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Students' Perception and Their Attitudes Toward the Use of Google Classroom in Osun State University

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Keywords	Abstract
perception, attitude, ict, google classroom, students.	The study investigated students' perception and their attitudes toward the use of Google Classroom in Osun State University. The study is a descriptive study; a sample of 360 students from in Osun State University formed the participants for the study. The instrument for data collections was inventory and questionnaire and was structured by the researcher for data collection and reliability level was 0.78. Data collected were analyzed using mean, descriptive statistics (frequency count and simple percentage), t-test and correlation. The findings of the study revealed that students' perceived the usefulness of Google Classroom for learning process in Osun State University, students have positive attitude towards the use of Google Classroom for learning in Osun State University, difficulties associated with the use of google classroom in Osun State University as lack of ICT tools in campus, epileptic electricity power supply, cost of data, lack of class management in google classroom, learning schedule do not allow for google classroom for learning, insufficient number of ICT facilities, insufficient Internet bandwidth or speed, amongst others and there is no significant difference in the students' perception of the use of Google Classroom for learning in Osun State University differ based on student's gender. The following recommendations were made such as: academic institutions should apply Google Classroom as it will assist both students and lecturers to connect, work together, create assignments, grade students and post lecture notes, academic institutions should continue to promote and provide quality ICT infrastructures upgraded computer units, laptops, tablets, and most importantly school-wide wifi access for all the stakeholders, training should also be given to facilitators of learning and academic institutions are encouraged to make Google Classroom an avenue to promote e-learning among the students.

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INTRODUCTION

Since education was first institutionalized in the 17th century, it has over the years experienced substantial evolution. In the 21st century, education has continued to evolve, it's now being shaped by modern advances in information and communication technology, or ICT. There are several ways in how education can use ICT beneficially. ICT can be made part of the curriculum, used as a means to deliver instructions, incorporated to aid instructions, and used to make the overall learning process an improved experience. ICT's integration into the educational system has led to positive effects (Adeyemi, 2020). Classrooms with technology-assisted instructions can make learning and teaching not only more effective but also enjoyable. These classrooms make students more motivated to learn about the subjects.

Information and communication technology (ICT) is increasingly becoming a bigger and more important part of students' everyday lives (Lonn & Teasley, 2019). With the help of ICT, students and teachers can more easily handle assignments and communicate across time and space (Chen, 2017). A significant trend in schools has been to implement the so-called Google Classroom, which are used as a common platform where students and lecturers can interact digitally. It appears most universities in Nigeria have not taken so much advantage of the Information and Communication Technology (ICT) as Osun State University, (UNIOSUN). The University combined traditional learning paradigms with visual-assisted tools and teaching materials (Adeola, 2020). Being the term with close proximity to Google Classroom is still at lowest ebb in Nigeria while academic institutions in developed countries adopt Google Classroom. Thus, despite its global usage in support of teaching and learning in higher education, Google Classroom remain unpopular in this country. It is even inconceivable that Google Classroom is alien to people in academia and students as well in Nigeria. This may be a reflection of level of adoption and utilization of Google Classroom in Nigerian higher education institutions. Google Classroom promotes learning by breaking the strong wall of dependence on time and space in the acquisition of knowledge in the traditional schooling system.

In other words, technological tools have destroyed the geographical gap through virtual classrooms. Conventional campus learning, which has been our traditional system in Nigeria since the introduction of Western education, remains very popular to the country. Osun State University administers courses through its six campuses, Osogbo, Ejigbo, Ifetedo, Ikire, Okuku and Ipetu-Ijesa, using the technological tools such as Google Classroom and LMS. The convenience and flexibility of its programmes using Google Classroom have endeared people to Uniosun. Several public servants and private individuals who do not have sufficient time to engage in conventional studies made good use of the opportunity of the Google Classroom.

Google Classroom is a free application designed to assist students and teachers connect, working together, organize and create assignments, it enables learning to be paperless. As a Digital Tool, Google Classroom is accessible only to users with Google Apps for Education (GAFE). This is a free collaborative set of tools, these tools include web tools like Google Docs, Google Drive, Gmail, and more. All users will GAFE account, have access to these web tools. Google Classroom can be used at any grade (basic, post basic and tertiary) levels, but this depends on the teachers' and students' competence (Bell, 2015). Therefore, Google Classroom can be defined as a Digital Tool that enables students to attend classes online. Teachers work together with their students without meeting face to face. Teachers can post materials for their students through this medium, they can also make announcements and create assignments and quizzes for students to complete, submit, and save online either in a web browser or on the Google Classroom App. Digital Tools stress on learners continuing learning activities through digital tools, which include desktop computers, notebook computers, tablet computers, and smartphones (Keane, 2019). These tools allow learning to take place without teachers and students meeting face-to-face.

Adeola (2020) considered the following as the benefits of Google Classroom. They include: allowing lecturers to post lecture notes, create assignments, make announcements, and set due dates for assignments, lecturers can create different groups in one classroom, and then give each group a different assignment, thus making the class active and interesting, lecturers can easily identify students that miss class assignments and students that submit their assignments late, it is flexible, enabling teachers to extend due dates so that all students can submit their assignments, similarly, it allows teachers to update or review students' grades, previous posts made by lecturers can be reused and then posted to the same group or to a different group, lecturers can also be added in the classroom, they can as well grade students' assignments

The role of google classroom in teaching and learning has become one of the most important and widely discussed issues in contemporary education policy. Google classroom is an important factor in this information age so much so that when properly adopted and applied holds a great promise to improving teaching and learning in educational institutions. It is an important instructional tool to facilitate the transfer of many types of information and an effective means of communication in schools and colleges. Google Classroom has been manifested in one-to-one (teacher-to-student), one-to-many (teacher-to-group) and many-to-many (group-to-group) approaches to instruction (Webb 2014). Google Classroom is the application of a whole range of technologies involved in information processing and electronic communications, such as computers, internet, e-mail, computer software, satellite, mobile communication gadgets, and other allied electronic devices for dissemination of knowledge and information.

However, despite the numerous advantages of google classroom, some factors prevent its adoption and usage in higher education. Becker (2017) identified unreceptive attitudes of instructors and methods of teaching. Instructors' and students' lack of relevant ICT skills were found also. Some student factors also include restricted access and infrastructural facilities and time constraint (Contrado, 2016). Based on the afore-mentioned, the present study therefore interested in examines students' attitude towards the use of google classroom among Osun State University.

Google classroom in several countries of Africa, Nigeria inclusive, is still evolving. This is not to say that efforts had not been made to develop ICT policy to facilitate its adoption, usage and full implementation particularly in higher education institutions. Utilization of google classroom and technologies enhances motivation, help recall previous learning, and provide new instructional stimulus for the learners. However, despite the numerous advantages of google classroom, some factors prevent its adoption and usage in higher education. In addition, many students do not have the required skills and competency in the utilization of google classroom for impacting courses in Osun State University. Based on the above observations, there is need to further dig deep into the students' perception of and attitudes toward the use of Google Classroom in Osun State University

METHODS

Survey research design was adopted for this study. The population for this study comprised all students in Osun State University. The researcher employed simple random sampling technique to select three campuses (Osogbo, Ikire and Ipetu Ijesa campus). Simple sample ensures the adequacy probability that every subject has the equal chances of being selected in all. The sample was further used to select One hundred and twenty (120) students in 3001 and 4001 from the selected campuses making a total of three hundred and sixty (360) respondents.

A Validated Inventory and Questionnaire was used for the study titled 'Students' Perception their and Attitudes toward the Use of Google Classroom in Osun State University' (SPAUGCOSU). This is a type of research instrument that gathers data of a large sample. The instrument consisted of two sections (A and B); section A elicit responses on the demographic data of the respondents while section B is sub- divided into three with relevant items that were used to elicit relevant responses from the respondents in line with the research questions.

The Inventory and questionnaire were validated by an educational technologist and an expert in test construction. This was to determine the effectiveness and the appropriateness of the instrument, to reduce ambiguity in the contents and structures of the sentences used, and to establish construct validity. The validator's corrections and modifications were used to improve the quality of the instrument.

The instrument was subjected to the test-retest method for three weeks to ascertain the internal consistency of the instrument. It was administered to twenty (20) respondents who were not part of the study sample after which the instrument was subjected to Person Product Moment Correlation (PPMC) analysis to establish the reality of the instrument. A reliability coefficient of 0.78 was obtained.

The researcher distributed the research instrument to the selected number of students. The completed instrument was collected for analysis. Data collected was subjected to descriptive statistics (frequency count and simple percentage), t-test and correlation

RESULT AND DISCUSSION

Demographic Information

Table 1. Respondent Distribution by Gender (N = 360)						
	<u>F</u>	%				
Male	176	48.9				
Female	184	51.1				
Total	360	100.0				

Table 1. presents the gender distribution of respondent. It shows that 48.9% are male while 51.1% are female.

Analyses Of Research Questions

Research Question 1: What is the perception of students' of the use of Google Classroom for learning process in Osun State University?

Table 2. Analysis of the perception of students' of the use of Google Classroom for learningprocess in Osun State University (N = 360)

S/N	ITEMS	RESPONSE									
		Strongly		Agree		T In de si de d		Discores		Str	ongly
		Agr	ee	A	gree	Undecided		Disagree		Disagree	
		F	%	f	%	F	%	F	%	f	%
1	Google classroom provide students with time and place	260 72.2	00/0	71 19	.7%	8	,	11 3.1	0/2	10 2.8	0/_
	flexibility	12.2	270	17	.170	2.27	U	5.1	. 70	2.0	/0
2	Google classroom have significant impact on increasing students'	136	007	16		27	,	16	107	14	07
	interest towards learning	37.8	0 %0	46	.4%	7.5%	0	4.4	£%0	3.9	% 0

3	Google classroom improve	171	102	53	23	11
	quality education	47.5%	28.3%	14.7%	6.4%	3.1%
4	Google classroom make student to learn on their own without attending lecture	163 45.3%	107 29.7%	43 11.9%	32 8.9%	15 4.2%
5	Google classroom make students to study often due to the	180	91	44	26	19
	availabilities of the materials online	50.0%	25.3%	12.2%	7.2%	5.3%
6	Google classroom has a competitive advantage on the interest of students towards learning	172 47.8%	111 30.8%	34 9.4%	31 8.6%	12 3.3%
7	Students are lazy to study as a result of availability of materials online	230 63.9%	70 19.4%	25 6.9%	23 6.4%	12 3.3%
8	Google classroom promotes individual learning	137 38.1%	158 43.9%	34 9.4%	20 5.6%	11 3.1%
9	I use goggle classroom to store, send, manipulate and read information	152 42.2%	96 26.7%	70 19.4%	26 7.2%	16 4.4%
10	Student-lecturers used goggle classroom efficiently	156 43.3%	105 29.2%	31 8.6%	50 13.9%	17 4.7%

Table 2 presents the analysis of the perception of students' of the use of Google Classroom for learning process in Osun State University. The items the respondents agreed with were; Google classroom provide students with time and place flexibility (91.9%), Google classroom have significant impact on increasing students' interest towards learning (84.3%), Google classroom improve quality education (75.8%), Google classroom make student to learn on their own without attending lecture (75.0%), Google classroom make students to study often due to the availabilities of the materials online (75.3%), Google classroom has a competitive advantage on the interest of students towards learning (78.6%), Students are lazy to study as a result of availability of materials online (83.3%), Google classroom promotes individual learning (82.0%), they use google classroom to store, send, manipulate and read information (68.9%), Student-lecturers used google classroom efficiently (72.5%).

Research Question 2: What is the attitude of students towards the use of Google Classroom for learning in Osun State University?

Table 3. Analysis of the attitude of students towards the use of Google Classroom for learningin Osun State University (N = 360)

S/N	ITEMS	RESPONSE									
		Stro	ngly	٨	roo	Und	adidad	ъ	aroo	Stro	ongly
		Agre	ee	Ag	ree	Undecided		Disagree		Disagree	
		F	%	f	%	F	%	F	%	f	%
1	Availability of online materials encourages student's use of google classroom for learning	218 60.6	%	99 27	.5%	17 4.7%	1	11 3.1	%	15 4.2	%
2	Google classroom is too expensive and cumbersome for learning	103 28.7	%	19: 53	3 .6%	28 7.8%	ı	21 5.8	8%	14 3.9	%

3	Speedy network encourages students use of google classroom	172 47.8%	69 19.2%	83 23.1%	27 7.5%	9 2.5%
4	Free Wi-Fi make students have access to google classroom and encourage its usage	111 30.9%	134 37.2%	53 14.7%	41 11.4%	21 5.8%
5	Availability of ICT centre on campus makes students have access to google classroom	133 36.9%	111 30.8%	51 14.2%	32 8.9%	33 9.2%
6	google classroom usage make student to learn on their own without attending lecture	139 38.6%	138 38.3%	33 9.2%	32 8.9%	18 5.0%
7	Students solve assignments through the use of google classroom	143 39.7%	116 32.2%	58 16.1%	22 6.1%	21 5.8%
8	Student update educational materials through the use of google classroom	133 36.9%	122 33.9%	46 12.8%	46 12.8%	13 3.6%
9	goggle classroom encourages	129	133	41	40	17
10	individual learning Students prefer lecturers note than google classroom	35.9% 141 39.2%	37.0% 111 30.8%	11.4% 42 11.7%	11.1% 33 9.2%	4.7% 33 9.2%

Table 3 presents the analysis of the attitude of students towards the use of Google Classroom for learning in Osun State University. The items the respondents agreed with were; availability of online materials encourages student's use of goggle classroom for learning (88.1%), Google classroom is too expensive and cumbersome for learning (82.3%), Speedy network encourages students use of google classroom (67.0%), Free Wi-Fi make students have access to google classroom and encourage its usage (68.1%), availability of ICT centre on campus makes students have access to google classroom (67.7%), google classroom usage make student to learn on their own without attending lecture (76.9%), Students solve assignments through the use of google classroom (70.8%), google classroom encourages individual learning (72.9%), Students prefer lecturers note than google classroom (70.0%).

Research Question 3: What is the perception of student of difficulties associated with the use of google classroom in Osun State University?

	classfoom in Osun State University ($N = 360$)								
S/N	ITEMS	RESPONSE							
		Strongly	Agroo	Undecided	Disagree	Strongly			
		Agree	Agree	Ullueclueu	Disagree	Disagree			
		F %	F %	F %	F %	F %			
1	Lack of ICT tools in my campus	213	68	21	51	7			
		59.2%	18.9%	5.8%	14.2%	1.9%			
2	Epileptic electricity power supply	128	161	46	23	2			
	affect the use of online learning	35.6%	44.7%	12.8%	6.4%	0.6%			
3	Cost of data deterred the use	158	129	52	19	2			
		43.9%	35.8%	14.4%	5.3%	0.6%			
4	Misinformation is mostly spread	140	138		50	32			
	through online learning	38.9%	38.4%		13.9%	8.9%			

 Table 4. Analysis of the perception of student of difficulties associated with the use of google classroom in Osun State University (N = 360)

5	Lack of class management in	163	132	39 10 00(22	4
	google classroom	45.3%	36.7%	10.8%	6.1%	1.1%
6	learning schedule do not allow for	131	158	54	16	1
	google classroom for learning	36.4%	43.9%	15.0%	4.4%	0.3%
7	Insufficient number of ICT	164	120	51	23	2
	facilities discourage their use	45.6%	33.3%	14.2%	6.4%	0.6%
8	Insufficient Internet bandwidth or	123	140	51	44	1
	speed hinders the use	34.2%	38.9%	14.2%	12.2%	0.3%
9	Google classroom software is not	176	115		42	27
	readily available	48.9%	31.9%		11.7%	7.5%
10	Fear of making mistakes deterred	170	93	56	36	5
	students use	47.2%	25.8%	15.6%	10.0%	1.4%

Table 4 presents the analysis of the perception of student of difficulties associated with the use of google classroom in Osun State University. The items the respondents agreed with were; Lack of ICT tools in my campus (78.1%), Epileptic electricity power supply affect the use of online learning (80.3%), Cost of data deterred the use (79.7%), Misinformation is mostly spread through online learning (77.3%), Lack of class management in google classroom (82.0%), learning schedule do not allow for google classroom for learning (80.3%), Insufficient number of ICT facilities discourage their use (78.9%), Insufficient Internet bandwidth or speed hinders the use (73.1%), google classroom software is not readily available (80.8%), fear of making mistakes deterred students use (73.0%).

Research Question 4: Does students' perception of the use of Google Classroom for learning in Osun State University differ based on student's gender?

Table 5. Summary of t-test Analysis to know if the students' perception of the use of Google

 Classroom for learning in Osun State University differ based on student's gender

	Ν	Mean	S.D	Т	Df	Sig. (2-tailed)	Remark
							Not Significant
Male	176	18.65	7.89				
				0.571	357	0.569	
Female	184	19.10	6.91				
remare	104	19.10	0.91				

Table 5 presents the analysis to know if the students' perception of the use of Google Classroom for learning in Osun State University differ based on student's gender. The result reveals that there is no significant difference in the students' perception of the use of Google Classroom for learning in Osun State University differ s based on student's gender (t = 0.571, df = 298, p > 0.05). This implies that male students' perception of the use of Google Classroom for learning in Osun State University is difference of the use of Google Classroom for learning in Osun State University differ s based on student's gender (t = 0.571, df = 298, p > 0.05). This implies that male students' perception of the use of Google Classroom for learning in Osun State University is different from female.

Summary of Findings

Based on the analysis of the findings above, the following were deduced:

The findings revealed that students' perceived the usefulness of Google Classroom for learning process in Osun State University

The findings revealed that students have positive attitude towards the use of Google Classroom for learning in Osun State University

The findings revealed the difficulties associated with the use of google classroom in Osun State University as lack of ICT tools in campus, epileptic electricity power supply, cost of data, lack of class

management in google classroom, learning schedule do not allow for google classroom for learning, insufficient number of ICT facilities, insufficient Internet bandwidth or speed, amongst others.

More so, the findings revealed there is no significant difference in the students' perception of the use of Google Classroom for learning in Osun State University differ based on student's gender

Discussion of Findings

Research Question One

Results on Research question one revealed that majority of students agreed that google classroom provide students with time and place flexibility, google classroom have significant impact on increasing students' interest towards learning, google classroom improve quality education, among others. This finding is interesting because is in consonance with the finding of Webb (2014) found that roles of google classroom can support and change teaching and learning process. However, the study of Bell (2015) disagreed with the result of the findings that university students are not comfortable to use google classroom.

Research Question Two

Research question two revealed that majority of students agreed that availability of online materials encourages student's use of google classroom for learning, speedy network encourages students use of google classroom, Free Wi-Fi make students have access to google classroom and encourage its usage, among others. The findings is in line with the study of Henry (2015) found that Google Classroom motivates students to learn on their own. However, the study of Bright (2017) found that google classroom does not encourage individual learning

Research Question Three

Research Question Three revealed the difficulties associated with the use of google classroom in Osun State University as sack of ICT tools in my campus, epileptic electricity power supply affect the use of online learning, cost of data deterred the use, misinformation is mostly spread through online learning, among others. The findings corroborate Isah (2016) found that insufficient bandwidth, lack of constant power supply, were the major factors inhibiting the use of google classroom. However, the study of Henry (2015) lack of ICT knowledge by students can be attributed to the factors associated with the use of google classroom.

Research Question Four

Research Question Four revealed there is no significant difference in the students' perception of the use of Google Classroom for learning in Osun State University differ significantly based on student's gender. This is in tandem with the studies by Bright (2017), found that there is no significant difference in the students' perception of the use of google classroom for learning based gender. However, the findings of Chen (2017) found that there is significant difference between male and female towards the use of google classroom.

CONCLUSION

In this research, a result of the survey of students' perception of and attitudes toward the use of Google Classroom in Osun State University. A total of 360 students from 3001 and 4001were selected from three campuses in Osun State on random basis served as the participants. A Validated Inventory and Questionnaire was used for the study for data collection. The study revealed that students' perceived the usefulness of Google Classroom for learning process in Osun State University, students

have positive attitude towards the use of Google Classroom for learning in Osun State University, difficulties associated with the use of google classroom in Osun State University as lack of ICT tools in campus, epileptic electricity power supply, cost of data, lack of class management in google classroom, learning schedule do not allow for google classroom for learning, insufficient number of ICT facilities, insufficient Internet bandwidth or speed, amongst others and there is no significant difference in the students' perception of the use of Google Classroom for learning in Osun State University differ based on student's gender. In the light of the above, it is recommended that:

- 1. Academic institutions should apply Google classroom as it will assist both students and teachers to connect, work together, create assignments, grade students and post lecture notes.
- 2. Academic institutions should continue to promote and provide quality ICT infrastructures upgraded computer units, laptops, tablets, and most importantly school-wide wifi access for all the stakeholders.

REFERENCES

- Adeola, O. (2020). Attitude towards the Google Classroom among University Students: A Case Study. Ife Online Journal of Social Science Education, 14 (3), 123-134.
- Adesoji, F. (2013). Making the most of the discussion boards in the ESL classroom. *TESOL Journal*, 3(2), pp. 27-29.
- Adeyemi, M. (2020). Students' Attitudes towards the Use of Google Classroom in evaluation. 11(5), 195-202.
- Becker (2017) Integrated Learning Design Based on Google Classroom to Improve Student Digital Literacy, 2019 5th International Conference on Education and Technology (ICET), Malang, Indonesia: 3(4). 108-111.
- Bell, J. (2015). Google Classroom for mobile learning in higher education: Modelling the initial perceptions of students. Education and Information Technologies, 9(8).1-25.
- Bright, S. A. (2017) User Acceptance of Computer Technology: A Comparison of Two Theoretical Models. Management Science, 35(8).
- Chen, I. (2017). Attitudes of Faculty Staff towards Using the Blackboard E-Learning Management System in Teaching the Courses. Journal of Research in Curriculum, Instruction and Educational Technology, 4(6), 1-29.
- Contrado, J. (2016). Student Perceptions of Using a SCORM-Compliant Learning Object (SCLO) for Learning in an ODL Environment. Asian Association of Open Universities Journal, 9(1), 47-56.
- Henry, M. (2015). Survey of ICT and Education in Africa: A Summary Report, Based on 53 Country Surveys, Washington, DC. United States.
- Isah, J. (2016). ICT Development at African Universities: The experience of the PHEA educational technology initiative.
- Keane, Y. (2019). Factors affecting the Adoption and Meaningful Use of Social Media: A Structural Equation Modeling Approach. International Journal of Information Technology and Language Studies, 2(3).
- Lonn & Teasley (2019). Students and Educators Attitudes towards the use of Google Classroom: Gender and Smartphone ownership Differences. 13(1), 127.
- Webb, D. (2014). Attitudes of Google Classroom students towards using computers in learning English. English for Specific Purposes World,13(37), 1-20.