

Evaluating the Technology Acceptance of Google Classroom as an Online Learning Tool: PCZC College Students' Perspective

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ABSTRACT

This research aimed to assess the technology acceptance of Google Classroom as an effective learning platform in terms of student satisfaction, perceived ease of access, perceived usefulness, and communication and interaction. This study employed a quantitative descriptive research design utilizing a survey as a method of gathering data from a quota sampling of 295 college students to evaluate the technology acceptance of the learning tool. The instrument was adapted from a study by Zuñiga-Tonio (2021) to measure the different variables by applying Weighted Mean and ANOVA to treat the data. The result showed that college students expressed a positive reception towards Google Classroom, showcasing overall agreement and satisfaction with its features and as a learning tool. It was pointed out that Google Classroom is useful to students based on the perceived usefulness with a weighted mean is 4.019 (SD=0.9019). Students agreed that Google Classroom can easily access information, announcements, notifications, and updates relevant to the subject, and submit/upload assignments. Also, there is no significant difference in terms of students' satisfaction from students across all degree programs when using Google Classroom as a learning tool. However, a significant difference was observed in terms of the perceived ease of access, perceived usefulness, and communication and interaction. In conclusion, the research demonstrates the favorable acceptance of Google Classroom among college students, highlighting its usefulness and overall satisfaction as a learning tool. Its successful implementation serves as a testament to the effectiveness of online learning tools in enhancing educational experiences and ensuring continued academic progress even in times of crisis.

Keywords: learning management system, Google Classroom, students' satisfaction, TAM, evaluation of the LMS

INTRODUCTION

Background of the Study

Technology integration in education has become increasingly prevalent, with online learning platforms gaining popularity among educational institutions (Zakaria, 2023). One such platform is Google Classroom, which offers a range of features designed to enhance the learning experience for students (Zakaria, 2023). However, students' acceptance and adoption of this technology is still an important area of investigation, particularly in the Philippines.

Several studies have examined the impact and effectiveness of Google Classroom as an online learning tool. For example, a study conducted in Nigeria during the COVID-19 pandemic found that Google Classroom positively affected students' academic achievement, attitudes, and perceptions (Oyarinde & Komolafe, 2020). Another study conducted in Oman used the TAM framework to assess students'

acceptance of Google Classroom and found that perceived ease of use and usefulness positively influenced students' behavioral intention to use the platform (Al-Marroof & Al-Emran, 2018).

In addition to Google Classroom, other online learning platforms have also been studied. For instance, a study conducted in Albania used the Unified Theory of Acceptance and Use of Technology (UTAUT2) to rank the attributes of using Google Classroom in online teaching (Qendraj et al., 2021). The study found that behavioral intention was the most preferred construct, while effort expectancy was the least preferred (Qendraj et al., 2021).

Several studies have examined the impact and acceptance of Google Classroom in the Philippines. For instance, Zuñiga-Tonio (2021) conducted a study among university students and found that Google Classroom provided accessibility, utility, and student satisfaction. It also supported communication, interaction, and instruction delivery in flexible learning. Similarly, Maglalang and Rivera (2023) investigated factors affecting students' performance in virtual classroom instruction and found that support from the university and instructors played a significant role. However, students expressed that virtual classroom instruction did not fully meet their needs and learning styles, highlighting the importance of user-friendly Learning Management Systems. Additionally, Tiria et al. (2022) explored the role of forum discussions in the online learning modality of senior high school students. They found that using Google Classroom had no significant difference in student performance regarding participation, quality of posts, plagiarism, and attitudes.

Furthermore, Fuady et al. (2021) analyzed students' perceptions of online learning media, including Google Classroom, during the COVID-19 pandemic. They found that students perceived Google Classroom and other platforms as relatively easy to use. Zoom was considered the easiest, while Learning Management Systems were perceived as more complicated. These findings indicate the importance of understanding students' perceptions and ease of use when implementing online learning platforms.

Various studies have explored the impact and effectiveness of Google Classroom and other online learning platforms on students' academic achievement, attitudes, and perceptions. The studies discussed in this text used different theoretical frameworks, such as TAM and UTAUT2, to assess the acceptance and preferences of these platforms among students. These studies were conducted in different countries, including Nigeria, Oman, Albania, and the Philippines, highlighting the global interest in online learning. The results showed that Google Classroom and other platforms were generally perceived as user-friendly and accessible. However, some students expressed concerns about the compatibility of these platforms with their learning styles and needs.

This study evaluates the technology acceptance of Google Classroom as a learning tool Pilar College of Zamboanga City, Inc college students use. The findings of this study will serve as a crucial turning point in deciding whether to continue the subscription to the licensed Google Workspace/GSuite Account. By providing insights into the students' perceptions of this technology, this study can significantly improve online learning experiences and help educators make well-informed decisions about using Google Classroom in their teaching practices.

Statement of the Problem

This study aims to answer the following questions:

1. What is the level of technology acceptance toward Google Classroom according to:
2. Perceived ease of access
3. Perceived usefulness
4. Communication and interaction

5. Students Satisfaction

6. Is there a significant difference in the level of technology acceptance toward Google Classroom when respondents are grouped according to Degree Programs?

Hypothesis

Ho: There is no significant difference in the level of technology acceptance toward Google Classroom when respondents are grouped according to Degree Programs.

Review of Related Literature

This section presents the related literature and studies after thorough readings conducted by the researchers. The information presented in this section provides a solid background for the study on evaluating the technology acceptance of Google Classroom as an online learning tool from the perspective of PCZC College students.

Acceptance of Online Learning Platforms

Several studies have explored the factors influencing the acceptance of online learning platforms. These studies provide valuable insights into the attitudes and perceptions of students toward e-learning technologies. By examining the similarities and differences among these studies, we can comprehensively understand the acceptance of online learning platforms.

One study by Chahal and Rani (2022) focused on higher education students in India and investigated the factors influencing their behavioral intentions and actual usage of e-learning. Their research incorporated the technology acceptance model (TAM) and examined the mediation effects among different latent constructs. The results revealed the direct and indirect effects of external variables, such as personal innovativeness, social factors, and self-efficacy, on the acceptance of e-learning platforms.

In another study conducted in Saudi Arabia by Alqahtani et al. (2022), the researchers explored student satisfaction and acceptance of e-learning technologies. They examined factors such as educational quality, social influence, and the TAM model and their effects on students' attitudes and satisfaction with e-learning systems. The study revealed the mediating role of perceived ease of use and perceived usefulness in the relationship between external factors and students' attitudes toward e-learning.

A study conducted in Spain by Garrido-Gutiérrez et al. (2023) focused on students' acceptance of e-learning technologies during the COVID-19 outbreak. They applied the Unified Theory of Acceptance and Use of Technology (UTAUT) model and conducted qualitative analysis through focus group discussions with engineering students. The findings highlighted the importance of social influence and the professor's role in shaping students' perception of improvement. The study emphasized creating a positive social environment around e-learning platforms to enhance acceptance and usage.

Another study by Alyoussef (2023) investigated the acceptance of e-learning in a higher education context, specifically focusing on task-technology fit with the information systems success model. The study analyzed the relationships between system quality, information quality, perceived enjoyment, technology characteristics, and task characteristics and their impact on perceived ease of use, usefulness, system use, and task-technology fit. The findings demonstrated these factors' positive and significant influence on e-learning acceptance.

Furthermore, a study by Rafique et al. (2022) examined the acceptance of e-learning technology by government school teachers in Pakistan. The researchers integrated self-efficacy, training, and task technology fit with the TAM model to investigate the factors influencing teachers' attitudes toward an e-

learning system. The study highlighted the direct effects of self-efficacy on ease of use and the significant impact of training on both core constructs of TAM.

These studies provide valuable insights into accepting online learning platforms from various perspectives. They highlight the importance of personal innovativeness, social influence, self-efficacy, task-technology fit, and perceived ease of use in shaping students' attitudes and satisfaction with e-learning technologies. Understanding these factors can contribute to developing more effective and customized e-learning solutions in higher education settings.

Google Classroom as An Online Teaching-Learning Tool

Several studies have been conducted on the effectiveness and perceptions of Google Classroom as a tool for teaching and learning. These studies provide valuable insights into the application of Google Classroom and its impact on students and teachers.

One study by Mohd Shahrane et al. (2016) explored the effectiveness of Google Classroom's active learning activities for the data mining subject. The study used the Technology Acceptance Model (TAM) to examine the relationship between identified factors and the effectiveness of learning activities. The findings indicated that most students were satisfied with Google Classroom, particularly regarding ease of access, perceived usefulness, communication and interaction, instruction delivery, and overall satisfaction. This study demonstrates the positive reception of Google Classroom among students.

Similarly, Bondarenko et al. (2019) shared their experience using Google Classroom for blended learning in geography courses. They highlighted the advantages of using Google Classroom, such as the unity of in-class and out-of-class learning, effective interaction among students and teachers in real time, and the ability to monitor and control learning progress. However, the study also acknowledged specific challenges, including students' external motivation and the need for pedagogical support outside the classroom. This study emphasizes the potential benefits and limitations of implementing Google Classroom in specific subjects.

Another study by Azhar and Iqbal (2019) focused on teachers' perceptions of Google Classroom's effectiveness. Through qualitative research, the study found that teachers primarily viewed Google Classroom as a facilitation tool for document management and essential classroom management. The study identified a lack of a user-friendly interface as a primary reason for perceived inefficiency. This study highlights the need to explore further Google Classroom's impact on teaching methodologies and the importance of addressing usability issues.

Hussaini et al. (2020) investigated students' perceptions of the effectiveness of Google Classroom as a digital tool for teaching and learning. The study revealed that Google Classroom improved students' access to and attentiveness to learning, promoted active learning, and provided meaningful feedback. However, poor network connectivity was identified as a hindrance to effective utilization. The study suggests integrating Google Classroom with conventional teaching methods to enhance student performance and active participation.

Harjanto (2019) examined teachers' experiences with Google Classroom as a learning media. The study found that teachers perceived Google Classroom as a helpful tool for managing tasks, organizing classrooms, and facilitating student interaction. However, the study also indicated that teachers needed to explore additional features of Google Classroom for their professional development. This study highlights the potential benefits and areas for improvement when utilizing Google Classroom in the classroom.

Lastly, Widiyatmoko (2021) conducted a literature review on the effectiveness of Google Classroom in

supporting online science learning, particularly during the COVID-19 pandemic. The review revealed that Google Classroom efficiently managed class schedules, facilitated communication, file sharing, assignment creation, and feedback. The review also discussed the advantages and disadvantages of using Google Classroom in science learning.

In summary, these studies collectively demonstrate the positive perceptions and effectiveness of Google Classroom as a tool for teaching and learning. Students and teachers have found value in its features, such as ease of access, communication, interaction, and organization of learning materials. However, usability and connectivity problems must be addressed for optimal implementation. The literature provides a foundation for understanding the potential benefits, limitations, and areas for improvement when utilizing Google Classroom in educational settings.

Theoretical Framework

This study was based on the Technology Acceptance Model (TAM) as a theoretical framework. TAM is a widely used model for understanding users' acceptance and adoption of technology (Davis, 1989). It posits that users' attitudes and intentions to use technology are influenced by two key constructs: perceived usefulness (PU) and perceived ease of use (PEU).

According to TAM, perceived usefulness refers to the extent to which a user believes that using a particular technology will enhance their performance and productivity in achieving their goals (Davis, 1989). In the context of this study, the perceived usefulness of Google Classroom refers to college student's perception of how beneficial the platform is in supporting their learning needs and improving their educational experience. It encompasses factors such as the platform's ability to facilitate effective communication, collaboration, and access to learning resources.

Perceived ease of use, the second construct of TAM, refers to the extent to which a user perceives that using technology is free from effort and requires minimal cognitive resources (Davis, 1989). It relates to the ease of accessing and navigating the Google Classroom platform. Students' perceptions of the ease of use of Google Classroom will influence their overall experience and acceptance of the platform.

By employing the TAM framework, this study aimed to examine the level of student's satisfaction with Google Classroom, their perceptions of the ease of access to the platform, their perceptions of its usefulness, and the level of communication and interaction among college students using Google Classroom. Additionally, the study sought to explore whether there were significant differences in these factors when students were grouped according to their degree programs.

Drawing on the TAM framework allowed for a comprehensive understanding of students' acceptance and perceptions of Google Classroom. It provided a theoretical basis to investigate the factors influencing technology acceptance among college students and shed light on the role of perceived usefulness and perceived ease of use in determining their attitudes and intentions to use the platform. Moreover, considering the context of different degree programs and individual differences enriched the analysis by accounting for the influence of specific academic backgrounds, needs, and preferences on students' perceptions and acceptance of Google Classroom.

Conceptual Framework

The framework suggests that the level of technology acceptance is influenced by satisfaction, ease of access factors, perceived usefulness, and level of communication and interaction. These factors are expected to have an impact on how students perceive and accept Google Classroom as a learning tool.

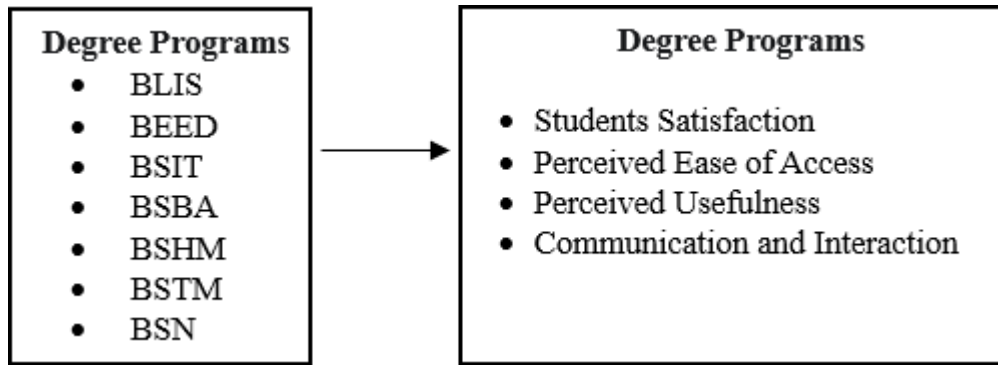


Fig. 1. The Conceptual Framework of the Study

METHODS

Research Design

This study employed the quantitative descriptive research design. A survey was conducted on college students to evaluate the technology acceptance of Google Classroom as an online learning tool used in the tertiary department of the college. In this study, variables were clearly defined, measured through instruments (Creswell, 2009), and tested whether there was a significant difference among these variables. Quantitative research examines situations or events that have an impact on people. It generates unbiased data that can be explained in detail using statistics and figures (Williams, 2021).

Research Locale

This study was conducted at Pilar College of Zamboanga City, Inc., and participated by college students from different degree programs. They answered the survey instrument through Google Forms sent to them.

Research Respondents

Since the goal of the study was to evaluate the technology acceptance of Google Classroom, the researchers believed that it was timely to get feedback and satisfaction from college students considering that they were experienced using the online platform.

The researchers used the Raosoft sample size calculator to determine the total sample size, which was 294, from a total population of 1244 college students in the department. Students were invited to participate in the online survey considering there were no classes already. Since the sample size was 294 respondents, quota sampling was considered, and the aim of the researchers was to meet the number of respondents without considering the sample size per degree program. The following were considered: (1) students were on vacation because of no summer classes, (2) other students were not able to participate due to either no internet connection or poor internet connection within their barangay.

Research Instrument

This study aimed to evaluate the technology acceptance of Google Classroom as an online learning tool used by Pilar College of Zamboanga City, Inc. In order to answer the purpose of this study, the instrument was adapted from a study by Zuñiga-Tonio (2021) in the study entitled "Google Classrooms as a Tool of Support for flexible learning in the New Normal." The instrument was based on the Technology Acceptance Model of Davis in 1989. The instrument was considered reliable and valid, as stated in the previous

research. The instrument was composed of five (5) dimensions, namely: students' satisfaction with four indicators, perceived ease of access with six indicators, perceived usefulness with seven indicators, and lastly, communications and interactions with four indicators. The instrument used a 5-point Likert Scale with the following descriptions and its corresponding mean range:

Table I. 5-point Likert Scale and Mean Range

Scale	Mean Range	Descriptive Equivalent
5	4.20 – 5.00	Strongly Agree
4	3.40 – 4.19	Agree
3	2.60 – 3.39	Neutral
2	1.80 – 2.59	Disagree
1	1.00 – 1.79	Strongly Disagree

Data Gathering Procedure

In gathering the data for this study, the researchers followed the procedures below:

Seeking Permission to Conduct the Study. The researchers sought permission from the school administration verbally, stating the purpose of the conduct of the study. The heads of the different degree programs were also informed about the conduct of the study and sought help by sending their students the link to the Google Survey Form through their program group chat (GC).

Administration and Retrieval of Data. After checking the final instrument for this study by the professor, the instrument was translated into Google Forms. The link was sent to the Heads and faculty through messenger, and they sent it to their program GC. The researchers continuously monitored the entry of the responses of the students, and from time to time, the heads and faculty were reminded to remind their students' participation in the survey. When the quota was reached, the *.csv file was downloaded from the Google Form. The researchers ensured the privacy of the respondents' data though no critical data like date of birth or students' grades were collected.

Data Processing. To ensure data privacy, students' names and email addresses were erased from the *CSV file. Only the degree program and responses of the students were retained. The responses were converted into numerical values because the data read the numerical values using JASP software. In processing the data, the *CSV file was uploaded into the software and made the computations for descriptive statistics.

Statistical Tools

The following tools were used for the statistical treatment of data:

Mean. The researchers utilized the mean to arrive at the average that describes the general characteristics of the four (4) variables. This was used to answer the statement of the problem (SOP) number 1.

ANOVA. The researcher utilized the ANOVA to determine the significant difference in the technology acceptance according to the degree program. This was used to answer the statement of the problem (SOP) number 2. Post Hoc Analysis was also presented when the result of the test of the hypothesis was significantly different.

Ethical Consideration

Ethical considerations play a vital role in research, ensuring the protection of human subjects and

the privacy of their personal data. This study explores the integration of the Belmont Report, including respect for people, beneficence, and justice, and the Philippine Data Privacy Act of 2012, to provide a comprehensive framework for conducting research ethically.

Respect for Persons. Since the survey was conducted, the students have the autonomy to whether to participate or not in the survey. The students were not forced to participate, and the act of volunteerism was observed. At any point when the respondent wishes to withdraw, he/she shall be given that right and privilege. The refusal of the respondents to take an interest entails no penalty or denial of the rights that are typically accorded to the respondents. The researchers ensured that the responses of the respondents were treated with respect since they participated in the conduct of the study, and no data will be manipulated.

Beneficence. According to the Belmont Report, beneficence stresses maximizing benefits while minimizing harm to participants. Researchers carefully evaluated any dangers related to their work and put precautions in place to reduce those risks. Taking into account the conduct of the survey, which was conducted online, researchers ensured that no major risks were involved. The time spent by the students in answering the survey was appreciated by the researchers.

Justice. The Belmont Report's definition of justice states that the selection of research participants must be fair and equitable. The use of vulnerable groups should be avoided, and fair distribution of the costs and rewards of research should be made. The researchers were aware of their responsibility to ensure fairness and equity in the methods employed to choose research participants.

Data Privacy Act of 2012. The Philippine Data Privacy Act requires researchers to protect personal data through appropriate security measures, such as encryption and access controls, to safeguard the privacy and confidentiality of participants. During the data processing, the names and email addresses of the students were deleted or removed from the data source. In order to protect the respondents and other people engaged in the processing of personal information, the researchers maximized their efforts to protect all types of information, whether private, sensitive, or personal.

RESULTS

Respondents

Considering the quota sample size for this study which is 294, the researchers were able to collect a total of 295 respondents. Table II below shows the percentage distribution of each of the degree programs:

Table II. Sample Distribution of each Program

Program	Sample Size	Percentage (%)
BLIS	5	1.7
BEED	16	5.4
BSIT	50	16.9
BSBA	38	12.9
BSHM	29	9.8
BST	36	12.2
BSN	121	41.0
TOTAL	295	100%

Technology Acceptance toward Google Classroom

Students Satisfaction

Table III shows the result of the satisfaction of students with Google Classroom. The result indicates that students are satisfied with Google Classroom with an average weighted mean of 3.9515 (SD=0.92425) with the descriptive equivalent as Agree. Students agreed that Google Classroom is the first pick for active learning as compared to FB Messenger and WhatsApp, with the highest weighted mean of 4.020 (SD=0.955). Also, students agreed that Google Classroom is a learning technique that can be used in all subjects/courses with a mean of 4.010 (SD=0.935). However, the result shows that the lowest mean is that students agreed that Google Classroom is a learning tool and motivation booster, with a mean of 3.868 (SD=0.929).

Table III. Students' Satisfaction

Indicators	Weighted Mean	Standard Deviation	Descriptive Equivalent
Google Classroom allows me to meet my personal goal and subject expectations.	3.908	0.878	Agree
I would suggest Google Classroom as a technique of learning that could be used in any subject.	4.010	0.935	Agree
Google Classroom is my first pick for active learning in comparison to other mediums like Facebook Messenger and WhatsApp.	4.020	0.955	Agree
Google Classroom appeals to me as a learning tool and motivation booster.	3.868	0.929	Agree
Average Weighted Mean	3.9515	0.92425	Agree

The findings of this study are actually similar results of the study conducted by Zuñiga-Tonio (2021), which stated that the results suggest that GoC has just recently been adopted in online teaching and learning compared to other online messaging systems. Compared to other widely used major chat platforms, this web-based learning application is somewhat unfamiliar to students. However, these chat platforms, like FB Messenger, have limitations as compared to the features offered by Google Classroom. For example, the quiz feature wherein the teacher prepares a quiz with different types of questions, and students can take it within the given time period. Another study conducted by De Guzman et al. (2017) stated that 94.9% of respondents were satisfied with using Google Classroom, and it is highly recommended to be used for online learning.

Perceived Ease of Access

Table IV shows the Technology Acceptance result in perceived ease of access to Google Classroom. The result indicates that college students agreed on the ease of access with an average weighted mean of 4.018 (SD=0.8545). Students agreed that Google Classroom can easily access information, announcements, notifications, and updates relevant to the subject and submit/upload assignments with the same weighted mean of 4.105. However, the indicator with the lowest mean of 3.902 is the ease of access in navigating the system with the descriptive equivalent of Agree. This implies that students have difficulty navigating the learning tool when it is their first time to use it. Hence, students learned how to navigate the tool because the teacher taught them how to use it, and they themselves explore it.

Table IV. Perceived Ease of Access

Indicators	Weighted Mean	Standard Deviation	Descriptive Equivalent
There is ease of access in terms of signing on to Google Classroom.	3.986	0.825	Agree
There is the ease of access to course materials.	3.959	0.844	Agree
There is the ease of access to information, announcements, notifications, and updates relevant to the subject.	4.105	0.828	Agree
There is ease of access in submitting/uploading assignments.	4.105	0.849	Agree
There is the ease of access in navigating the system.	3.902	0.881	Agree
There is the ease of access to quizzes and learning activities.	4.051	0.900	Agree
Average Weighted Mean	4.018	0.8545	Agree

The result correlates with the study of Zuñiga-Tonio (2021) that due to varying levels of exposure to and familiarity with using web-based programs, particularly online learning apps, student responses differed in this component. The study by Lham and Jurmey (2021) stated that students were unfamiliar with Google Classroom. It was helpful when their teacher showed them how to use it.

Perceived Usefulness

In terms of Perceived Usefulness, table V shows the result that students agreed that Google Classroom is useful to students with an average weighted mean of 4.019 (SD=0.9019). It was noted that Google Classroom allows students to download class notes, slides, references, and review materials with a weighted mean of 4.292 (SD=0.863) with a descriptive equivalent of Strongly Agree. This implies that students find it useful because what was uploaded by the teachers in Google Classroom can be accessed by the students as long as the students have the right to access the file. Also, students agreed that the learning tool helped them when submitting their assignments on time, with a weighted mean of 4.142 (SD=0.965). One of the features of Google Classroom is allowing students to submit online their requirements, assignments, and other performance tasks. It was noted that the indicator with the lowest mean is that Google Classroom is an excellent medium for social interaction, with a weighted mean of 3.803 with the descriptive equivalent of Agree. Though the learning tool is considered useful, however, there are other online tools where students can socially interact with other students or even their teachers, for example, FB Messenger.

Table V. Perceived Usefulness

Indicators	Weighted Mean	Standard Deviation	Descriptive Equivalent
Google Classroom makes the quality of learning activities excellent.	3.888	0.860	Agree
Google Classroom is an excellent medium for social interaction (lecturer vs. students and student vs. student)	3.803	0.970	Agree

Google Classroom helps me submit my assignment on time.	4.142	0.965	Agree
Google Classroom allows me to download class notes, slides, references, and review materials.	4.292	0.863	Strongly Agree
The feedback provided by the professor is useful.	4.051	0.858	Agree
The grading system in Google Classroom helps in monitoring my performance.	3.946	0.981	Agree
The subject's objective, assessment, and content become clear with the aid of Google Classroom.	4.014	0.816	Agree
Average Weighted Mean	4.019	0.9019	Agree

De Guzman et al. (2017) pointed out that Google Classroom is considered extremely useful to students in terms of assignments and collaborative learning. In the study conducted by Zuñiga-Tonio (2021), it was noted that the indicator Google Classroom allows downloads of class notes, slides, references, and other materials has the highest mean of 4.41. This indicates that schools using Google Classroom as a learning tool helped their students and teachers to access materials from the online classroom.

Communication and Interaction

Table VI presents the results of the evaluation conducted in terms of Communication and Interaction. It shows that students experienced comfort and ease in communicating with the teachers and other learners/classmates with an average weighted mean of 3.8358 (SD=0.896) with a descriptive equivalent of Agree.

Table VI. Communication and Interaction

Indicators	Weighted Mean	Standard Deviation	Descriptive Equivalent
I feel comfortable conversing through Google Classroom	3.902	0.926	Agree
The professor facilitates course participants' engagement and participation in productive discussions.	3.895	0.812	Agree
I feel at ease using Google Classroom to engage with other students.	3.773	0.947	Agree
Other participants acknowledge my point of view while using Google Classroom.	3.773	0.899	Agree
Average Weighted Mean	3.8358	0.896	Agree

It also shows that students felt comfortable with conversing through Google Classroom, and the professor facilitates course participants' engagement and participation in productive discussions with a weighted mean of 3.902 (SD=0.926) and 3.895 (SD=0.812), respectively, both with the descriptive equivalent of Agree. This implies that Google Classroom allows students to become more engaged. However, it was noted that other participants were able to express their point of view while using Google Classroom with a weighted mean of 3.773 (SD=0.889) with a descriptive equivalent of Agree.

According to Zuñiga-Tonio (2021) that university students generally concurred that Google Classroom is helpful in enabling their subject professor to post announcements, exams, and messages without time restrictions. Engagement of students in class, participation in fruitful discussion, and professor's availability

outside of consultation hours. Another study noted that students could readily access the learning activities, communicate electronically with students on their topic, choose when they wanted to learn and work at their own pace. The students had the freedom to ask their instructor questions about anything they did not understand, according to the results, and they could regularly access online resources (Gupta & Pathania, 2021).

Technology Acceptance of Google Classroom

Table VII shows the summary of the Evaluation of Technology Acceptance toward Google Classroom. It was pointed out that Google Classroom is useful to students considering that the factor/dimension's average weighted mean is 4.019 (SD=0.9019) with a descriptive equivalent of Agree. However, communication and interaction have the lowest mean with 3.8358 (SD=0.896) with a descriptive equivalent of Agree. This indicates that students have different experiences when communicating or interacting with teachers and classmates. Based on the study conducted, the majority of respondents stated that their inconsistent internet access prevented them from participating in class without interruptions (Basar, 2021). Poor internet connection would lead to less communication and interaction among students and teachers.

Table VII. Evaluation of Technology Acceptance of Google Classroom

Indicators	Weighted Mean	Standard Deviation	Descriptive Equivalent
Students Satisfaction	3.9515	0.92425	Agree
Perceived Ease of Access	4.018	0.8545	Agree
Perceived Usefulness	4.019	0.9019	Agree
Communication and Interaction	3.8358	0.896	Agree
Average Weighted Mean	3.9560	0.8942	Agree

Significant Difference in the Technology Acceptance of Google Classroom

- Students Satisfaction Toward Google Classroom According to Degree Programs:

Table VIII. Significant Difference in terms of Perceived Ease of Access

Case	df	Mean Square	F	p	Decision	Conclusion
Course	6	0.779	1.303	0.256	Failed to Reject Ho	No Significant

Table VIII shows the result of the test of the hypothesis. The result shows that the p-value is 0.256, which is greater than the alpha level ($\alpha= 0.05$). The decision is to fail to reject the null hypothesis. Statistically, there is no significant difference in terms of students' satisfaction when respondents are grouped according to the degree program. This implies that students are satisfied when using Google Classroom as a learning tool despite of what degree program they belong to.

- Perceived Ease of Access toward Google Classroom according to Degree Programs:

Table IX. Significant Difference in terms of Perceived Ease of Access

Case	df	Mean Square	F	p	Decision	Conclusion
Course	6	1.964	4.313	<0.001	Reject Ho	Significant

Table IX shows the result of the significant difference in terms of perceived ease of access when

respondents are grouped according to degree programs. It reveals that the p-value ($p < 0.001$) is less than the alpha level ($\alpha = 0.05$). The decision is to reject the null hypothesis. Therefore, there is a statistically significant difference in terms of perceived ease of access when respondents are grouped according to degree programs. This implies that students from different programs have different perceptions when accessing Google Classroom.

To check what programs have different perceptions about Google Classroom, Post Hoc Tests are computed.

Post Hoc Tests

Table X. Post Hoc Comparison – Perceived Ease of Access

		Mean Difference	SE	t	P _{scheffe}
BEED	BLIS	-0.143	0.346	- 0.413	1.000
	BSBA	0.511	0.201	2.541	0.377
	BSHM	0.233	0.210	1.110	0.975
	BSIT	0.075	0.194	0.386	1.000
	BSN	0.229	0.180	1.278	0.950
	BSTM	0.658	0.203	3.245	0.108
BLIS	BSBA	0.654	0.321	2.036	0.657
	BSHM	0.376	0.327	1.151	0.970
	BSIT	0.218	0.316	0.688	0.998
	BSN	0.372	0.308	1.208	0.962
	BSTM	0.801	0.322	2.486	0.406
BSBA	BSHM	-0.278	0.166	- 1.669	0.835
	BSIT	-0.436	0.145	- 3.003	0.177
	BSN	-0.282	0.125	- 2.244	0.540
	BSTM	0.147	0.157	0.936	0.990
BSHM	BSIT	-0.158	0.158	- 1.006	0.985
	BSN	-0.004	0.140	- 0.028	1.000
	BSTM	0.425	0.168	2.522	0.387
BSIT	BSN	0.154	0.113	1.362	0.932
	BSTM	0.583	0.147	3.953	0.018
BSN	BSTM	0.429	0.128	3.345	0.087

Based on Table X, post hoc comparison using the Scheffe test indicated that the mean score of the perception of students toward Google Classroom in terms of perceived usefulness for the BSIT program is statistically significantly different from the BSTM program (MD=0.583, $p=0.018$) considering the p-value is less than the alpha level (0.05).

- Perceived Usefulness toward Google Classroom according to Degree Programs:

Table XI. Significant Difference in terms of Perceived Usefulness

Case	df	Mean Square	F	p	Decision	Conclusion
Course	6	1.384	2.902	0.009	Reject Ho	Significant

Table XI is the result of the significant difference in terms of perceived usefulness when respondents are grouped according to degree programs. It reveals that the p-value ($p=0.009$) is less than the alpha level ($\alpha=0.05$). The decision is to reject the null hypothesis. Therefore, there is a statistically significant difference in terms of perceived usefulness when respondents are grouped according to degree programs. It implies that students from different programs have different perceptions of the usefulness when using Google Classroom.

Post Hoc Test

Table XII. Post Hoc Comparison – Perceived Usefulness

		Mean Difference	SE	t	P _{scheffe}
BEED	BLIS	0.272	0.354	0.769	0.996
	BSBA	0.465	0.206	2.260	0.531
	BSHM	0.267	0.215	1.239	0.957
	BSIT	0.050	0.198	0.254	1.000
	BSN	0.349	0.184	1.901	0.729
	BSTM	0.559	0.208	2.694	0.301
BLIS	BSBA	0.193	0.329	0.588	0.999
	BSHM	-0.005	0.334	-0.016	1.000
	BSIT	-0.222	0.324	-0.684	0.998
	BSN	0.077	0.315	0.245	1.000
	BSTM	0.287	0.330	0.871	0.993
BSBA	BSHM	-0.199	0.170	-1.167	0.968
	BSIT	-0.415	0.149	-2.791	0.258
	BSN	-0.116	0.128	-0.903	0.992
	BSTM	0.094	0.161	0.585	0.999
BSHM	BSIT	-0.216	0.161	-1.341	0.937
	BSN	0.083	0.143	0.579	0.999
	BSTM	0.293	0.172	1.698	0.823
BSIT	BSN	0.299	0.116	2.574	0.360
	BSTM	0.509	0.151	3.370	0.082
BSN	BSTM	0.210	0.131	1.601	0.861

However, based on Table XII, post hoc comparison using the Scheffe test indicated that the mean scores of the perception of students toward Google Classroom in terms of perceived usefulness for all programs are not statistically significantly different, considering the p-values are greater than the alpha level (0.05). This happened when there were gaps in the number of respondents who participated in the survey. The researchers noticed that the nearest p-value to the alpha level is between the BSIT program and the BSTM (MD=0.509, $p = 0.082$). With this result, the researchers run a post hoc comparison using the Tukey test. It reveals that there is a statistically significant difference only between the students of the BSIT program and the BSTM program considering that the Ptukey value (0.015) is less than the alpha level (0.05).

- Communication and Interaction toward Google Classroom according to Degree Programs:

Table XIII. Significant Difference in terms of Communication and Interaction

Case	df	Mean Square	F	p	Decision	Conclusion
Course	6	1.381	2.310	0.034	Reject Ho	Significant

Table 13 is the result of the significant difference in terms of communication and interaction when respondents are grouped according to degree programs. It reveals that the p-value ($p=0.034$) is less than the alpha level ($\alpha=0.05$). The decision is to reject the null hypothesis. Therefore, there is a statistically significant difference in terms of communication and interaction when respondents are grouped according to degree programs. This implies that students from different degree programs have different experiences in terms of communication and interaction when using Google Classroom.

However, table 14 reveals that there is no significant difference in terms of communication and interaction when comparing students from one-degree program to the other program. The researchers made all efforts to cross-examine the data and result between the computation of ANOVA and Post Hoc Tests, both Scheffe and Tukey tests were examined, and the result is still the same. This happened because of the gap in terms of the number of respondents who participated in the survey, which makes the result in the Post Hoc Test insignificant.

Post Hoc Test

Table XIV. Post Hoc Comparison – Communication and Interaction

		Mean Difference	SE	t	P _{scheffe}
BEED	BLIS	0.087	0.396	0.221	1.000
	BSBA	0.497	0.230	2.156	0.590
	BSHM	0.403	0.241	1.674	0.833
	BSIT	0.102	0.222	0.462	1.000
	BSN	0.388	0.206	1.886	0.736
	BSTM	0.576	0.232	2.481	0.408
BLIS	BSBA	0.409	0.368	1.113	0.975
	BSHM	0.316	0.374	0.843	0.994
	BSIT	0.015	0.363	0.041	1.000
	BSN	0.300	0.353	0.852	0.994
	BSTM	0.489	0.369	1.325	0.940

BSBA	BSHM	-0.094	0.191	- 0.492	1.000
	BSIT	-0.394	0.166	- 2.369	0.470
	BSN	-0.109	0.144	- 0.757	0.997
	BSTM	0.080	0.180	0.443	1.000
BSHM	BSIT	-0.301	0.180	- 1.665	0.836
	BSN	-0.015	0.160	- 0.094	1.000
	BSTM	0.173	0.193	0.899	0.992
BSIT	BSN	0.285	0.130	2.196	0.568
	BSTM	0.474	0.169	2.804	0.252
BSN	BSTM	0.188	0.147	1.284	0.948

SUMMARY, CONCLUSION AND RECOMMENDATION

Summary of Findings

The goal of this study was to evaluate the technology acceptance of Google Classroom in terms of 4 dimensions/factors. The following were the major findings:

1. The result of the evaluation of technology acceptance in terms of students' satisfaction indicated that students were satisfied when using Google Classroom. This was supported by a weighted mean of 3.9515 (SD=0.92425). Google Classroom was picked by students for active learning as compared to other applications with a mean of 4.020 (SD=0.955) with a descriptive equivalent of Agree. Also, they would suggest the learning tool as a technique of learning that could be used in any subject with a mean of 4.010 (SD=0.935).
2. Students agreed that Google Classroom is considered an ease of access with an average weighted mean of 4.018 (SD=0.8545). Students were able to access information, announcements, notifications, and updates relevant to the subject and submit or upload assignments, and both have the same weighted mean of 4.105 (SD=0.828 and SD= 0.849). It was noted that the indicator ease of access in navigating the system has the lowest weighted mean of 3.902. This implied that students have difficulty navigating the learning tool when it is their first time to use it. Hence, students learned how to navigate the tool because the teacher taught them how to use it, and they themselves explore it.
3. Students find Google Classroom useful, with an average weighted mean of 4.019 (SD=0.9019) with the descriptive equivalent of Agree. Students experienced downloading class notes, slides, references, and review materials using Google Classroom with a weighted mean of 4.292 (SD=0.863). Also, students agreed that the learning tool helped them submit assignments or performance tasks on time, with a weighted mean of 4.142 (SD=0.965). On the other hand, the indicator with the lowest weighted mean of 3.803 (SD=0.970) was Google Classroom as a medium for social interaction, although the descriptive equivalent is Agreed.
4. Among the four (4) factors, communication and interaction have the lowest mean of 3.8358 (SD=0.896) with a descriptive equivalent of Agree. Students agreed that they felt comfortable when conversing through Google Classroom, and the professor facilitated students' engagement and participation in productive discussions with weighted means of 3.902 (SD=0.926) and 3.895 (SD=0.812), respectively. However, there were two (2) indicators with the same lowest mean of 3.773. These are that the students felt at ease and acknowledged his/her point of view while using Google Classroom.

5. It was noted that the result of the test of the hypothesis was that there was no significant difference in terms of students' satisfaction when respondents were grouped according to degree programs with a p-value higher than the alpha level. On the other hand, there were significant differences in terms of perceived ease of access, perceived usefulness, and communication and interaction when respondents were grouped according to degree programs since their p-values were below the alpha level.

Conclusions

Based on the findings of the study, the following conclusions are drawn:

1. College students were satisfied with Google Classroom, indicating that students were content with the platform's features and functionality.
2. College students perceived the ease of access to Google Classroom as relatively high, suggesting that they found it user-friendly and accessible.
3. Google Classroom was considered useful to students. Students recognized its value in enhancing their learning experience.
4. The level of communication and interaction among college students using Google Classroom was satisfactory, indicating that the platform facilitated effective communication and collaboration.
5. College students from different degree programs have different perspectives concerning the performance of Google Classroom as a learning tool. However, students were really satisfied despite the degree program they belong to since there is no significant difference in terms of student satisfaction when respondents are grouped according to degree programs.

Recommendations

In light of the findings and conclusions of the study, the following recommendations are forwarded:

1. Continuous training and support should be provided to college students to enhance their proficiency in using Google Classroom and maximize its features and functionalities.
2. The college should consider conducting regular assessments and surveys to gather student feedback and address any issues or concerns related to Google Classroom.
3. Collaboration and communication features within Google Classroom should be promoted and utilized to foster active student engagement and interaction.
4. The college should explore opportunities for integrating additional interactive tools and resources within Google Classroom to enhance the learning experience and cater to different learning styles.
5. For further study, the researchers recommend the following:
 - Conduct a qualitative study with regard to students' experiences when using Google Classroom as a learning tool.
 - Conduct a similar study but with more enhanced research instruments based on the current situations or experiences, considering the presence of Artificial Intelligence (AI).
 - Conduct a comparative study between students' and teachers' experiences with Google Classroom.

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