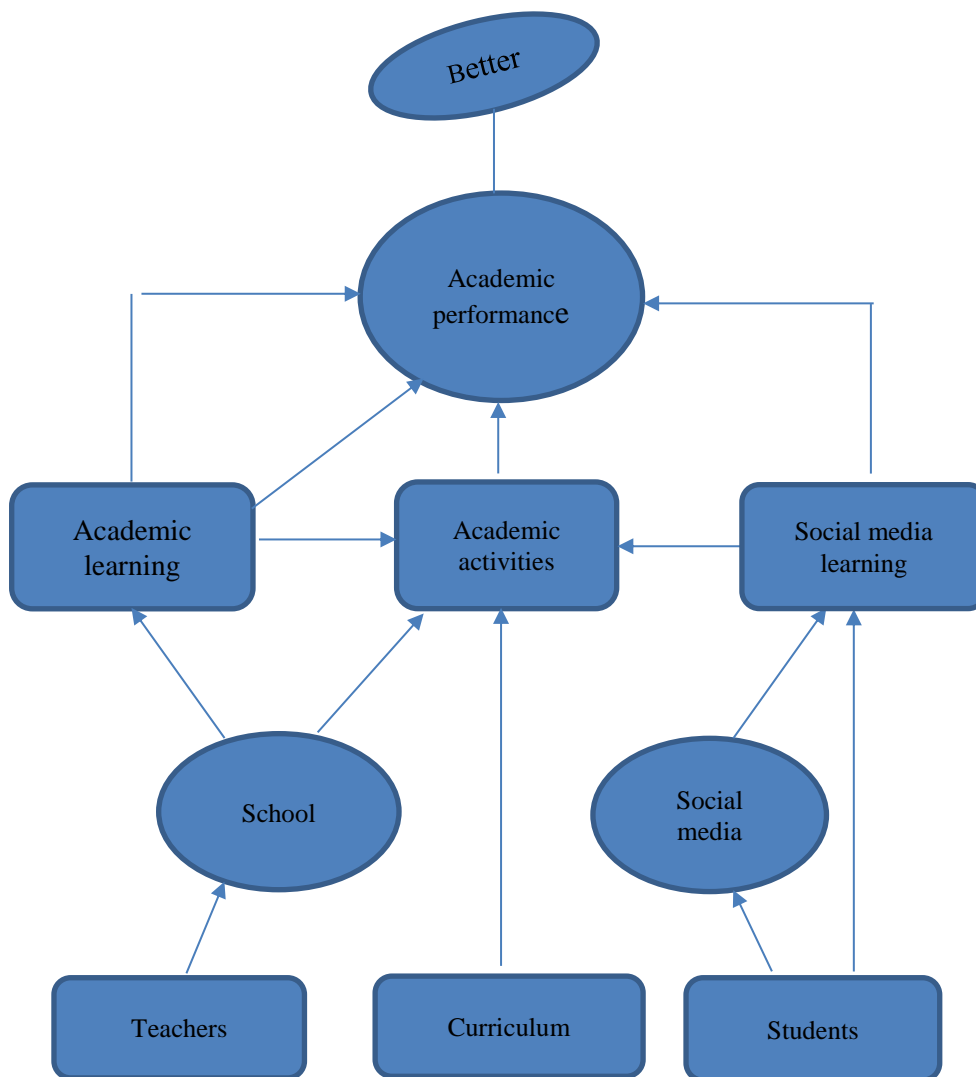
Figure 25: There is a relationship between social media activities and academic activities

Figure 26 illustrates the situation where there is a link between social media learning and academic activities, indicating a relationship between social media and academic performance. This shows that if social media learning connects powerfully with traditional academic learning, the result is enhanced academic performance.

7.7 Participants' view of social media and traditional school contexts

I found that there are three pathways to academic performance: the traditional pathway, social media pathway and a combination of both. The first pathway is the traditional context which some participants like Lez, Dickson, Anabel and Mez said prevented them from being participants in the academic conversation, while for other participants like Pearl, the traditional context empowered her to be academically strong, and for Princess, Michael and Neka, both

contexts provided a balance for their academic function. It may be that the traditional way provides an education that benefits a few students who are talented in the knowledge provided by that context. This assertion connects powerfully with the insight gained from the data collection process: the face-to-face conversations elicited more interaction and nuanced information than the Facebook interactions. This suggests that sometimes text does not exactly reflect or directly enact and embody the overall conversation as much as talk does, which affects the power relations in conversations. This may indicate that the participants are passive readers rather than active writers. Thus, social media seems to enhance their imagination but perhaps not their writing. Writing requires more mediation, training, logic and clarity which the traditional context provides.

Context, according to Elger (2007), is a major determinant of academic performance. Most participants held the view that traditional academic activities are limited and exclusive, and perceived that social media enables them to be independent. They discussed and defended social media learning as though it has become their tradition and is no longer an optional form of expression. If social media is a tradition, and schools operate based on tradition, what then is the difference between the two contexts in relation to students' academic performance? Elger's definition of performance (see section 4.3) is in two parts. One part is the traditional context that makes students partakers in academic conversation, while the other part, which in this case is social media, is the non-traditional context that empowers them to be in control of their academic conversation. Participants generally held the view that the role of social media in the academic context is not simply for entertainment and socialising but plays a more complex role, that their regular use of social media has an overriding influence on their affective and motivational processes (Lewis et al., 2010). Neka contended that academic knowledge is uploaded into the social media for a reason, and that through social media he had the opportunity of exploring and discovering a variety of knowledge and there were many ways in which it can be obtained. According to the participants, the benefits associated with the features of social media motivated them to study more effectively, because social media facilitates group learning, promotes the quality of posting and answering questions, equips them with knowledge, and enables them to seek assistance from teachers and from each other within the privacy of their group account. Shared community space and inter-group communications are a large part of what excites young people and motivates them to learn better (Lewis et al., 2010). This social ecology (Parke, 1972) is an arena where students meet, interact, and learn from each other. Although these learning experiences may not be registered as academic knowledge in an academic setting, it does not change the fact that what they learn

in the process empowers them with knowledge and skills that they can teach to teachers, for example on digital and technological topics. This assertion was confirmed in the conversations with participants as they all said that they engage with friends using social media to share ideas and learn from each other. Michael said "I simply pick what I want to learn, and I am like my own teacher". This indicates that social media provides a virtual bridge which acts as the common context for socialising and learning (Wellman & Gulia, 1999). This virtual bridge allows students to interact with each other in much the same manner as they would in a classroom context, as they observe and learn from each other. Spatialisation, time and culture (Turner, 1987) are altered as participants discover that they do not have to be in the same physical space or location at a particular time to learn within a specific cultural context, but are able to learn even when they are apart. The evidence provided by all participants suggests that students used social media tools to restructure their learning patterns in ways that transform their learning behaviour resulting in a remarkable improvement in their academic performance. This suggests that students can decide what they want to learn and learn it efficiently using social media, whereas at school they are left with no choice but to take what is given, a condition that Leez and Dickson said kills creativity. Nevertheless, participants like Dickson seem to have settled for academic subjects that are not of interest to them. This category of students repeatedly performs poorly academically not because they are addicted to social media usage or because they are docile. Those who perform excellently also use social media, do not rely on school learning, and are not smarter either. The difference probably is that Princess, Neka and Michael are studying subjects in their areas of interest whereas others like Leez, Mez, Dickson and Anabel are not.

Matching the features of social media activities with academic activities, coupled with students' personal interests and experiences, means that teachers should see that social media activities which use both visual and verbal presentations can lead to more robust learning than academic activities that use only verbal information for instruction. In contrast to the traditional approach of giving students a list of homework problems to solve, social media enables students to learn more efficiently and perform more robustly, thus expanding their knowledge and skill base and reducing poor performance. Social media provides a worked example (visual or text) to study, prompting students to self-explain each step of the worked example or each line of the text. This learning style results in better learning gains than the alternative of studying the material without such prompting. If students are encouraged to coordinate information from both learning sources, this will lead to more robust learning. This approach will guide their attention and assist them to focus on the relevant features of the learning

materials, instead of relying only on social media learning with its distractions which can cause a lack of focus. In summary, the combination of both social media and academic contexts is likely to yield better academic benefits than a single context. A learning context that combines or helps students' combine learning from examples and learning from rules tends to be more effective than instruction that includes the same examples and rules but does not help students combine them. It is only when the academic instruction supports students' needs that the academic gap between both contexts can be bridged.

7.8 Synthesis of research findings

Nigerian public perception that social media causes students to fail, coupled with the protagonists' and antagonists' views that link students' academic performance to social media positively and negatively (Locke, 2004, p. 37), are arguments that I explore critically and systematically to understand the "causality and determination" (Fairclough, 1995, pp. 132-133) factors. My exploration takes account of participants' emic reports while at the same time reflecting on the etic accounts given by protagonists and antagonists to reveal their generalisations, beliefs, claims, assumptions, contentions, suppressions, oppressions and excitement with the media, and their frustrations with traditional school learning.

Students, because they are human beings, want to be in control of their lives and so tend to gravitate towards social media learning to improve their performance, doing so on their own as individuals or within groups. Leez, Anabel and Mez see themselves as 'digital natives' (Prensky, 2001a) and claim that their engagement with social media has exposed them to a wide range of knowledge which is more than the school and teachers provide. As a result, they find it difficult to submit in totality to the tutelage of their teachers. Their ideas are synonymous with the hermeneutic interest of Habermas (1978). If student engagement with social media gives them broader knowledge, is it also deeper, or is it broad yet shallow knowledge? With a lot of information being pushed at them, is it plausible to equate the quantum of knowledge with intelligence? Should educational practitioners accept the fact that students know things that teachers need to find out and can learn from them, thereby adopting an emancipatory approach through praxis (Grundy, 1987)? Conversations with the participants has altered my initial perception about how students use social media. As I worked through this research, I began to view social media as both a classroom and a knowledge production and exchange centre, where teachers and students can learn from each other simultaneously. I interpreted all evidence in the conversations to mean that social media facilitates creativity, cooperation, and co-creation (Lewis et al., 2010), making it a context for knowledge acquisition. Participants all

alluded to the fact that the heuristic approach embedded within social media enabled them to learn better, observing each other, comparing, self-evaluating and seeing each other as a neutral source of information which helped to develop several forms of learning. This suggests that social media is a common ground for acquiring and adopting knowledge and ideas and leads me to believe that social media influences the academic performance of Nigerian high school students.

Firstly, 21st century students are intellectually curious (Von Stumm et al., 2011) and eager to explore their world. They have integrated social media into their daily lives (Gikas & Grant, 2013) using multiple platforms to multitask (Chen & Yan, 2016). For this reason, some participants' accounts portrayed an impression that the typical academic activity that the school under study offered did not fit their vision for learning. They complained that what their school presented as academic knowledge were imperatives from previous generations, and some participants saw this as frustratingly boring and complicated. The school system, according to Anabel, runs on a 'one-size-fits-all' tradition that was inherited from the colonial era, i.e. a system that compartmentalises knowledge into groups known as subjects and assigns titles to them. Indicating signs of impatience with the school programme, Anabel complained that the knowledge provided predates the current technological age and reflects that which existed centuries ago. Anabel, Lez, Dickson and Mez argued vehemently against the structure of the school curriculum and its dictatorial approach, contending that change has come and that the school has to adapt. Anabel and Leez compared their generation with previous generations in a manner that supports Turner's (1987) description of the post-modern era of academic process. Turner describes this era as representing stability and continuity which is acted out and re-enacted as visible continuity that consistently promotes repetition. At the same time, this description ignores the passage of time which is the very nature of change. The implicit extent of potential indeterminacy of social relations does not sell anymore. In this time of exponential knowledge, the academic performance of students could be altered by their use of social media technologies to comply with the new thinking that follows social-economic change, thus encouraging them to know more and perform better than previous generations. Anabel and Leez's beliefs may not necessarily be informed only by youthfulness but also by the reality of the current era.

Secondly, this era is profoundly different due to the emergence of social media. In this post-modern era (Turner, 1987), the view of the world has been refined by technology. Digit-textual practices have blurred the traditional divide between what students know and can do on the one hand, and what students need to know and are asked to do on the other hand (Grushka

et al., 2014). So, while schools simultaneously preserve culture and tradition through the formal system which is packaged and presented as academic activity, some participants contended that what is provided is not skill but tradition, which slows them down. This contention challenges current academic methods that are simply 'teacher directing and student accepting', i.e. academic activity that is predetermined and officially sanctioned with students in the role of consumers rather than co-producers. These practices tend to override the emotional and intellectual abilities of students. A system which rates academic performance based on individual productivity, and behaviour that is forced to meet established criteria, and which is measured on instruments such as standardised examinations or other performance measures (Huett, 2004), kills creativity, as reported by Leez and Anabel. Participants holding this view challenged the entire educational programme, reporting that it is grossly insufficient, excluding many of what they consider to be important learning areas, and thus excluding many talented students who are classified as academically weak. They vehemently opposed the academic performance rating process that takes the form of drill and practice, habit-breaking and reinforcement, using grades as rewards for competency. Huett (2004) says such a cut-and-dried information-only approach does little to explain the complex nature of the behavioural patterns of students in translating their intrapersonal values into academic achievement tools. This may be the reason why Anabel said:

> I struggle a lot especially in maths yet I underperform, it makes me look stupid but I know I am not. I am simply not cut out for it and no longer want to waste my time on it.

Failure in a subject does not automatically translate to general academic weakness, revealing that Anabel also struggles with emotional stability, a skill driven by the affective domain. The affective domain, according to Elger (2007) requires skill for emotional stability in taking risk, accepting failures and persistently improving on it through success, while the psychomotor domain deals with the practical demonstration of skill. On the other hand, the effectiveness of any academic practice is directly related to the ability of that practice to increase students' engagement in the five levels (cognitive, affective, psychomotor, social and cultural) of academic performance provided by Elger (2007) and Turner (1987). Just as it is inevitable that social media is structured in the direction of change, the education system should have the capacity to review its strategy in line with change in order to be able to understand the dynamics of change and accommodate students' needs. It is in the education system that the minds of students and youths in general are shaped, and schools do so through various academic and co-curricular activities that reflect the reality of culture and shape students' perception of their world. However, this does not completely condemn the important role that school play in

organising and impacting total knowledge and skill learning. Both Turner (1987) and Elger (2007) agree on the fact that skill is a function of the cognitive, social, affective and psychomotor domains, thus cognitive is the thinking skill for processing information, constructing meaning, and applying knowledge, the social domain requires skill for producing effective team learning which school provides. Many of the participants seem not to appreciate the critical role school plays in their academic pursuit. Prior to the actual interview, I had a casual familiarisation interaction with all the participants in which I asked the question: "If you had to choose between social media and traditional learning which would you prefer?" The responses were in sharp contrast to one another. One student said: "I prefer traditional learning because it allows me a one-on-one learning with teachers". Others said: "I prefer social media because I do not have to depend on teachers for everything, you have to find out things yourself". Another said "schools have killed creativity and they are very rigid in their ways and they expect every student to adhere to their structured rules" and social media "is there to complement our academic learning". Pearl said:

> Schools are there for a reason, it is better to get basic training from school first then study online, but if you are financially low, you may not be able to meet the financial demands of formal schooling, so you rely on social media.

Joel reaffirms the role of the traditional setting in complementing his social media usage as he said:

> Schools help to break knowledge into components parts of subjects and topics that set my focus on what to search for on social media, especially YouTube. Even teachers refer us to social media to cover subject areas that the allotted school time limits us to cover in detail …. Even when teachers redirect us to online sources, I get confused due to the various information I receive on the same topic there. To be able to manage all into an understandable form, I have to learn, unlearn to be able to understand what I already learned in school.

Participants contend that social media keeps students 'glocal' (updated globally and locally). Some asserted that social media benefited them much more than the traditional classroom did, claiming that they knew more about technological matters than teachers due to the generation gap. Participants said they consulted social media for an understanding of broad topics they were taught within a short period of 30 minutes in school. However, teachers think all they do on social media is entertainment and socialising. In as much as a school cannot be an island, nor can the students be. The single biggest problem facing education in Nigeria today is that our instructors are digital migrants who speak an outdated language (that of the pre-digital age) and are struggling to teach a population that speaks an entirely new language (Weiss & Hanson-Baldauf, 2008). Literature from renowned scholars such as Sizer (1996) and Eisner (2002) offer solutions to the arguments from participants regarding their relationship with teachers. Two decades ago, prior to the proliferation of social media tools, Sizer (1996) suggested that teachers must connect strongly with their students because learning for students requires a

determined collaboration between both parties, and the school should take the initiative in making this happen. Using a biological metaphor, Eisner (2002) explains that:

> "Human beings from birth on are stimulus-seeking organisms, not stimulus-reducing organisms. The task of school is to provide a resource-rich environment so that [a student] will, without coercion, find what he or she needs in order to grow academically" (p. 117).

The essence of Eisner's point is that it is imperative that teachers establish a positive rapport with students in a manner that enables all parties to understand themselves, because it is in that relationship of meaningful interaction that aptitudes, interest and intelligence develop. Once such interests are identified, the teacher can foster them by the artful construction of educational situations in which those interests can be deepened and expanded. Another way of identifying students' interests is to have a discussion with them about their interests, passions, and visions. These discussions can provide content for the curriculum and an opportunity for students to contribute to curriculum's aim and content. A meaningful form of academic engagement and performance can then occur. It is therefore critical that teachers regard students as individuals, not as mere class members, and that both teachers and students deal with each other not as people occupying roles but rather as living creatures attempting to broaden and deepen the quality of their experience.

The lack of academic activity that equips students to exhibit independence and initiative in directing their own learning makes them turn towards social media for help, an act that teachers perceive as a waste of valuable time and talent which contributes to poor academic performance. Students should be able to ask questions, evaluate evidence, defend arguments, and apply their knowledge in new situations. Academic activities that enable students to "acquire higher order thinking skills that go beyond recall, recognition, and reproduction of information, to the evaluation, analysis, synthesis, production, and application of ideas" (Taylor, 2002, p. 89) cannot be faulted. Surely "the major mission of schooling is to increase the probability that maximum realisation of those processes occurs" (Eisner, 2002, p. 112), not necessarily those which "foster the intellectual growth of the student in those subject matters most worthy of study" (Eisner, 2002, p. 113). Students on their own have identified a medium that they can use to complement their studies.

Academic learning should emphasis teaching students' ways of knowing and measure how good this is by how well students perform intelligently in the world of work or life, rather than measuring only an insulated understanding that is related to a particular discipline (Bernstein, 2002). Unfortunately, academic performance rating is rooted mainly in formal discourse, and school knowledge is driven by systematic knowledge that is more highly valued in society over every day, familiar knowledge (Taylor, 2002). Academic performance is rooted

in a broad spectrum of knowledge from various sources, and if education for change does not include and address the needs and aspirations of students, they may not be fully equipped for challenges that come with change, and life in general. However, it is not just knowledge but the context that provides the desired content.

Three main assumptions surfaced from the conversation-based data from the participants. The first assumption is premised on the long-standing traditional belief that academic knowledge is defined basically by what teachers practice in school only. Some participants like Anabel, Dickson, Mez and Leez assumed that what schools provide is not knowledge but tradition rooted in school culture. The second assumption is that academic activities from a schooling point of view simply entail the setting of academic goals, demarcating subjects according to knowledge areas, and setting high standards for academic achievement. Such an assumption presupposes that students perform well due to the efficiency of the school's academic programme with recognition of what students' display of high academic performance will lead to. Sizer's (1996) view is that academic performance is not merely the expression of expectations at a given moment of assessment or perhaps of presentation of facts acquired by means of rote learning, neither the habitual display of those facts and skills, but rather their resourceful use which is then evidence that the mastery of their use indicates that facts have become students' knowledge (Sizer, 1996). Some participants want academic programmes that will set their trajectory, shape their minds and invariably their lives, reveal their dreams, expand their vision, give them wisdom, provide focus and hope, lead them to their destiny, transform them for good, and prepare them for social adjustment. This category of participant demonstrated what Pintrich and DeGroot (1990) refer to as 'identity efficacy' and Elger (2007) refers to as 'level of identity', which requires that students have self-confidence in themselves and take responsibility of their academic activity and progress. However, the route to such achievement requires one of Elger's (2007) axioms, the 'performer's mind-set' (see section 3.12.3).

Participants report that they use social media from a multi-perspective dimension rather than as a linear continuum of school perspectives in the pursuit of their vision, passion, desires, interests, as well as academic goals. In descriptions that present social media as what Trevors and Saier (2011) refer to as 'vaccines against ignorance', Anabel, Dickson, Mez and Leez describe media as a classroom in its own right. They all set their minds on being independent of school tradition and culture while striving to acquire knowledge and skills that will equip them for emancipation.'

In their conversations, they exuded an ability that portrayed that they understood what they wanted, echoing Goleman's (2011) pontification of the capacity to manage and take charge of their academic need and manage change, adapt and solve problems of personal and interpersonal nature, the ability to generate positive mood and to be self-motivated.

The third assumption is that teachers are digital immigrants (Prensky, 2001a) while they are the 'net generation' (Junco & Mastrodicasa, 2007) or 'homo zapiens' (Kirschner & Karpinski, 2010), between those Participants like Neka report that teachers assume students' engagement with social media is a waste of time because social media is deceptive, distracting and misleading. For this reason, teachers seize students' phones in a bid to discourage them from engaging with the social media which participants say is their vital learning tool. Sizer (1996) challenges the entire tradition proposition of teachers' authority, asking "who are we adults to tell an adolescent that he must learn what we want him to learn (p. 36)?" He wonders why those who are not directly affected by the curriculum structure deserve the power to decide and have full control of what those who are directly affected need to learn in order to perform optimally. Who does the curriculum benefit and who should decide what counts as knowledge and what should not? Although Princess acknowledges that there are distractive and deceptive tendencies on social media, she spoke convincingly that they possess a high level of identity (Elger, 2007) and that they know what they want and therefore know how to sift through the social media to obtain facts for academic purpose while at the same time avoiding falsehood. Princess's description of social media presents it as a source of wide-ranging knowledge and learning, providing knowledge that is broader and deeper than school knowledge, and that a heuristic approach makes them effulgent. Participants reported that they knew how to immerse themselves in enriching and reflective practices (Elger, 2007), and sift through the material focusing on what is important and avoiding what is not, which shows their level of emotional intelligence and self-efficacy.

7.8.1 Desire for change

Academic activities are understood to be a contest in a complex and negotiated process that values personalisation and encourages reflective understanding through historical, cultural and personal insights, engaging students' interactive thinking skills, material experiences and performative practices (Grushka et al., 2014). It is also the function of students' engagement in academic activity, and reveals their intellectual strengths (Duckworth & Seligman, 2005). That is probably the reason Turner (1987) classified performance according to era (pre-modern, modern and post-modern) and the school tradition is the reason Elger (2007) classified

performance under traditional, non-traditional and institutional settings. The traditional approach to academic activities informed the call for change from participants such as Dickson, Mez, Anabel and Leez form the basis for much socio-ethical discourse regarding students' social media usage. Such calls are premised on what is considered appropriate and inappropriate, valuable and invaluable, ethical and unethical. In this post-modern era, compliance with the normative etic and emic model (Turner, 1987) renders academic activity immutable which inhibits knowledge that can be achieved from engagement with social media. Subjecting academic activities to what Turner (1987) describes as factors of potential inter-determinacy of social relations packaged as normative standards through prescriptive activities that are measured based on socio-cultural norms, may deprive academic processes of the pluralistic features which social media contains, thus excluding some students. The implicit culture of our schools promotes tendencies that encourage dropping out. This may be the reason Nigerian has the highest number of out-of-school children in the world as reported by the minister for education Muhammad, report in <u>Vanguard</u> (July 25, 2017), quoting the education Minister,   Mallam Adamu as saying on national television on the first day of August 2017 in his presentation on "education for change: a ministerial strategic plan" that 25.3 million Nigerian youths are out of school. According to him, out of this population, 11.4 million are at the secondary school level of which 60% are girls. On the other hand, the culture of our society, which has great faith in the content of our current school curriculum, inhibits schools and ultimately students from engaging in social media whose content is considered educationally valuable by a majority of participants in this study. Such a cultural approach is motivated by the desire to protect students from anti-education activities such as cyber bullying, thus widening the relational gap between social media and academic performance, creating a barrier driven by social prescriptions and normative concepts. Such socio-cultural inhibition mechanisms are failing because social media was created by students in an academic context to be used by students. Bart (2009) observes that Facebook started on a college campus, and it continues to thrive in student settings. Therefore, any requirements that force students to power down will leave many active students who thrive on communication and multitasking bored out of their minds, leading to hallucinations, daydreaming, wool-gathering and fantasy. Such a state of delusion will expose them to negative fantasies that will distract and control their minds from their active engagement in academic functions.

A comparative reflection on all participants' views revealed a huge disparity between the 21st century students' social culture laden with fun and socialisation; and school culture that Turner (1978) describes as a diachronic process laden with flaws, hesitation, personal factors,

and incomplete ellipticals context rooted in a set of loosely integrated processes, with customised rigid rules in ritualistic procedures with regular formalities, symbolic repetitions and continuity. Such fixed realities no longer serve the interest of some students as Anabel, Mez and Lez reported that what accounted for basic knowledge decades ago is now obsolete for 21st century students, suggesting the need for understanding the reality of social change Turner (1987). What changes will produce the quality of education 21st century students' desire in order for them to perform well academically? Will the education for change pushed by the Minister for Education address the needs and aspirations of the future generation? What is far less clear is the absence of substantial arguments about what should replace some of what schools offer as knowledge today. Sizer (1996) argues that:

> "Change for change makes no sense. Improved attendance can be a plus as long as what students attend to in school is truly worthy of their time. One person's though course is for another a misguided effort. Better test scores provide a limited and challengeable yardstick, but what sorts of test are chosen, and what meaning do the scores on them in fact mean?" (p. 16).

Change is moving so fast that some students are already going along with it and cannot wait or rely on school programmes that they consider exclusive, to catch up. Change feeds culture and tradition, and because the traditional method is static, it "conspires against change" (Sizer, 1996, p. xi). Therefore, while schools maintain the tradition of putting up fascinating ideas with the intent of capturing student's interest towards excellent academic performance, there is also the need to reflect on the progression from typewriter to iPad, laptops, and computers, analogue land phones to cell phones, and post mail to email. If the changes associated with these technological improvements are beneficial, it then follows that the curriculum needs to be revisited and revised in the direction of this change in a manner that shapes the way students think, act and learn. Fortunately, the wave of change has been captured by some state governments as a recent report says that in a bid to encourage students to use social media to scaffold their learning towards academic excellence, the Osun state government gave out smartphones loaded with several learning materials tagged 'opon imo' (meaning 'tablet of knowledge' in Yoruba) to all secondary students in the state (Oluwalanu et al., 2014). However, to alleviate fear of change, a careful implementation process guided by a critical curriculum plan is required.

Trevors and Saier (2011) argue that one of the greatest challenges facing humanity is ignorance. The outright lack of effective definition and reliable information about the role of social media in academic settings robs us of the valuable knowledge that social media is a fundamental tool for academic activity. Participant accounts provide evidence that proves that students learn and improve their knowledge through using social media. For instance, Michael

says "following NASA on Twitter keeps me to date with current state of astronomy and space aeronautics". Through social media students discover that there is life on other planets and galaxies, and inform themselves on how to relate to each other and to other organisms here and elsewhere so that the common themes and the magnificence of life's diversity can be better appreciated (Trevors & Saier, 2011). This suggests that social media is not an escape route where weak students hide their academic inefficiency, but an activity capable of assisting both valiant and non-valiant students and those with learning disorders to learn better and to achieve better academic outcomes. From all indications, what students need is not criticism but a level of recognition and acceptance with a gentle push towards their passion, desire and vision.

Although the traditional academic context, according to participants, provides an opportunity to know little about many subjects, and more about a particular one, some participants contest and detest academic performance criteria set by school on the basis that it is asymmetrical. They wish for academic activities that provide them with a variety of options and a broad view of the future that they are going to lead. Participants like Dickson, Leez, Anabel and Mez say that they expect an education that provides incentives that will shape their social and academic culture, encouraging them to be who they want to be, and providing them with a profile of their future that they can imagine. The data from this study indicates that students hear more, learn more, know more and do more using social media than they do in school. The absence of satisfying experience in the traditional setting causes them to gravitate towards social media. Conversation with participants revealed that 21st century students detest any learning that forces them to operate in an orderly fashion and to follow routine in order to stay focused and be serious with studies. Sizer (1996) deeply resents the categorisation of student's minds as he said "no coach ever fielded a team and no music teacher ever assembled an orchestra on the basis of a set of scores. It is the student's actual and sustained performance on the field or behind the tuba that counts, not just what that students did with a pencil and paper at one sitting" (p. xiv). Sizer argues that students are more complicated than we think, therefore it may be possible to think that the existing performance rating is seriously flawed, providing, at best, snippets of knowledge about students' actual academic standing and at worst, a profoundly distorted view of their ability. Inaccurate academic assessment is a terrible irony and inflicting it on students is an outrage especially for senior secondary school students who are at the terminal stage of compulsory schooling. Rather, each student's real academic performance should be judged from the perspective of their individual circumstances, because at the end of schooling, there is usually no relationship between such performance rating and their future activity in life, thus creating a vacuum (Sizer, 1996). Such vacuum can be avoided

or, at best, be filled constructively by the change that student's desire. The desired change is not just curriculum restructure, but also restructuring of content and practice. Attempts to distinguish outcomes from performance involving academic expectations that exclude social media learning may ignore some important performative elements that motivate students to perform optimally, suggesting that social media learning and academic learning are related constructs. Perhaps, what separates them is the lack of an efficient performance monitoring system with inclusive criteria that explicitly states how learning, skill and knowledge students obtained from academic settings, and those obtained from social media settings, will be assessed and graded. Whether we approach academic performance from a cognitive, affective or psychomotor perspective, Jason Huett (2004) says there will always be a socio-cultural aspect of mutual influence between the students and their intrapersonal values that implicitly or explicitly influences their performance level and school culture

7.9 Interface between students' academic performance and life outside school

Many students graduate from secondary school with no concrete idea of who they want to be or what they want to do in terms of employment or further education. Those who gain admission into university may have difficulty identifying the course of study to pursue and so change across disciplines every year or session because they are not adequately prepared for life after secondary education. Princess notes that

> the main aim of every academic activity is to educate and I cannot over flog how social media has influenced my academics positively. Every academic activity whether carried out within the four walls of the classroom or outside the classroom educates the people involved.

The general goal of secondary education is to prepare young adults for life, which includes further education, employment, self-employment or entrepreneurship. To function adequately in future responsibilities requires life skills that transcend mere cognitive knowledge to include socio-economic, socio-cultural, and psychological skills. As grade 12 students prepare to progress to the university, self-employment and the world of work, they need to fully understand and develop the values of these skills, especially social skills. Social skills are equally as important in building and maintaining valuable friendships that contribute to academic success. In addition to the academic knowledge grade 12 students acquire, they need to acquire information seeking and capital development skills (Junco, 2014b) so as to maintain relationships with friends they met in the past and their new friends, building on these bonds and seeking out new academic information arising from them. The social capital base of students transcends just classmates and school mates to a broader space where students meet to interact on general and specific knowledge that can be used to support their academic

functions efficiently. Such social capacity development and sustenance will not only provide them with emotional support, and improved self-esteem. I use Junco's (2014b) exhaustive evidence to assert that in addition to helping students feel connected to their institution, which is related to positive academic improvement, the value of social capital and social interaction is important for students' success. Students who build broad social ties and reciprocal relationships with clever peers and maintain strong bonds in their social media network, are more likely to persist to graduation.

7.10 Thesis

This study reveals that the academic potential embedded in social media is limitless as all participants reported that it creates and provides a suitable climate that increases their interest to learn more, know more, think deeper, do more and achieve more. However, due to the restrictive structure of schools' academic programmes, students' performance academically depends to a significant degree on the value they bring to and place on their academic activities. Individual students' personalities have a significant influence on how they conduct academic functions, as they do in the social media arena. Therefore, social media is not the root of all evil but an academic enhancement tool.

Also, the relationship between social media and academic performance depends on the philosophy of each school and how they choose to define and rate students' academic performances. Although the ministry of education (federal and state) regulates the conduct of every school, the relationship between social media and academic performance depends on how each school defines their academic activity. Nigeria is a democratic state and democracy means making a proposition and allowing people to make informed choices based on that proposition. If a school philosophy is driven by democratic principles, liberalism will guide practice. Such a school will define academic activity with tenets such as 'what students know and can do' will guide them to discover their inherent talent and build on it. The school which participants attended did not seem to be driven by democratic principles, based on the nature of the data procured. Finally, except for a few cases of addiction and distraction, there was no report of cyber-bulling, privacy invasion and security issues as participants all said they understand how to protect themselves from cyber-crime and invasion.

7.11 Conclusion

I have presented the findings of this study and discussed them in detail and in a manner that has addressed the critical questions. In doing so, I have identified and clarified issues that

surfaced in data as assumptions, claims, and contentions, analysing them extensively to answer all the critical questions set for this research. In my analysis, I have described social media and traditional contexts comparatively as reported by participants, making the case and situating it within the ambit of academic performance. I conclude my analysis by presenting the assertions, claims, contentions assumptions and frustrations of participants in relation to their academic experiences. Further, I grounded all findings in current literature that addressed the dimensions of the relationship between social media and academic performance, while at the same time reflecting on conventional views. Based on my findings and interpretations, I present concluding comments and recommendations in the next chapter

Chapter 8: Summary, Implications and Conclusion

8.1 Introduction

In the perspective of this research, the literature review, conceptual analysis, and theoretical frameworks are closely related in an effort to corroborate participants' reports on their social media usage and academic experiences, indicating that social media learning and academic learning are closely related. In the previous chapter, I presented the findings of this research and discussed each extensively, illuminating what participants said they expect from the curriculum and teachers. I also discussed the value of social media to students, and its impact on their academic performance as reported by participants. All discussions were wrapped around theories drawn from the literature and theoretical frameworks, and were tailored towards addressing in detail all critical questions related to the study. This chapter is a synopsis of the conversations analysed in Chapter 6 that led to the findings in Chapter 7, and concludes with recommendations for curriculum planners, school managers and future research.

8.2 Summary

There seems to be a classic case of misunderstanding between a generation that depended on daily newspapers for news, listened to the radio to track football tournaments, read magazines for social entertainment and read books for knowledge acquisition and teaching, and a generation whose source of entertainment and knowledge is different. The evolution of social media has revolutionised the way students function academically, and has revolutionised the way they think, perceive and understand things, learn and act. It has greatly influenced their desire to learn and how they learn. They obtain information about anything faster than previous generations, thus are able to keep up with emerging knowledge and update to stay current. They stay permanently connected to social media which is interpreted by people from the pre-digital era as a distraction, but intelligent students see it as their main source of broader knowledge with current content. Participants see their normal school routines as being uncreative and uneventful, and say that the benefit of social media is profound – using YouTube for learning is like being in a classroom. While it has become popular to say that students immerse themselves in social media to the detriment of their academic duties, Princess used exhaustive evidence to convince me that social media is flexible, has a large scale of coverage, provides

quick and easy access to detailed knowledge at low cost, and facilitates a great deal of democratic learning (see section 6.6.3).

Conversation with participants also revealed that some students have short attention span that affect their academic performance negatively, and so prefer a more active and robust engagement with knowledge than the traditional setting provides. On the other hand, some participants said that in addition to active and robust engagement, they preferred a dynamic context with wider social repertoire driven by compelling intellectual features. The rest contended that they needed academic activities that taught them adaptability and creativity, and that the lack of this in the traditional setting set them on the path towards social media adoption. From all indications, what is clearly resonating here is the desire for academic learning that exposes students to a variety of knowledge and skills that will empower them to think critically and creatively, ask thought provoking questions, and address critical issues that confront them daily, rather than imposing content that regurgitate facts and figures only. They need academic knowledge which: develops a strong sense of entrepreneurship; prepares them for life after secondary school and for a smooth transition from school to society; empowers and emancipates them for independence; and which puts them on a healthy economic foundation, providing a pathway to a meaningful life. They do not want academic knowledge which simply prepares them for jobs that are hardly available (see section 6.6.4.2).

Participants' emic viewpoint can be unpacked and compressed into two layers. Firstly, some participants report that they need a curriculum that will engage their minds in the direction of their talent and help them to develop a strong sense of entrepreneurship. They reasonably argued that school alone cannot teach everything, and that what school has to offer is grossly inadequate to meet their social expectations, but social media can assist to complement schools' efforts. They reported that, sadly, they felt excluded by some school programmes because the school did not include learning areas that were of interest to them, causing their poor academic performance. Such conversations call into question the design of the school curriculum. What values drive our curriculum and inform the content of our curriculum? What percentage of students does the current content benefit and what percentage does it exclude? Participants such as Leez, Anabel and Mez challenged the traditional assumptions that have long characterised academic activity in some schools in Nigeria, calling for a match between theoretical and practical approaches to the long-supressed notion of student-centred learning. According to them, there is a generation gap – the days of learning that isolates students from students and teachers from students should be long gone (see section 6.6.3). Their views suggest that academic activity and what it is to be educated has now become

a dynamic concept that challenges the current academic process that involves teachers simply directing and students simply accepting an academic activity that is predetermined and officially sanctioned, regarding students as consumers rather than producers. It also challenges the current worldview of the academic process that leads to the attainment of academic excellence, because what is considered academic activity has undergone radical changes over the years especially with the emergence of social media. Achieving good academic performance is no longer embedded in the simplicity of the classroom and formal teaching alone but also entails acquiring knowledge through seeking to know and to understand. Participants' accounts revealed to me how interesting social media is and how and its emergent activity has created new opportunities for them to engage in academic activities with the aid of smartphones and tablets, as their applications are designed to accept publications (Auer, 2011) and easy interactions and exposure to academic content.

The second layer is that the apparent academic improvement reported by participants is as a result of many factors of which three are most outstanding. The first of these is that participants like Michael worked hard on their own, consulting social media and having one-on-one discussions with teachers for in-depth understanding of topics they found difficult, and relied on social media for more information on subjects that were not well taught by teachers. Secondly, some participants like Neka, Princess and Michael come across to me as though they are naturally endowed with cognitive skill and self-efficacy. Such students just know that they know and so can perform irrespective of which context they find themselves in. Thirdly, some participants reported that the traditional context kept them in focus on their academic function, thus enabling them to perform better than using social media. Reflection after my conversation with all participants has caused me to realise how far we as teachers are from our students (see section 6.6). Sizer (1996) notes that "Students, like all of us, learn best in familiar settings that they perceive to be both safe and led by teachers who really know them" (p. 33) which then reflects on their academic performance. The issue of academic performance lies barely below the surface of school tradition as students pretend to adhere to school rules and regulations, trying to impress teachers so that they can achieve higher grades. Without change in school routines that some participants say benefit very few students, how can anyone reasonably expect improvement in student's academic performance? Contextual analysis reveals that just as the classroom became a tradition, social media has also become a tradition to students; therefore, whichever one they choose to replace with the other at any given time does not alter the other because it will always be a tradition.

The world has evolved and job opportunities are scarce, so much so that knowledge and life skill based academic activities are in high demand, yet our education is still mainly engaged in teaching the traditional subjects of Science, Mathematics and English, with very minimal infusion of technology aimed at preparing students for jobs or further education. In this technological age, the demand in education is for more than the basic subjects; students prefer academic activities that engage their mind, so they use social media as the interface for academic practices. The kind of academic activity that the 21st century student expects is summarised by Moore and Ozga (1991who argue that

> "The task of education in the technological age is thus a double one, on the one hand, there is a duty to set young people on the road to acquiring the bewildering variety of qualifications they need to end their living. On the other hand, running through and across these vocational purposes there is also a duty to remember those other objectives of any education, which have little or nothing to do with vocation, but are concerned with the development of human personality and with teaching the individual to see himself in due proportion to the world in which he has been set [….]. They are individual human beings, and the primary concern of school should not be with the living they will earn but the life they will lead" (p. 10).

The outright lack of reliable information about the role of social media in academic settings robs us of valuable awareness that social media is a fundamental tool for academic activity. The older generation, who are teachers, are yet to capture the understanding that the role of social media in the academic context is not simply information processing but a more complex milieu with the platform in regular use by students having an overriding influence on their affective and motivational processes (Lewis et al., 2010). The undeniable benefit of social media has inspired many students to do research on their own to gain more knowledge to add to what they get from the traditional classroom. For instance, through social media students can discover that there is life on other planets and galaxies, and inform themselves how to relate to each other and with others as compared to the traditional classroom approach to academic activities that focus on structured and restricted syllabi with restrictive content. Some participants see it as morally reprehensible for a 21st century school to provide academic learning that only seeks to make them perform excellently in examinations and be silent on that which promotes their active participation in rigorous curriculum development that sets them on a career path.

If students say a curriculum with personalised learning strategies will enhance their academic performance, then we cannot afford to maintain the status quo and expect them to excel in national examinations. Nations whose curricula intentions are tied to social media have citizens with broader perspectives on life generally. They gain new knowledge on how to evaluate scientific claims on a daily basis and use this knowledge to enhance their society, while we are swayed and confused by any simple whim of misinformation. If we continue to

perpetuate learning that will graduate semi-illiterates, they will not be able to differentiate between fact and truth, a lie from a statement based on scientific data, because their education did not prepare them to conceptualise. We cannot afford to raise students who think that knowledge is difficult or imagine it as belonging to a certain race and therefore we must travel overseas to obtain it if we need it (Micaiah, 2014). There is a need to remove the impediments that stand as a barrier to reach the world via social media, because our world is changing constantly, and we are part of this dynamic world. Therefore, to keep up and stay connected with the world, we must change. In this technological age social media is enabling people to learn better, know more, do more and achieve more with less effort. Our students cannot be an exception. Change has come, and change represents opportunity, and in this instance, educational opportunity. If our society seeks change then we must start with the education sector. The indices calling for change are visible. The outcomes of the WASSCE, NECO, and NABTEB are compelling evidence that we are struggling educationally (see section 1.10). Curricula intention can be achieved when inferior, obsolete ideas and thoughts in human minds are eliminated and replaced with fresh, superior ideas resulting from sound education (Micaiah, 2014), grounded in research and posted on social media. It is then that we will begin to notice a remarkable improvement in students' grades in national examinations. In his state of the union address in 2012, President Barak Obama explored change and the adoption of new academic activities designed to mark the next generation of learning. He stated that today's next generation high schools are engaging students based on the need to provide stronger connections to the educational needs and interests of individual students; opening new opportunities to personalise learning, tailoring academic topics in favour of students and wrapping these around their needs; challenging students with vigorous courses and integrating them with new economic demands driven by such subjects as computer science; using innovative approaches and strategies to restructure the scope and time spent learning; employing innovative technological strategies, project-based-learning and competency-based progression that engages and empowers students (US Department of Education, 2012). This means redesigning academic content to be technology dominant, and instructional practices to promote active and hands-on-learning aligned with post-secondary and career-readiness. Grading should use evidence of what they know and can do to rate them by, rather than standardised ratings that produce inaccurate meanings. Dependency on standardised tests as a measurement of academic performance may not provide a valid measurement because the rating fits academic activities designed for a different era that participants in this study considered archaic, discouraging and depressing. The sense of what truly matters to students,

and is of importance to them, is in what they do with the education they acquire rather than with validation by means of external measurement and producing grades out of knowledge processed through a series of standardised tests and examinations. Such assessment procedures exclude students with unique academic interests and their needs which they fulfil on social media, causing an apparent disparity between social media activities and academic performance. There is no better illustration of the distinction between school and everyday knowledge than to say that knowledge can only be understood in relation to the experience in which it is nested (Burrell & Morgan, 1979). Academic performance should not merely be the expression of expectations at a given moment of test, examination, or perhaps the presentation of facts and skills in some familiar contexts, neither should it be in teaching that emphasises rote learning compared to problem solving methods that engage students in individual and group work.

The findings of this research are in layers of which the first is that social media was created by students for students, and is something that students spend a large proportion of their time interacting with (Kelm, 2011). Therefore, attempts by teachers and school to stop or reduce such usage pushes some students to more usage and turns them away from organised academic activities. This means that students are exposed to danger and other unethical practices in their adoption of social media, therefore, for the purpose of sound education and protection, students need to be taught explicitly using a well-planned curriculum so that they can understand the merits and de-merits of social media because they are already fully immersed in the media, and denial or restriction will not solve the problems identified in this research.

Secondly, knowledge has become so complex that brute literacy and numeracy rooted in the standardised system of education that misclassifies and mis-teaches and rewards only a few students no longer will suffice (Sizer, 1996). Such fixed reality negates the very purpose it aims to achieve because it ignores what students know and can do while imposing ideas that are distanced from their interests, forcing them to a situation of indeterminacies that compel them to condition themselves to a process of situational adjustment (Turner, 1987). Such socio-cultural settings are concerned with the interpretation or redefinition of rules and relationships through re-enactment of socio-cultural relations (which may include social networks and arenas with relatively persisting interactive activities) guided by regularisation and situational adjustment (Turner, 1987). However, whether the processes are changing or unchanging with the emergence of social media adoption by students, processes of regularisation and situational adjustment may have no effect other than stabilise an existing social situation and order

(Turner, 1987). I hope that in the near future, the immutable socio-cultural realities in Nigerian secondary schools may be adjusted to accommodate the complex relationship between students' social media adoption, incorporating it formally into their academic activities. This may mean that students' academic performance and grades operated through schools' socio-cultural regularities and representations may be easier to handle democratically, especially if the interlocking processes of regularisation, situational adjustment, and factors of inter-determinacy that make students feel vulnerable, are taken into account (Turner, 1987). It is also hoped that with the emergence of the post-modern dislodgement of spatialised thinking and ideal models that project cognitive skill to a position of what Turner calls exegetical pre-eminence (see section 4.4.3) over technological skill, will be revised to adopt a more informed approach which deviates from compliance and the normative etic and emic.

Thirdly, most Nigerian secondary schools and their regulatory bodies are yet to adopt and employ social media as a complementary tool in bridging the widening gap between knowledge and learning for the academic benefit of students who rely on the media for specific knowledge. Without the incorporation of social media learning and the inclusion of the vision of millennials, vision 2020 driving the national policy on education and the millennium development goals cannot be achieved.

Based on the notion that education is the foundation of a nation and the key to its future, it is profoundly unreasonable to tie the talent of the next generation of leaders and entrepreneurs to the existing school tradition and culture, locking the future of the next generation in the pages of books written decades ago by unknown persons (Micaiah, 2014). At the same time, it is important to note that although social interaction with our environment is our primary source of knowledge, and that social media is capable of providing surplus knowledge, the interactional knowledge gained via social media may or may not be as deep, rich, nuanced and refined in meaning and reality as experiential knowledge gained over time from both contexts. So, over reliance on personal knowledge acquired outside the organised knowledge for academic enhancement, as called for by some participants, may not yield as valid a result as the combination of social interaction and social media. A well organised context that combines the attributes of all contexts will enhance students' academic performance, suggesting that both contexts are together and separate.

Participants reported that they desired to be given the opportunity to participate in matters that affect them directly. They also wanted freedom to explore their dreams, discover their potential to the fullest, and express themselves reasonably on matters related to their lives and interests. An environment where students' needs are met through the provision of an

enabling environment and opportunities to pursue their vision vigorously and realise their dream regardless of their background and location (Micaiah, 2014) will contribute greatly to achieving the millennium development goals. Schools need to acknowledge and connect both social media learning and academic learning institutionally, using a flexible curriculum design based on students' contributions, informed by their interests. In this way, the attention of students, who find solace in social media for their academic function, will be focused on their goals.

To summarise what I have written so far, poor academic performance does not necessarily indicate weakness. A student can be very knowledgeable or smart yet perform poorly in school. Academic performance is not exactly determined by what students know rather, it depends on which knowledge is expected, suggesting that the relationship between social media and academic performance depends holistically on how schools define the concept of academic activity. It will differ from one school to another depending on the philosophy of the school. The school's philosophy is driven by democratic principles which could be liberal or conservative. If a school adopts a hermeneutic (practical) approach to learning and learning activities, their definition of academic activity will include a wide range of knowledge from diverse learning areas, allowing students to obtain knowledge from anywhere and accepting it as academic knowledge. Also, if a school's philosophy is driven by empowerment and entrepreneurship, students will be encouraged to focus on their area of strength, make informed choices, and learn and do what they can with perfection. On the contrary, if the school is driven by the traditional, conservative, "standardised routine and rule-driven" (Sizer, 1996, p. 32) approach, laden with what Luckett calls "facts, rules and regularities" (1995, p. 20), what will be perpetuated is a solid foundation riding on past glory, attached to a poorly educated mind which worked in an industrial age, but will no longer suffice in the information age.

Further, the notion that social media causes students' academic performance to decline should be individualised, because not all students use social media for academic purposes while others do, and the value students get out of social media largely depends on the value they place on it, which directs and dictates how they use it. If students use social media concurrently with studying, the negative relationship found may be an indication of the deleterious effect of trying to implement two cognitive demanding tasks simultaneously, which can have a negative impact on both the effectiveness and the efficiency of carrying out the tasks (see section 2.7.1). Those who report improved academic performance attribute their academic success to their hard work, consulting teachers, and researching on social media. This means that neither social media nor academic learning is the sole contributor to good grades. What students do on social

media, and how such usage impacts their academic performance, is not dependent on the context but on focus; is not a matter of passion but skill, and it takes tenacity and self-actualisation to achieve this. There is a need for students who use social media to cultivate and employ their cognitive, emotional and self-efficacy skills in order to perform optimally. Cognitive skills are for the adoption and retention of knowledge acquired from social media; the affective skills are for students to be able to navigate and sift through platforms sensibly and be able to align their psychomotor skills so as to be responsive to the instincts of their cognitive and affective skills. Just like the game of soccer, it is the skill and not the field that determines the win. It is the ability of the players to maintain team spirit, stay focused, deploy skills and exhibit talent. Goal scoring relies on players' perceptive skill in identifying and utilising available spaces, navigating through opponents and focusing on the target in the field of play. The same applies to social media usage by students. Based on my findings, I now present their implications and the recommendations arising from them.

8.4 The research implications

Social media has changed the world system and the way social structures work of which the education system is not and cannot be exempted. Teaching and learning the world over has been influenced by social media and the Nigerian education sector cannot afford to be different. If we leverage the incredible opportunity that social media usage presents, and develop a positive outlook towards social media learning, schools will reduce the propensity of raising a generation that will only draw out knowledge, and start raising those who contribute from a well-grounded, informed position. This will require coordination between education curriculum planners and school managers with a level of contribution from students.

8.4.1 Implication for curriculum policy

Since Nigerian students are already savvy and have adopted social media as a tool which supports their academic development. I recommend a curriculum with objectives that targets and includes those students that are at the bottom of the performance rating. Also, because performance is character and skill induced, and improvement depends on discipline and focus, it is imperative that students are taught the appropriate use of social media. Such inclusion will not only enhance the curricula but will hopefully educate schools on how to use what students love and do passionately to help them achieve academic excellence, alleviating the academic fears that we now experience. It will also provide students with sufficient knowledge and

understanding of how to deal with cyber danger and other unethical practices on social media to which they are already exposed.

8.4.2 Implication for curriculum strategies

Including social media as a topic in a subject such as ICT may powerfully influence how students define, understand and use social media for academic enhancement. They may not need to be persuaded to learn but will willingly do so with enthusiasm. This recommendation is based on the fact that students are already addicted to social media usage. Because teachers, parents and other stakeholders fear that social media is causing students to fail, schools need to design an appropriate method of teaching students how to use the social media.

It has become undeniable that students prefer a learning context such as social media because it combines or helps them through learning from examples. Therefore, I submit that there is the need to cascade the process of integrating social media learning into academic learning so that those students who rely on social media for academic benefit or for personal reasons can have the sense that their knowledge and interests are of value in the assessment process. This means assigning a department to be responsible for the assessment and grading of learning that takes place outside the classroom whether this be on social media or in private contexts. This will go a long way to bridging the relational gap between social media use and the academic performance of students who rely heavily on the device for knowledge. Also, before any performance monitoring procedure is set up, well-defined criteria should be established that are able to evaluate the knowledge that students have gained on their own from social media and that which has been gained from teachers in school.

8.4.3 Direction for the future

Based on the findings of this research, I recommend a research study that considers classifying students into three groups, namely, a group which relies on social media for academic purposes, a group which relies on teachers and school knowledge as their only source of academic benefit, and a group which relies on both for academic enhancement. A general test of knowledge and skill using the same questions should be administered to see which group performs better. However, to avoid putting some participants at a disadvantage in the test, I suggest that sampling should cluster either all science students or all art students as participants. The result of this recommendation will be useful or, at best, provide a benchmark for the identification of an accurate relationship between social media and academic performance.

Finally, technology is evolving and improving by the day, and academic knowledge is uploaded into social media for a reason, the reason being that students want to know. I therefore recommend that further studies be conducted on how the school curriculum can be structured to capture social media studies as a subject or as a broad topic under a cognate subject like computer science, in ways that allow students to follow the trends appropriately, understand the associated issues and know the right methods of using social media for academic benefit, and to avoid cyber dangers. These recommendations, if implemented, will hopefully alleviate detrimental fears before students' academic retrogression becomes our perpetual reality.

8.3 Conclusion

I came into this study with a doublethink, accepting contradicting ideas that social media is bad for students but sometimes good for communication, taking up either position depending on when it was suitable for me to do so. However, to my participants, social media is an invaluable learning tool that they cannot efficiently and effectively function without. Hence, if the relationship between social media and academic performance is built on perception, then there is the danger of assuming that all students do on social media is chat, entertain themselves, take and post photos, meet new friends and maintain contact with old friends, a perception that overlooks its value and causes its prospects to be ignored. I have identified the social media platforms that students engage with and have investigated what they do on the platforms. I have identified the assumptions, facts, myths, truths, and realities associated with students' relationship with social media and their academic performance.

Considering my initial impression, premised on negativity, it is interesting to discover that secondary school students in Nigeria understand how to navigate their way through social media to obtain valuable academic information whenever the need arises. It is also interesting for me to note how students' interests have become the highlight of this research on social media, considering that my initial impression was that they were not serious about their studies. Most intriguing is their explanation about how they employ Facebook, Messenger, Twitter, WhatsApp, Instagram, YouTube, Skype, and IMO for academic purposes, a revelation that has altered my initial impression profoundly. As I consistently worked with students through the course of this research, I began to view social media as a classroom, a knowledge source and producer, and as an exchange centre. In Nigeria where the education policy says education is every child's right, access to quality education is still exclusively for the rich, so social media could provide an opportunity for those who cannot afford quality education.

My interpretation of the general conversation is that a positive and negative relationship exists between social media and academic performance, with student's intrapersonal values and interests sitting at the mid-point demarcating inhibition from achievement and progression from retrogression. Secondly and most importantly, social media possesses the capacity to provide students with a suitable environment to learn more, know more, do more and achieve more with relatively minimal effort and time. Therefore, suffices it to say that a learning context that combines or helps students' combine learning from examples and learning from rules tends to be more effective than instruction that includes the same examples and rules but does not help students combine them. A combination of both the social media context and the academic context will yield more academic benefit than one of them on their own, and it is only when the academic instruction supports students' needs that the academic gap between the contexts will be bridged.

Finally, I have explored in detail the relationship between social media learning and academic learning and discussed the influence of social media on the academic performance of Nigerian students, using a sample size of 12 students, which is not enough for generalisability. Therefore, it is imperative for readers to note that the outcomes of my analysis and interpretation do not support extensive generalisations, but rather present contextual findings based on participants account's that can be useful in developing knowledge and understanding in general about students' social media adoption and their academic performance.

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Appendices

Interview Protocol

Interview questions aimed at addressing specific research question

1. How many subjects are you studying?
2. How are you doing in these subjects? Name the subjects specifically and provide details
3. Which is-are your favourite subject-s?
4. Why?
5. Which subject-s do you have problem with? What are the problems?
6. How do you cope with the problems?
7. Have you ever used social media to solve the problem-s? Explain
8. Which social median platform do you use?
9. Which is your preferred platform? (RQ1)
10. Which device do you use to access the internet and why do you prefer the device and not the others?
12. What do you use it for? (RQ2)
13. Have you used these platforms for academic purposes? Please share some examples. (RQ3)
14. What are the other activities you use the platform for? (RQ2)
15. Do you have friends on the social media?
16. What do you and your friends do on social media? (RQ3)
17. From where do you source information for your assignments & projects? (RQ3)
18. How? Tell me more (RQ3)
19. Do you learn anything from using the social media? Please give some example (RQ4)
20. Tell me about the subject area where your use of the social media assists you? (RQ4)
21. Has your social media platforms helped you with learning? How? (RQ4)
22. What are the changes you experience when you integrate social media learning into your academic activity? (RQ4)
23. Does your regular use of the social media enhance your academic performance? (RQ4)
24. Tell me more about how the chosen platform helps you to achieve or improve your academic performance (RQ4)
25. How do you rate yourself academically? Why? (RQ4)
26. in what ways do social media learning differ from school learning (RQ4)

26. Which do you prefer, social media learning or school learning? (RQ4)

Performance indices

Ability

Arousal

Behaviour

Belief

Competency

Context

Desire

Determination

Engagement in reflective practices

Environment

Emotional intelligence

Experience

Feeling

Fixed factor

Focus

Hard work

Intention

Inter-personal value (self-efficacy, self-discipline, self-actualisation, confidence, self-esteem, self-monitoring, self-reactive and self-regulation).

Imitation

Immersion in enriching environment

Level of skill

Level of knowledge

Level of identity

Mastery

Motivation

Motive

Nature of task

Need

Passion

Personal factor

Performer's mind-set

Strategy

Skill

Social pressure

Talent

Understanding

Volume of the task

Zeal

Academic performance inhibitors' index

Regularisation

Processualisation,

Rituals,

Rigid procedures

Regular formalities,

Symbolic repetitions

Explicit laws,

Categorisations,

Principles,

Rules and regulations

Cultural representations of fixed social reality

Continuity

Tradition

Genetic make-up

Social norms

Self-slighting

Dysfunctional self-monitoring

Self-disparagement

Unrealistic standards

Unchanging methodology.

Tradition