

## **PERCEPTION OF STUDENTS ON THE USE OF GOOGLE CLASSROOM DURING COVID-19 PANDEMIC**

**Rosemary Oluwayemisi Ahiakwo PhD**

Department of Home Economics, Federal College of Education (Technical), Omoku. Rivers State, Nigeria.

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### **Abstract**

The study is a descriptive survey research designed to examine perception of students on the use of Google classroom for teaching and learning during COVID-19 pandemic. The area of the study is Federal College of Education (Technical), Omoku. The population of the study comprises of 13 students from the Food Service course and 18 students from Nutrition course, in the department of Home Economics, School of Vocational Education. A sample of 30 students were used for the study. Simple random sampling technique was applied in the selection process. The Instrument used for the study to collect data from respondents was a structured questionnaire titled Perception of students on the use of Google classroom during COVID-19 pandemic with a 30 item questions. Reliability co-efficient of 0.72 was obtained. Mean Score and t test were the statistical tools used for the study. It was found that Google classroom make online learning exciting and it creates creativity and critical thinking and makes students highly motivated. Based on the findings, the researcher recommended that Teachers should use Google classroom tool to bring about paperless communication in the classroom.

**Keywords:** Google Classroom, Collaboration, Paperless communication, Information and communication technology, COVID-19 Pandemic

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### **Introduction**

Nowadays, technology is growing rapidly. The development has been in almost all sectors. Economics, Politics and Education have applied technology. It can be predicted that many people have been addicted with information and communication technology (ICT). Information technology is one of the many devices used by managers in anticipating changes (Laudon & Laudon, 2014). With this development, Information Technology that can be used to facilitate other daily activities ranging from sending messages, assignments and communicate online, search for and buy many things by online, order tickets and modes of transportation online and many others. Thus, many aspects of human life are influenced by technological developments where one of them is related to the learning process in the field of education. The concept of education has undergone a paradigm shift, in recent times, from teacher-centric to learner or learning-centric. Earlier, teachers played the role of knowledge providers, but now their role has expanded. There is a lot of emphasis on integrating technology in the classroom through innovative teaching strategies that focus on enabling students to achieve the desired learning objectives (Hwang, Lai, & Wang, 2015). Technology facilitates increase in students' engagement (Northey, Bucic, Chylinski, & Govind, 2015) which is critical to obtain the desired learning objectives (Bolkan, 2015).

The current teaching and learning process is different from the past where classes are held directly (face to face). This traditional method of teaching is teacher-centered where teachers use visual aids in the form of presentation of slides of whiteboards and visualizer. Learning activities in the computer laboratory involves four major types of practical works: exercises, experiences, demonstrations and investigations (Sukmawati, 2019). Hence, the teachers need to be able to use the various technologies and also design, compile, guide and assess students' projects. Resources and services need to be coordinated by colleagues and other professionals. This new role is challenging and requires the need for a different approach to teacher professional development. The isolation of typical teachers is formed with each other and the outside world must be eliminated given this very different form of education. As the world is being developed with new technologies, discovering and manipulating new ideas and concepts of online education are changing rapidly. In response to these changes, many countries, states, institutions, and organizations have been working on strategic plans to implement online education.

One of the ways that can be used to do learning process online is to use google classroom. Google classroom is a free collaboration tool for teachers and students. Teachers can create an online classroom, invite students to the class, then create and distribute assignments. Within the google classroom, students and teachers can have conversations about the assignment and teachers can track the student's progress (Vangile, 2018). Google classroom's purpose is to facilitate paperless communication between teachers and students and streamline educational workflow. Classroom allows teachers to create classes, post assignment, organize folders, and view work in real-time. One of the best features is that classroom is fully integrated with all other google apps, so students and teachers can share information with one another instantaneously instead of having to hop through various hurdles to submit work. Google classroom offers a one-stop platform for facilitating digital production, workflow, and communication between teachers and students. Like other google apps, it is available for free to schools, has no ads, and never uses students or teacher content for advertising purposes (Catapano, 2018).

### **Statement of the study**

Fortunately, there are technology solutions out there that can help to address this skill gap before it becomes an economic crisis. In classrooms where students and teachers have access to computers and the Internet, Google Classroom is changing the way students learn for the better. At the same time, misconception and myths related to the difficulty of teaching and learning, technologies available to support online instruction, the support and compensation needed for high-quality instructors, and the need of online students create challenges for such vision statement and planning document. COVID-19 pandemic forced the education sector to make a learning system change from face to face to online to break the chain of distribution of COVID-19. This requires lecturers and students to adapt to changes in how to deliver content using online learning. The google classroom application was chosen in teaching and learning because the application allows the creation of classrooms online. This will help to move the passive students from a traditional face to face classroom into a more engaging and interactive classroom environment.

### **Aim and objectives of the study**

The study is to investigate Perception of students on the use of Google Classroom for teaching and learning during COVID-19 pandemic. Specifically, the study intends to

1. Examine the perceived usage of google classroom for improved students learning in the Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.
2. Determine the attitude of students towards the use of Google Classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.
3. Investigate the challenges students face while using Google classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

### **Research Questions**

Based on the aim and objectives of the study the following research questions were drawn;

1. What is the perceived usage of Google Classroom for improved students learning in the in the Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.
2. What are the attitudes of students using Google Classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.
3. Are there challenges students are facing while using Google classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

### **Hypotheses**

Based on the specific objectives and research questions, the following hypotheses are raised for the study

HO<sub>1</sub> There is no significant difference between students on the use of google classroom for improved learning in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

HO<sub>2</sub> There is no significant difference between students' attitude towards using google classroom for the first time of Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

HO<sub>3</sub> There is no significant difference between the students in their challenges using google classroom for the first time of Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

### **Methodology**

The study is a descriptive survey research designed to examine perception of students on the use of google classroom for teaching and learning during COVID-19 pandemic. The area of the study is Federal College of Education (Technical), Omoku. The population of the study comprises of 13 students from the Food Service course and 18 students from Nutrition course, in the department of Home Economics, School of Vocational Education. A sample of 30 students were used for the study. Simple random sampling technique was applied in the selection process. The Instrument used for the study to collect data from respondents was a structured questionnaire titled Perception of students on the use of Google classroom during COVID-19 pandemic with a 30 item questions. Reliability co-efficient of 0.72 was obtained. Mean Score and t test were the statistical tools used for the study.

## Results and Findings

**Research Question 1:** What is the perceived usage of Google Classroom for improved students learning in the in the Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

**Table 1: Perceived usage of Google Classroom for improved students learning**

Items	SA	A	D	SD	Mean	Standard Deviation	Total No of Respondents
Usage of Google Classroom					X		
1. Google Classroom helps students organize their assignment	27	3	-	-	3.90	0.30	30
2. It boosts collaboration	18	12	-	-	3.60	0.49	30
3. It fosters better communication between teacher and students	17	10	3	-	3.46	0.67	30
4. It gives students feedback	22	8	-	-	3.73	0.44	30
5. It creates motivation	16	14	-	-	3.53	0.49	30
6. It saves time	25	5	-	-	3.83	0.37	30
7. It keeps materials and resources organized in the classwork page	20	10	-	-	3.66	0.47	30
8. It eliminates distraction by answering mode	19	11	-	-	3.63	0.48	30
9. It sparks creativity and creates endless opportunities for learning	21	9	-	-	3.43	0.51	30
10. It provides announcement and news to remind students	6	24	-	-	3.20	0.40	30
<b>Grand Mean</b>					<b>3.27</b>	<b>0.46</b>	

Entries in Table 1 above show that students accepted all the item as their perceived usage of Google classroom during COVID-19 pandemic. This is because the entire item mean was above the criterion mean of 2.50. Therefore, the table revealed that Google classroom platform helps students organize their assignment and it fosters better communication between teachers and students.

**Research Question 2:** What are the attitudes of students using Google Classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

**Table 2: Attitude of students towards usage of Google Classroom**

Items	SA	A	D	SD	Mean X	Standard Deviation	Total No of Respondents
<b>Attitude of students towards usage of Google Classroom</b>							
1. Research materials and books have created better learning opportunity in Google Classroom	21	4	3	2	3.46	0.92	30
2. Having a new educational experience has changed the way I learn	20	4	5	1	3.40	0.88	30
3. Students are highly motivated by the usage of Google Classroom	18	12	-	-	3.50	0.61	30
4. It has improved my information Communication technology skills	24	3	2	1	3.60	0.74	30
5. Google Classroom makes online learning exciting	24	4	3	-	3.67	0.64	30
6. Google Classroom is a very effective app for teaching and learning purposes	22	3	3	2	3.50	0.92	30
7. It creates productivity	20	5	4	1	3.46	0.84	30
8. It creates creativity and critical thinking skills	24	3	1	2	3.63	0.93	30
9. There is no invasion of privacy of educational materials and grades	20	5	3	2	3.43	0.91	30
10. Google classroom has brought great collaboration between teachers and students	23	3	3	1	3.60	0.80	30
<b>Grand Mean</b>					<b>3.52</b>	<b>0.82</b>	

Entries in Table 2 shows that students accepted all the item as their attitude towards using Google Classroom for the first time. This is because all the item mean was above the criterion mean of 2.50. Therefore, the table revealed that Google classroom make online learning exciting and it creates creativity and critical thinking and makes students highly motivated.

**Research Question 3:** Are there challenges students are facing while using google classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

**Table 3: Challenges students face while using google classroom**

Items	SA	A	D	SD	Mean X	Standard Deviation	Total No of Respondents
<b>Challenges students face while using Google Classroom</b>							
1. Google classroom does not allow access from multiple domains.	17	8	5	-	3.40	0.75	30
2. Google classroom has not yet integrated with google calendar which may cause some problems with organizing material and assignment deadlines	14	15	1	-	3.43	0.55	30
3. First time google users may get confused, as there are several buttons with icons familiar only to google users	21	6	3	-	3.60	0.66	30
4. Activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements	23	6	1	3	3.73	0.55	30
5. Learners cannot share their work with their peers, unless they become owners of a document, and even then, they will need to approve sharing options and this can cause chaos.	15	8	7	-	3.26	0.81	30
6. Learners can delete any part of assignment they share on the platform, which could cause problems even if it happens accidentally	19	5	6	-	3.43	0.80	30
7. Google classroom does not provide automated quizzes and tests for learners.	20	5	4	1	3.47	0.84	30
8. Google classroom has not	16	10	4	-	3.40	0.71	30

	integrated google hangouts, which creates a problem							
9.	Online interaction between teachers and learners is only possible through google documents	20	7	2	1	3.53	0.76	30
10	There is no way to have a live chat in google classroom.	24	4	2	-	3.73	0.57	30
	<b>Grand Mean</b>					<b>3.49</b>	<b>0.69</b>	

Entries in table 3 show that students accepted the entire item as their challenges while using Google Classroom during COVID-19 pandemic. This is because all the item mean was above the criterion mean of 2.50. Therefore, the table revealed that there is no way to have a live chat in google classroom. Also, activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements.

### Hypotheses

HO<sub>1</sub> There is no significant difference between students on the use of Google classroom for improved learning in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

t test table of analysis to determine the significant difference for improved learning of the department of Nutrition and Food Service students on the use of Google classroom

Group	Mean	SD	N	Df	Standard Error	Z - Cal	Z-Crit	Decision
Department of Nutrition	5.9	28.90	12	22	0.62	0.96	2.10	Accepted
Department of Food Service	5.3	22.80	12					

The calculated value of t is less than the tabular value ( $t(\text{cal}) < t(\text{tab})$ ), hence the hypothesis is accepted. This implies therefore that there is a significant difference between the department of Nutrition students and Department of Food Service students on the use of google classroom for improved learning. "This means that the perceived usage of Google classroom between the department of Nutrition and Food Service are the same. There is no significant difference in their mean usage, the slight difference observed between Nutrition (5.9) and Department of Food Service (5.3) is simply due to chance.

HO<sub>2</sub> There is no significant difference between students' attitude towards using google classroom for the first time of Nutrition and Food Service courses, department of Home

Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

t test of difference between the department of Nutrition and Food Service attitude towards using Google classroom for the first time

Group	Mean	Sum of Squared Deviation	N	Df	Standard Error	t (Cal)	t (tab)	Decision
Department of Nutrition	5.0	36.00	12	22	0.75	0.93	2.10	Accepted
Department of Food Service	4.3	38.68	12					

The calculated value of t is less than the tabular value ( $t(\text{cal}) < t(\text{tab})$ ), hence the hypothesis is accepted. This means that the department of Nutrition students' attitude towards using Google classroom for the first time are the same, therefore, there is no significant difference students in the department of Nutrition and the department of Food Service due to chance.

HO<sub>3</sub> There is no significant difference between the students in their challenges using Google classroom for the first time of Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

Table 3 Table of analysis to determine the significant difference between Department of Nutrition and Food Service students' challenges while using google classroom for the first time

Group	Mean	Sum of Squared Deviation	N	Df	Standard Error	t (Cal)	t (tab)	Decision
Department of Nutrition	4.6	36.72	12	22	0.70	1.00	2.10	Accepted
Department of Food Service	5.3	28.58	12					

The calculated value of t is less than the tabular value ( $t(\text{cal}) < t(\text{tab})$ ), therefore, the hypothesis is accepted. This means that there is no significant difference between the department of Nutrition students and Department of Food Service students' challenges while using Google classroom.



## Discussion of Findings

**Research Question 1:** What is the perceived usage of Google Classroom for improved students learning in the in the Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

The result shows that Google Classroom helps students organize their assignment, it fosters better communication between teacher and students and sparks creativity and creates endless opportunities for learning. This means that there is significant difference in the department of Nutrition and Food Service students' usage of google classroom for the first time, therefore Department of Nutrition use Google classroom more than the department of Food Service Students. The result is expected because most students already have Google Classroom app and are used to getting resources/materials for educational purposes on the app. Essential communication creates a working atmosphere that includes students' engagement, psychosocial development, retention, academic success and communication patterns among students and their parents.

The findings of the study are in agreement with those of Okmawati (2020) who found that Google classroom is an effective platform to use for teaching and learning. Also, the findings are in agreement with those of Zuhrieh, Tareq, Mohammad and Nahla (2021) who found that the perception of the google classroom was positive, and the majority of participants assured that Google classroom is easy to create and use, and that there is more interest to learn more about Google classroom through training.

Furthermore, Iliyasu, Sawida, Bashir, Ibrahim and Usman (2020) found that Google classroom is effective in improving students access and attentiveness towards learning, knowledge and skills gained through Google classroom makes students to be active learners, as a digital tool, it provides meaningful feedback to both students and parents.

**Research Question 2:** What are the attitudes of students using Google Classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

The study found that Google classroom make online learning exciting and it creates creativity and critical thinking and makes students highly motivated. The study is in agreement with those of Stephen (2019) who found that Google classroom has opened opportunities for students to experience 21<sup>st</sup> century learning with the aid of modern technology. It provides an online platform for teachers in creating an online version of their classroom that mimics the learning activities and students can submit their output online. The study is in agreement with those of Syed & Shafiz (2021) who found that Google classroom help in collaborating with teachers and peers, and teachers' feedback provided them with increased learning opportunities. The study is also in agreement with those of Wan & Wan (2020) who found that Google classroom is easy to use, useful and worth using. With the advancement of the internet technology, there have emerged new learning and teaching innovations.

**Research Question 3:** Are there challenges students are facing while using Google classroom for the first time in Nutrition and Food Service courses, department of Home Economics, School of Vocational Education, Federal College of Education (Technical), Omoku.

The study found that there is no way to have a live chat in Google classroom. Also, activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements. The study is also in agreement with those of Tshewang (2021) who avers that Google classroom and television lessons, including students resorting to copying assignment and homework directly from friends or copying directly from textbooks and the internet is a major challenge of Google classroom. The study is in agreement with those of Maheran, Junaidah, Siti and Salwa (2021) who found out that the ease of technology is important as it will determine whether the users will enjoy or be reluctant to use the technology. The study is in agreement with those of Maheran, Khamisah, Hasnun and Rahayu (2020) who found that Emergent sub-themes deriving from the benefits of Google classroom consisted of four connections, unreliable connection and lack of management support. The first emergent sub-theme was difficult to comprehend. This is because learners have trouble in comprehending the web-based platform, specifically at the initial stage.

### Conclusion

The following conclusions were made by the researcher

1. It was found out that Google Classroom helps students organize their assignment, it fosters better communication between teacher and students and sparks creativity and creates endless opportunities for learning.
2. Google classroom make online learning exciting and it creates creativity and critical thinking and makes students highly motivated.
3. There is no way to have a live chat in Google classroom. Also, activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements.

### Recommendations

Based on the conclusion, the researcher made the following recommendations

1. Google classroom is a useful tool that every educator should use for teaching online
2. Teachers should use Google classroom tool to bring about paperless communication in the classroom
3. Google classroom is efficient and a simple way to take learning online for both in-class and remote studying

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