


# Perception of Students on the Use of Google Classroom for Educational Purposes

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## Abstract

This study investigated the Perception of students on the use of Google Classroom for educational purposes. Four research objectives, four research questions and three hypotheses guided the study. The population of the study used all education students in the Faculty of Education, University of Port Harcourt. A sample of 300 students was used for the study. Purposive and stratified random sampling techniques were used for the study and the instrument used to collect data was a structured questionnaire titled Perception of students on the use of Google Classroom in Tertiary Institutions (PSGCTI) with 40 items. A reliability coefficient of .74 was obtained for the structured questionnaire administered to students. Mean scores, Z-test and Anova, were used as the statistical tools for the study. It was found that the Google classroom platform helps students organize their assignments and it fosters better communication between teachers and students. It was also found that Google classroom makes online learning exciting and it creates creativity and critical thinking and makes students highly motivated. Based on the findings, it was recommended that Google classroom is a useful tool that every educator should use for teaching online. Furthermore, it was also recommended that teachers should use the Google classroom tool to bring about paperless communication in the classroom.

**Keywords:** google classroom, collaboration, engagement, paperless, communication

## Introduction

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 slides, whiteboards and visualizers. Learning activities in the computer laboratory involve four major types of practical work: 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 with 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 (Oyarinde & Komolafe, 2020). 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 (Roudlotun & Muhammad, 2020).

One of the ways that can be used to do the 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 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 assignments, organize folders, and view work in real-time (Olalekan et al., 2020).

As a free online learning platform, Google classroom offers several benefits to students and teachers. Such as:

1. Accessibility: Google classroom can be accessed from any computer via Google chrome or from any mobile device regardless of platform. All files uploaded by teachers and students are stored in a classroom folder on Google drive. Users can access the classroom anytime, anywhere. Students no longer have to worry about crashed computers (Okmawati, 2020).
2. Exposure: Classroom provides students with exposure to an online learning system. Exposure to Google classroom may help students transition into other learning management systems used in higher education (McGinnis, 2021).
3. Paperless: Teachers and students will not have excessive amounts of paper to shuffle since the classroom is completely paperless. When teachers upload assignments to the classroom, they are simultaneously saved to Google drive. Students can access missed work due to absences and locate other resources they may need (Linsey, 2021).

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4. Time saver: Classroom is a huge time saver. With all resources saved in one place and the ability to access the classroom anywhere, teachers will have more free time to complete other tasks. Since the classroom can be accessed from a mobile device, teachers and students can participate through their phones or tablets (Leighton, 2020).
5. Communication: Built-in tools make communicating with students and parents a breeze. Teachers and students can send e-mails, post to the stream, send private comments on assignments, and provide feedback on work. Teachers have full control over student comments and posts. They can communicate with parents through individual e-mails or through classroom e-mail summaries which include class announcements and due dates (Kassim, 2021).
6. Collaboration: Classroom offers several ways for students to collaborate. Teachers can facilitate online discussions between students and create group projects within the classroom. In addition, students can collaborate on Google docs which have been shared by the teachers (Kassim, 2020).
7. Engagement: Most digital natives are comfortable with technology and will be more apt to take ownership of their learning through the use of technology. The classroom offers numerous ways to make learning interactive and collaborative. It offers the teacher the ability to differentiate assignments, include videos and web pages into lessons, and create collaborative group assignments (Lynch, 2018).

**Statement of the Problem**

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, misconceptions 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 statements and planning documents. The problem of the study is to move the passive students from a traditional face-to-face classroom into a more engaging and interactive classroom environment.

**Objectives**

1. Examine the perceived usage of Google classroom for improved students learning.
2. Determine the attitude of students using Google Classroom for the first time.
3. Investigate the challenges of Google classroom.
4. Identify the possible solution to Google classroom usage by students.

**Table 1**  
*Perceived Usage of Google Classroom for Improved Student’s Learning*

Items	M	SD
Google Classroom helps students organize their assignment	3.18	.68
It boosts collaboration	3.16	.65
It fosters better communication between teachers and students	3.18	.63
It gives students feedback	3.07	.65
It creates motivation	3.06	.68
It saves time	2.93	.67
It keeps materials and resources organized on the classwork page	3.08	.69
It eliminates distraction by answering mode	3.13	.66
it sparks creativity and creates endless opportunities for learning	3.15	.70
It provides announcements and news to remind students	2.94	.67
Average mean	3.08	.66

Table 1 shows that students accepted all the items as their perceived usage of Google classroom in the 21st-century classroom. This is because all the item mean was above the criterion mean of 2.50. Therefore, the table revealed that the Google classroom platform helps students organize their assignments 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?

**Research Questions**

1. What is the perceived usage of Google Classroom for improved student learning?
2. What are the attitudes of students using Google Classroom for the first time?
3. Are there challenges students are facing while using Google classroom?
4. Is there a possible solution for Google classroom usage by students?

**Hypotheses**

1. There are no significant differences among students in the use of Google classroom for improved learning.
2. There is no significant difference between male and female students’ attitudes towards using Google classroom for the first time.
3. There is no significant difference between male and female students in their challenges using Google classroom for the first time.

**Methodology**

This study is descriptive survey research designed to find out the Perception of students on the use of Google classroom for educational purposes. The area of the study was the University of Port Harcourt. The population of the study consisted of all Education students offering the course computer in education in the Faculty of Education, University of Port Harcourt. The study sample size consisted of 300 students drawn through Purposive and stratified sampling techniques based on the various departments. The instrument used in this study to collect data from respondents was a structured questionnaire titled Perception of students on the use of Google classroom for educational purposes (PSUGCEP) with 40 items. To ensure validity, the designed instrument by the researcher was given to experts in the field of educational technology. To determine the reliability of the instrument, a test-re-test was applied and the responses were correlated to attain the reliability coefficient of .74. Mean, Z test and ANOVA were the statistical tools used for the study.

**Results**

Research question 1: What is the perceived usage of Google classroom for improved student learning?

**Table 2***The Attitude of Students towards Usage of Google Classroom*

Items	M	SD
Research materials and books have created better learning opportunities in Google Classroom	2.99	.65
Having a new educational experience has changed the way I learn	3.07	.65
Students are highly motivated by the usage of Google Classroom	3.08	.67
It has improved my information Communication technology skills	3.04	.67
Google Classroom makes online learning exciting	3.12	.66
Google Classroom is a very effective app for teaching and learning purposes	3.06	.67
It creates productivity	3.01	.67
It creates creativity and critical thinking skills	3.14	.67
There is no invasion of privacy of educational materials and grades	3.06	.66
Google classroom has brought great collaboration between teachers and students	2.82	.68
Average mean	3.03	.66

Table 2 shows that students accepted all the items 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 makes 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?

**Table 3***Challenges Students Face While Using Google Classroom*

Items	M	SD
Google Classroom does not allow access from multiple domains.	3.48	.50
Google classroom has not yet integrated with Google calendar, which may cause some problems with organizing material and assignment deadlines	3.53	.49
First-time Google users may get confused, as there are several buttons with icons familiar only to Google users	3.47	.53
The activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements	3.60	.46
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.	3.44	.49
Learners can delete any part of an assignment they share on the platform, which could cause problems even if it happens accidentally	3.52	.52
Google Classroom does not provide automated quizzes and tests for learners.	3.54	.49
Google classroom has not integrated Google Hangouts, which creates a problem	3.46	.50
Online interaction between teachers and learners is only possible through Google documents	3.40	.51
There is no way to have a live chat in Google classroom.	3.75	.46
Average mean	3.52	.50

Table 3 shows that students accepted all the items as their challenges while using the Google Classroom platform. 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, the activity feed does not update

automatically, so learners will need to refresh regularly in order not to miss important announcements.

Research question 4: Is there a possible solution for Google classroom usage by students?

**Table 4***Possible Solution for Google Classroom Usage*

Items	M	SD
Schedule for blended learning	3.21	.43
Capitalize on digital tools	3.15	.54
Mastering new learning management systems and communication tools is a possible solution to the Google classroom	2.96	.44
Not every Google classroom user is going to have access to the same resources. Educators must work to create equity wherever they can.	3.65	.48
Connect students with independent learning tools	3.06	.48
Maintain live connections during Google classroom learning	3.09	.48
Be sensitive and flexible	2.53	.45
Proper planning and cooperation on the part of all those who are associated with Google classroom learning.	2.48	.40
This problem can be tackled through technological methods such as e-mail, telecommunication, etc	3.10	.51
social interaction can be improved	3.19	.44
Average mean	3.04	.47

Table 4 shows that students accepted all the items as their solutions to Google Classroom problems. This is because all the item mean was above the criterion mean of 2.50. Therefore, the table revealed that not every Google classroom user is going to

have access to the same resources. Educators must work to create equity wherever they can.

Hypothesis 1: There are no significant differences among students in the use of Google classroom usage.

**Table 5**  
ANOVA of Differences among Students on the Use of Google Classroom Usage

Source	Sum of Sq	df	Ms <sub>q</sub>	Fcal	Ftab	Remark
Btw group	460.547	5	92.109	8.554	2.22	Hypothesis rejected
Within group	3165.800	294	10.768			
Total	3626	299				

The result of one-way ANOVA reveals a significant difference exists in Google classroom usage across the six (06) departments

since the Fcal value of 8.554 is greater than Ftab of 2.22. The result is significant at .05 levels.

**Table 6**  
Post Ho, Multiple Comparison Test using Scheffe Model

Departments	N	M
Curriculum Studies/Educational Technology (EDC)	50	35.24
Human Kinetics and Health Education (KHE)	50	31.44
Educational Foundation (EDF)	50	32.52
Educational Management and Planning (EDM)	50	32.54
Adult and Non-Formal Education (DAE)	50	34.22
Educational Psychology and Guidance Counselling (EDP)	50	33.33

Table 6 is the post Hoc multiple comparison test using scheffe. This shows the difference in the use of Google classroom lies actually. The table shows that a significant difference exists between the mean usage of Google usage in KHE = 31.44 and DAE = 34.22. Also, significant differences exist between the mean usage of Google classroom in KHE = 31.44 and EDC = 35.24. A significant

difference exists in Google classroom usage of students in DAE = 34.22 and EDC = 35.24. Significant difference also exists in Google classroom usage in EDP = 33.33 and EDC = 35.24.

Hypothesis 2: There is no significant difference between male and female students' attitudes towards using Google classroom for the first time.

**Table 7**  
Z Test Analysis of Difference between Male and Female Students Using Google Classroom for the First Time

Variable	N	M	SD	df	Zcal	Ztab	Remark
Male	127	46.83465	3.620409	298	1.644854	1.96	
Female	173	46.87861	3.861295				

Table 7 shows the Z test analysis of the difference between male and female students' attitudes using Google classroom for the first time. The attitude means score for males is 46.83465 and for females is 46.87861. Since the Zcal = 1.644 is less than Ztab = 1.96, the null hypothesis, which states that there is no significant differences between male and female students' attitude toward

using Google classroom for the first time, is accepted. The implication is that there is a significant difference in the attitude of students using Google classroom for the first time.

Hypothesis 3: There is no significant difference between male and female students in their challenges using Google classroom for the first time.

**Table 8**  
There is No Significant Difference between Male and Female Students in their Challenges Using Google Classroom

Variable	N	M	SD	df	Zcal	Ztab	Remark
Male	23	21.69565	31.828834	298	1.644854	1.96	Hypothesis rejected
Female	277	24.57762	4.721053				

Table 8 shows the Z-test analysis of the difference between male and female students' challenges using Google classroom. The mean challenge score for males is 21.69565 and for females is 24.57762. Since the ZCal value is 1.644 is less than Ztab of 1.96, the null hypothesis, which states that there is no significant differences between male and female students' challenges using Google classroom for the first time, is accepted. The implication is that there is a significant difference in male and female students' challenges in their mean using Google classroom for the first time.

agreement with those of Syed and Shafiq (2021), who found that Google classroom provides opportunities to flip the class and receive increased participation of students in the face-to-face class discussion as well as on the online platform. It also provides teachers an opportunity to share the most relevant material with students before the class, which helps in flipping the class successfully.

Research Question 2: What are the attitudes of students using Google Classroom for the first time?

The result showed that Google classroom makes online learning exciting and it, creates creativity and critical thinking and makes students highly motivated. The result is in agreement with those of Stephen (2019), who found that Google classroom provides an online platform for teachers to create an online version of their classroom that mimics the learning activities and students can submit their outputs online.

The study is also in agreement with those of Kassim (2021), who found that Google classroom is highly useful in that it helped them be more productive, allowed them to access materials conveniently and submit assignments quickly, and enabled them to interact with the lecturer and other students. They also indicated their high intention to use Google classroom. Also, the study is in agreement with those of Moonma (2021), who found that Google classroom

## Discussion

Research Question 1: What is the perceived usage of Google Classroom for improved student learning?

The result showed that the Google classroom platform helps students organize their assignments and it fosters better communication between teachers and students. The result of these findings is in agreement with those of Zuhrieh et al. (2021), who found that the Perception of the Google classroom was positive, and the majority of participants assured that the Google classroom is easy to create and use. They also expressed interest in learning more about Google classroom through training. The result is also in

help teachers to consider arranging activities such as live online tutoring and discussion using Google classroom to enhance students' learning engagement or using blended learning (integrating online learning mode with a face-to-face classroom).

Research Question 3: Are there challenges students are facing while using Google classroom?

The result of the study shows that there is no way to have a live chat in Google classroom. Also, the activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements.

The study is in agreement with those of Maheran et al. (2020), who found that Emergent sub-themes deriving from the benefits of Google classroom consisted of four connections, unreliable connections and lack of management support. The first emergent sub-theme was difficult to comprehend. This is because learners have trouble comprehending the web-based platform, specifically at the initial stage. The study is also in agreement with those of Nur (2021), who found that teaching reading using the Google classroom application is something challenging for some students. It will improve students' curiosity in learning, although reading is a receptive language skill that sometimes makes students bored with learning it.

Research Question 4: Is there a possible solution for Google classroom usage by students?

The result shows that not every Google classroom user is going to have access to the same resources. Educators must work to create equity wherever they can. The study is in agreement with those of Johnson et al. (2016), who found that technology integration in the classroom will require the ongoing collaborative efforts of teachers and educational software personnel. It also offers teachers training on the intersection of technological knowledge, pedagogical knowledge and content knowledge (TPACK). The study is in agreement with those of Suryani et al. (2021), who found that teachers should prepare the material lesson well and they are expected to be more creative and innovative in making learning media. However, the lack of internet quota and connection made the students get difficulty receiving the learning material or submitting the assignment.

### Conclusion

The researchers concluded that the Google classroom platform helps students organize their assignments and it fosters better communication between teachers and students; the Google classroom makes online learning exciting and it, creates creativity and critical thinking and makes students highly motivated. There is no way to have a live chat in Google classroom. Also, the activity feed does not update automatically, so learners will need to refresh regularly in order not to miss important announcements. It is also noted that not every Google classroom user is going to have access to the same resources. Educators must work to create equity wherever they can.

### Recommendations

1. Google classroom is a useful tool that every educator should use for teaching online
2. Teachers should use the Google classroom tool to bring about paperless communication in the classroom
3. Google Classroom is an efficient and simple way to take learning online for both in-class and remote studying
4. Teachers using Google classroom should e-mail everyone in the people tab for equity for all.

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