



INFLUENCE OF SOCIAL MEDIA ON AGRICULTURAL SCIENCE STUDENTS' ACADEMIC PERFORMANCE IN SOME SELECTED SECONDARY SCHOOLS IN JALINGO LGA, TARABA STATE, NIGERIA

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ABSTRACT

The study assessed the Influence of Social Media on Agricultural Science Students' Academic performance in some selected Secondary Schools in Jalingo Metropolis. The theory underpinning this work is the theory of social constructivism. The work adopted a correlational-survey design, and a sample size of 248 respondents was determined from a population size of 1242 using the proportionate sampling technique. 248 copies of a structured questionnaire were distributed. 246 were retrieved and used in the analysis. A total of 209 copies, of which the respondents agreed to using social media, were used in answering the research questions and analysing the hypotheses. Mean and standard deviation were used in answering the research questions, while the Person Product Moment Correlation and T-test were used in testing the hypotheses. Person product moment correlation was used in examining the relationship between the independent and dependent variables, while T-test was used to determine if the level of relationship is significant a 0.05 level of significance. The result of the analysis showed a significant relationship between the dependent and the independent variables. Based on the findings, the study recommended that agricultural science students should be better educated on the use of social media, how to effectively use it and ability to strike a balance between the use of social media and their studies.

KEYWORDS' Social media, Agricultural science, Academic, Performance

INTRODUCTION

The world is enjoying the improvements in communication technology which has improved communication through Information and Communication Technologies (ICTs). Present Technology in communication has transformed the world to a “Global village”. The revolution of the Internet has changed the process of sharing, storing and retrieving information anywhere in the world without distance barriers.

Through the Internet, many web technologies with regard to information sharing and communication have emerged, and one prominent technology is the social media (Mingle & Adams, 2015). The evolution of social media permeates all facets of society with positive and negative impacts. Social media has transformed and impacted communication, learning, research and education in general (Aghazamani, 2010).

Davis, Canche, Deil-Amen and Rios-Aguilar (2012), see social media as “web-based and mobile applications that allow individuals and organizations to create, engage, and share new user generated or existing content, in digital environments through multi-way communication”. Through this platform, people create personal or organisational profiles and share information. However, it is not limited to desktop or laptop computers but accessible through mobile applications and smart phones.

Social media usage has been met by mixed feelings in Nigeria. There have been calls to establish a working framework to regulate the usage, while some others believe it is an extension of the freedom of speech of individuals. A lot of people have argued about the benefits, whereas some emphasise the negative effects. The most important thing is that it has given people freedom to express themselves and voiceless now have a voice. Like most things, this new freedom can also be abused and at such is observed to be the fresh wine of freedom which is beginning to intoxicate (Odu, 2013). This is bound to affect other areas of life and the society at large.

There have been a lot of debates on the impact that social media has on society and specifically, its effect on education. Ito, Baumer, Bittanti, Boyd, Cody and Herr-Stephenson (2009) observed that teenagers use social media for some positive activities, which include joining groups they find interesting and contributing in various activities. Ahn (2011) believes that social media provide an avenue for youths to engage in groups that encourage them to improve in specific knowledge areas. Fishman, Lunsford, McGregor and Otuteye (2005) also

observed that students seem to develop various writings through various social media. On the contrary, Ogedebe, Emmanuel and Musa (2012) observed that the time students dedicate to social media affect their commitment to class activities which in turn affect their academic performance.

Banquil, Chuna, Leano, Rivero, Dianalan, Matienzo and Timog (2009) discovered a steady decline in students' grades as a result of social media usage.

The understanding of social media usage by secondary school students is vital in achieving performance in order to improve secondary school education in Nigeria. Although there are other factors standing in the way of academic performance, social media seems to be a major factor, considering its interest among secondary school students. There are many works on social media usage among students in Nigeria, but there exists a gap in knowledge on social media and its impact on academic performance, bearing in mind that social media is a fascination among secondary school students. Hence, there is need to investigate the relationship between social media and agricultural science students' academic performance in Jalingo metropolis, in order to determine students' attitude to social media and how it impact on their academics.

Agriculture is a deliberate efforts made by man to till the soil, cultivate crops and rearing of animals for food and other purposes. It also involves the sale of produce from agriculture, because production is incomplete until the produce gets to the final consumers. Agricultural science must be attended to vigorously if students are to perform well hence, the half attention given it must be discouraged.

Statement of the Problem

A fast growing challenge to the performance of students and the educational system in Nigeria is the use of social media. There is a deviation, distraction and divided attention between social media activities and students' academic work. Secondary school students in Nigeria are fascinated with social media and spend so much time on it. The researchers observed that students devote more attention to social media than they do to their studies.

Instead of focusing on their books, they spend time chatting and making friends on social media and this might definitely have influence on their academic performance. Performing well academically is a function of how effective ones reading and study habits are. Apart from the reading habit, another area that is of concern is the disruption of students' writing skills. Students now find it

difficult to write long essays and even when they write, most words will be abbreviated. Some students do not even know correct spellings for some words. Likewise, they have inculcated the habit of writing in shorthand. Abbreviations and incomplete sentences are mostly used while communicating via social media and they apply such in tests and examinations. For instance, okay is represented as k, because is replaced with bcos or cz, you are represented as u, why is y, etc. Based on these problems, the researchers are interested in examining the influence of social media on agricultural science students' academic performance in some selected Secondary Schools in Jalingo Metropolis, Taraba State.

Purpose of the Study

The purpose of the study is to examine the relationship between social media and agricultural science students' academic performance in some selected Secondary Schools in Jalingo Metropolis. The specific objectives of this study were:

4. To examine how the use of blogs influence students' academic performance.
5. To ascertain how the use of collaborative projects affect students' academic performance.

Research Questions

1. What is the relationship between blogs and students' academic performance?
2. How much influence do collaborative projects have on students' academic performance?

Hypotheses

1. Ho1 There is no significant relationship between blogs and students' academic performance.
2. Ho2 There is no significant relationship between collaborative projects and students' academic performance.

Significance of the Study

This study is significant to the teachers, parents and students. This study will help the teachers of the school to know the influence that social media has on their students, so as to assist them to enlighten and create awareness to the students

on the possible influence it has on them. The study is of significant to parents in the sense that they will know the possible effects these social media usage has on their children, to serve as watchdog to their children on the usage of the social networking site.

The study will enable the students of the secondary level so that they will be aware that, apart from the social benefits of this social networking site, using the sites more than necessary will pose possible dangers to their health. It will be relevant in assisting students in understanding the diversity of social media. It will provide relevant material for students and other researchers undertaking similar research. The study will help researchers with more information on the Influence of social media on student's academic performance.

Scope of the Study

The focus of this research work is to study the Influence of social media on the academic performance of agricultural science students. The study comprised of students in some selected secondary schools in Jalingo Metropolis.

LITERATURE REVIEW

The theory underpinning this research is the Theory of Social Constructivism. Constructivism is a combination of various speculations diffused into one frame. It is the digestion of both behaviouralist and psychological beliefs. The constructivist position keeps up that learning is a procedure of developing significance; it is the means by which individuals understand their experience (Caffarella & Merriam, 1999).

Social constructivism is a theory of knowledge in sociology and communication theory that inspects the learning and understandings of the world that are produced mutually by people. These theories expect that understanding and importance are produced in a joint effort with other people (Amineh & Asl, 2015). This theory was pioneered by Vygotsky (1978). He argues that the culture and context form understanding. Learning is not just an internal process, neither is it an inactive adjustment of behaviour, rather it is a social construct mediated by language through social discourse (McMahon, 1997).

The most vital components in this theory are

- i. the supposition that people legitimize their experience by making a model of the social world and the way it functions, and

- ii. the confidence in language as the most basic framework through which people develop reality (Leeds-Hurwitz, 2009).

Vygotsky (1978) states that psychological development happens first on a social level and after that it can happen inside the person. Learners can comprehend others and construct knowledge if they relate with conditions (Roth, 2000). To McMahon (1997), culture and setting in understanding what happens in the society and knowledge development in light of this comprehension are underlined in social constructivism.

Kim (2001) believes that social constructivism depends on particular assumptions about reality, knowledge, and learning.

- i. Reality: The first assumption of social constructivism is that reality does not exist ahead of time; rather it is developed through human action.
- ii. Knowledge: Social constructivism sees knowledge as a human item that is socially and culturally developed. People can make meaning when they associate with each other and their environment.
- iii. Learning: Social constructivism believes that learning is a social procedure. Learning does not happen just inside an individual, nor is it created by outside powers (McMahon, 1997).

Social constructivism, influenced by Vygotsky's (1978) work, proposes that knowledge is first developed in a social setting and is then internalized and utilised by people (Kim, 2001). Collaborative elaboration, the process of sharing personal perspective, brings about learners constructing understanding together and this development is not conceivable alone inside people (McMahon, 1997). Social constructivist researchers see learning as a dynamic procedure where learners should figure out how to find standards, ideas and realities for themselves, consequently they empower and advance the mystery and instinctive deduction in learners (Brown, 1994). As it were, social constructivist features that reality is not something that people can find since it does not pre-exist preceding their social development of it. Hence the theory is tandem with this work

METHODOLOGY

Research Design

This study examined the opinions of agricultural science students on the influence of social media on their academic performance. The study adopted

correlational-survey design. It sought the opinion of people through questionnaire administered to them in order to establish the relationship between social media and students' academic performance.

Area of the Study

This research work was conducted in Jalingo Metropolis because it is one of the biggest and most populous local government area in Taraba State, and is also the capital city of the state. Another factor that influenced the choice of the study area was because it is considered as an urban area and as such, access to the internet and social media is unfettered in contrast to rural areas. Also, it is assumed that students in the area are more exposed to social media and its various dimensions.

Population of the Study

The population of this study comprised of fifty-six (56) public secondary schools in Jalingo Metropolis. The respondents were SS11 students from these secondary schools. SS1 students were used for the study because they were considered to have had better understanding of the concept and hence this would reduce many response errors.

The corresponding student population was four thousand seven hundred and thirty-eight (4738) students. (Source: Post Primary School Board, Taraba State)

Sample and Sampling

The proportionate sampling technique was adapted for this research. The researchers selected 20% of the population in four (4) public secondary schools in Jalingo Metropolis. The secondary schools are Government Day Secondary School, Kofai; Government Day Secondary School, Mile Six; Kona Day Secondary School, Kona; and Community Secondary School, Nukai. A sample size of two-hundred and forty-eight (248) was determined from one thousand, two hundred and forty-two (1242) SS11 students in the four secondary schools.

Instrumentation

The instrument for the study was a structured questionnaire. The questionnaire was divided into two sections **Section A:** Social Media Usage, which includes the common types of social media used by students and the degree of usage. The degree of usage was rated on 5-scale of Always, Often, Sometimes, Rarely and Never.

Section B: Items to Answer the Research Questions, which were adapted to suit the purpose of the study. The variables investigated was rated on 4-point rating scale of strongly disagree (1), disagree (2), agree (3) and strongly agree (4).

Validation of Instrument

The instrument was validated by two (2) experts from measurement and evaluation. The validators examined the items of the instrument to ensure that the items were clear and in line with the objectives of the study, as well as the appropriateness of the instruments' items in terms of the language used. Their valuable observations and corrections were used to design the final versions of the instruments which were used for data collection for the study.

Reliability of Instrument

The instrument was trial tested on three (3) senior secondary schools which were outside the main study area. A sample of 30 senior secondary school students in senior school two (SS2) was randomly chosen from the three (3) selected schools. The internal consistency reliability of the instruments was estimated using Cronbach Alpha method based on the collected data. The estimates of the various clusters of the instruments were calculated as follows: cluster 1 = .60; cluster 2 = .62; cluster 3 = .86. The overall reliability of the instrument gave the reliability coefficient of 0.68.

Administration

The researchers collected the needed data through the use of questionnaire and its administration was at the various secondary schools. The administration of copies of the questionnaire was carried out by the researchers and some teachers in the schools assisted. To ensure that each school was represented, a total of 248 questionnaires was distributed to elicit responses from the students and 246 was retrieved on the spot by the researchers and those who assisted.

Method of Data Analysis

The data was analysed using statistical techniques. The mean and standard deviation of the responses to each item on the questionnaire were calculated and used to answer the research questions. A correlation analysis using Pearson Product Moment Correlation Coefficient was used to test the relationship between social media and students' academic performance. T-test was used to

determine if the level of relationship is significant. Analyses were done using Statistical Package for Social Sciences (SPSS) Version 21.0.

ANALYSIS. INTERPRETATION AND DISCUSSION OF FINDINGS

Research Question 1 and Hypothesis 1: What is the relationship between blogs and students' academic performance?

The answer to this research question is presented in Table 1 below:

Table 1: Blogs

Variables	Mean	Std. Deviation	Decision
Blogs			
It is my routine habit to use Naij.com in my daily life.	1.82	.780	Reject
I engage in academic discussions on blogs and that has improved my academic performance.	2.55	.740	Accept
Students share study materials on blogs that help other students who are weak in academics.	2.34	.988	Reject
I prefer to express my feelings and ideas in blogs.	2.67	.733	Accept
I use materials gotten from blogsites to complement what I have been taught in class.	1.64	.482	Reject

Source: Field Research,2022

Table 3 shows the mean at 1.82% and standard deviation is .780% for the statement "It is my routine habit to use Naij.com in my daily life" the decision rule is to accept the ≥ 2.5 and to reject the < 2.5 , hence it is therefore rejected, it also shows the mean of 2.55% and standard deviation of .740% for the statement "I engage in academic discussions on blogs and that has improved my academic performance" resulting in its acceptance, "Students share study materials on blogs that help other students who are weak in academics" produced a mean of 2.34% and standard deviation of .988% and was therefore rejected," I prefer to express my feelings and ideas in blogs" had a mean of 2.67% and standard deviation of .733% resulting in acceptance and finally, the data from the statement " I use materials gotten from blogsites to complement what I have

been taught in class” shows the mean is 1.64% while the standard deviation is .482%, hence it is rejected according to the decision rule.

Hypothesis 1. The decision rule is to reject the null hypothesis where $p \leq 0.05$ significant level and accept the null hypothesis where $p > 0.05$ the hypothesis was tested in the null form.

Hypotheses	Sig	Correlation	Extent of Relationship	Decision
HO ₁ <i>There is no significant relationship between blogs and students' academic performance</i>	0.000	-.264	Weak Negative relationship	Reject null hypothesis

Research Question 2: How much influence do collaborative projects have on students' academic performance?

The answer to this research question is presented in Table 2 below:

Table 2: Collaborative Projects

Variables	Mean	Std. Deviation	Decision
Collaborative Projects			
I like working with other students on group projects.	3.04	.308	Accept
I am motivated when I participate in online forums.	2.51	.581	Accept
Engaging in academic forums reduces my rate of understanding.	1.93	.286	Reject
I solely rely on Wikipedia to do my assignments without consulting other sources.	3.75	.803	Accept
The usage of Wikipedia for research has helped improve my grades.	3.78	.552	Accept

Source: Field Research, 2022

Table 2 shows the statement “I like working with other students on group projects” produced a mean of 3.04% and standard deviation of .308% and in

accordance with the decision rule, this was accepted, “I am motivated when I participate in online forums” produced a mean of 2.51% and standard deviation of .581% hence it was accepted, “Engaging in academic forums reduces my rate of understanding” produced a mean of 1.93% with standard deviation of .286% and was therefore rejected, “I solely rely on Wikipedia to do my assignments without consulting other sources” produced a mean of 3.75% and standard deviation of .803% resulting in its acceptance, finally the statement “The usage of Wikipedia for research has helped improve my grades” produced a mean of 3.78% and standard deviation of .582%, hence resulting to the decision accepted.

Hypothesis 2

The decision rule is to reject the null hypothesis where $p \leq 0.05$ significant level and accept the null hypothesis where $p > 0.05$. the hypothesis was tested in the null form.

Hypotheses	Sig	Correlation	Extent of Relationship	Decision
H_{O_2} <i>There is no significant relationship between collaborative projects and students' academic performance</i>	<i>0.000</i>	<i>.297</i>	Weak Positive relationship	Reject null hypothesis

Summary of Major findings.

- 1, The outcome of the analysis on the relationship between blogs and students' academic performance shows a weak negative relationship between the two variables.
2. From the analysis on the relationship between collaborative projects and students' academic performance, a positive relationship exists between the two variables.

Discussion of Findings

The analysis revealed that there is a significant relationship between the dimensions of social media and students' academic performance, as well as age and the use of social media.

Blogs and Students' Academic Performance

The outcome of the analysis on the relationship between blogs and students' academic performance shows a weak negative relationship between the two variables. This contradicts the work of Yang and Chang (2012) that blogs are associated with positive attitudes towards academic achievement in course subjects and in online peer interaction. They also observed in their study that students showed positive motivation to learn from peer work, regardless of whether blogs were interactive or solitary (Yang & Chang, 2012). Hall and Davison (2007) also observed that composing blog comments involves stepping back, reflecting, and analysing, which enables individuals to become more thoughtful and mindful of their work. However, blogs can create avenue for harassment and bullying (through blog postings); libel suits; others can reuse a person's information for criminal or illegal acts (Valie, 2006).

Collaborative Projects and Students' Academic Performance

From the analysis on the relationship between collaborative projects and students' academic performance, a positive relationship exists between the two variables. Al-Rawahi and Al-Mekhlafi's (2015) investigation on the effect of online collaborative project-based learning on the language performance and attitudes of intermediate level students at the College of Applied Sciences in Oman discovered that the main positive effect of online collaborative project-based learning was clear on students' writing skill. Collaborative online learning does benefit from scaffolding that supports collaborative planning and feedback from peers (Hume, 2015). Research on collaborative project shows that technology enables the development of critical thinking skills when learners utilize technology tools to prepare, present and publish their projects, particularly with collaborative learning techniques (Cradler, McNabb, Freeman & Burchett, 2002) skill.

Conclusion

The result found a significant relationship between the dimensions of social media and students' academic performance, and blogs has a significant influence on the use of social media.

Recommendations

From the research, analysis and conclusions above, the followings recommendations are put forward:

1. Students should be better educated on the use of blogs and its effect on their performance. They should be advised on curtailing the use and its intended purpose to avoid dwindling academic performance.
2. Students should be encouraged to participate in collaborative projects. This will help them share ideas on various educational topics.

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