

# GOOGLE CLASSROOM: BEYOND THE TRADITIONAL SETTING

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## Abstract

*This research explored the participants' use of Google Classroom and evaluated its acceptability using the Technology Acceptability Model (TAM). The respondents were limited to 56 teachers enrolled in the research methodology class in a graduate school of a certain university in Bulacan during the first semester of the school year 2019-2020. The study utilized a mixed-method design. Triangulated were the result of the TAM survey, the analysis of the open-ended survey, and the record of the submission frequency of the respondents through Google Classroom. The descriptive approach was also utilized to describe the respondents' technology acceptance when using Google Classroom through the administration of the TAM survey questionnaire. The study also determined which TAM factor affected the consistency of the use of Google Classroom the most. Among the factors, actual system use appeared to have significantly affected the respondents' consistency of using Google Classroom. A separate open-ended survey was conducted to verify the data derived from the TAM survey questionnaire. The open-ended survey revealed that despite the difficulty of having a good internet connection, all of the respondents agreed that Google Classroom is very useful, easy to use and would recommend its use to others. The consistency of actual use, through online submission, was recorded and served as the dependent variable. In terms of consistency, it was observed that 62.5% of the respondents were able to submit 11 to 12 out of 12 total number of activities through Google Classroom. It was concluded that the use of Google Classroom, though a new experience, made them realize how their life as a teacher can be more comfortable with the use of this technology.*

**Keywords:** active system use, behavioral intention, Google Classroom, perceived ease of use, perceived usefulness, technology acceptance

## Introduction

"Work smarter and not harder!" This is the mindset teachers should have concerning how they work these days. With the presence of technology and easy access to information, teachers should experience convenience when working. Maximizing the benefits of technological advancement in terms of ease of work is deemed vital in education. Thus, taking the application of technology in teaching to a higher level makes it equally essential. Educational technology is not something new in the process, but how technology evolves in other areas is the same as the rapid uptake in education.

A learning management system (LMS) is a mechanism that controls all facets of the learning process (Watson & Watson, 2007). LMSs, such as WebCT and Blackboard, are enterprise-wide and internet-based systems that incorporate various pedagogical and course administration resources (Coates et al., 2005).

Google contributes to aid the growing demand for LMS through Google Apps for Education. Introduced in October 2006 free for qualified institutions, this ecosystem of applications was engineered for integration with existing mail and user account directory systems of prominent educational institutions, with tools for enabling migration of these to Google Apps (Micro, 2019). In August 2014, Google launched Google Classroom to serve as an LMS that works well with other existing educational tools in Google Apps. The classroom

is a streamlined, easy-to-use tool that helps teachers manage coursework. With the classroom, educators can create classes, distribute assignments, grade and send feedback, and see everything in one place (Google for Education, 2021).

There have been several studies conducted that focus on the use of Google Classroom and its benefits. It unifies in-class and out-of-class learning. It allows effective real-time interaction between subjects, tracks the standard of training, manages student learning achievements in and out of the classroom, and many other functions. (Bondarenko et. al, 2018). In the study of Ramadhani et al., (2019), they associated the use of Google Classroom in flipped-problem-based learning in mathematics. They found out that these two variables had real effects on developing second-year high school students' mathematics learning outcomes. Through the flipped-problem-based learning model with the LMS, students gain more understanding of the learning process in and out of the classroom. Google Classroom is an essential tool for promoting blended learning and professional growth (Iftakhar, 2016). In one of the results of Subandi's (2018) study on Google Classroom, he discussed the paperless learning system's support. Through its unique design for lecturers and students, it provides support tools from Gmail, Drive, and Docs. Thus, making the creation, viewing, editing, and transferring of documents paperless.

The paperless classroom is one of the trends in education worthy of consideration as more than 20 million trees are consumed for printing books, and about 95 million trees are downed for newspapers every year (EPN Staff, 2014). Paper accounts for half of all garbage generated by enterprises (The World Counts, 2021). As one of the leading solutions in every problem, education must start its advocacy to reduce the bulk of papers used.

There are no questions on the effectiveness of technology in school, but one thing still needs to be considered, and this is the teachers' readiness to adapt. In developing countries like South Africa and Bangladesh, educational technology used in some private and public schools is far from other countries' advancement. In one South African province, the Minister of Education, Gauteng, recently declared that beginning in 2015, tablets will be used by teachers and students, with the conventional chalkboard replaced by digital technology. In a study on Information Communication Technology (ICT), the findings indicate that, while many teachers are open to new ideas and initiatives in education, ICT can create confusion and make most teachers feel inept. Computers, according to teachers, can reveal their inadequacies in the classroom if they are not adequately trained (Msila, 2015). According to a study conducted in Bangladesh on the readiness and challenges of higher education in using Information and Communication Technology (ICT), each institution faces infrastructural issues using ICT, such as a lack of ICT facilities, staffing, training, and many more. Teachers and staff were less involved in ICT incorporation in education than students (Hossain et al., 2016).

Meanwhile, several studies in the Philippines delve into teachers' readiness to use ICT in the classroom. In one study's findings, teachers possess a positive attitude in integrating ICT and are ready for online teaching (Javier et al., 2017; Ventatyen et al., 2018). Teacher educators will firmly adopt any proposed instructional tool and integrate it into their teaching and learning activities (Marcial, 2015). Even higher education institutions are ready to adopt and implement E-learning towards continuous improvement in the Philippines' quality of education (Lucero et al., 2020).

With the above findings, Filipino educators are proven ready for the integration of ICT in education. However, readiness is not the only issue. Though there is the popular assumption that e-learning is still at the embryonic development level, there is a strong indication that e-learning is no longer a new idea in principles. Its implementation, application, or practice is still far below expectation in most developing countries, especially the Philippines (Acosta, 2016). While teachers showed preparation and a positive attitude toward using technology, integration, and acceptance of these programs are still in their early stages (Oliyunka et al,

2019). Existing studies recommended further training among teachers to be more confident and equipped with its use (Javier et al., 2017; Ventatyen et al., 2018). Hence, further research should focus on determining additional factors that may influence the acceptance of Google classrooms (Saeed et al., 2018).

Being equipped with technology, pedagogy, and content knowledge is expected from teachers once they graduate from the teacher education course. In a study's review of literature, the main obstacles to using ICTs in pre-service teachers' educational courses are lack of sufficient instruction, appropriate software and hardware, lack of expertise and skills, inadequate ICT leadership support, insufficient time, and low self-efficacy. With enough information on how much these barriers impact ICT users and organizations, it is easier for institutions to develop strategies to enhance e-learning programs (Mirzajani et al., 2015).

Along with the Department of Education's (DepEd) constant effort to remind teachers of the importance of technology in education, they also provide training nationwide. Rapatan (2018) reported how the Department of Education makes the K to 12 curricula of the Philippines adhere to making Filipino graduates locally and globally competitive. He illustrated the different approaches used by public schools in attaining advancements in technology. DepEd's initiative may not be enough to reach out to every teacher in the classroom; this is why graduate schools' role is vital in providing updated knowledge and skills to the teacher-students enrolled in graduate programs.

The graduate school of a university in Bulacan has continuously produced competent graduates serving the community in various disciplines for almost forty-two years as a cradle of excellence. It strives to fulfill its mission to provide higher professional, technical, and special instruction for special purposes, promote research and extension services, advanced studies, and progressive leadership, and provide quality instruction to its students. Graduate schools' role becomes an essential part of teachers' goal to improve in their discipline as the learning they acquire directly affects their school community, especially their students and colleagues.

### *Research Problem*

In a Graduate School Research Methodology class, it was observed that almost all of the students were not aware of the use of a Learning Management System (LMS). Since the researcher firmly supports the use of technology to promote better learning, it was decided that the need to introduce and provide an opportunity for the students to experience the use of LMS be studied. The course content remained the same, it was only the modality of how the classes were provided in terms of where announcements and assignments were posted, submitted, corrected, and resubmitted.

### *Research Focus*

The lack of research on Google Classroom, especially in developing countries, has prompted a need to examine the tool's effectiveness further (Azhar et al., 2018). Looking into the advantages of Google Classroom is an excellent opportunity for the researcher to let the respondents experience the convenience of using the tool to help them in their classroom management tasks. With the advantages of using Google Classroom to communicate, post materials and assignments, and promote paperless classrooms, the research explored the respondents' perception of the use of the application in terms of its acceptability and which factor significantly affected the respondents' consistency of use.

### *Research Aim and Research Questions*

The research assessed the respondents' acceptability of Google Classroom and determined which factor in the Technology Acceptability Model (TAM) affected the respondents' consistency on its use.

The research sought answers to the following questions:

1. How is the level of acceptability of the use of Google Classroom by the respondents described in terms of the Technology Acceptability Model (TAM)?
2. Which of the factors of TAM influenced the respondents' consistency on the use of Google Classroom?
3. How are the perceptions of the respondents described on the use of Google Classroom?

## **Research Methodology**

### *General Background*

The research utilized a mixed-method design using a triangulation approach. Three sources of data from the respondents were utilized to meet the objective of the study. These were the answers from the TAM survey questionnaire, answers in open-ended questions, and the record of consistency of use of the Google Classroom through submission of activities. It also used a descriptive approach to describe the respondents' technology acceptance in using Google Classroom through the administration of the Technology Acceptance Model (TAM) survey questionnaire. An open-ended survey was conducted to detail the respondents' personal experience using Google Classroom and was used to support the result of the TAM survey questionnaire. The consistency of use through the respondents' submission of work online through Google Classroom was recorded. It served as the dependent variable in the multiple regression that was used to identify which specific factor/s affect/s significantly the respondents' consistency of use.

### *Sample*

Fifty-six (56) students, enrolled during the first trimester of the school year 2019-2020 in a certain Graduate School in Bulacan, were the respondents of the research. Out of the 1000 students (on average) enrolled per semester, only 56 who were enrolled in the subject research methodology, who had the opportunity to experience the use of Google Classroom, since the application is not yet being widely utilized by the other professors in the Graduate School, were considered the respondents of the research. They are professional teachers of both public and private schools from different municipalities of Bulacan and even from other nearby provinces. The respondents were asked to signify their consent to be part of the research and gather from them information regarding the research's requirements. The respondents' age ranged from 21 to 54 years. Specifically, 18 were 21-25 years old; 18 were 26-30 years old; 9 were 31-35 years old; 4 were 36-40 years old; 6 were 41-45 years old; and 1 was 51-55 years old. A large majority (48) of them were female while some (8) were male. Thirty-four (34) were residents of Bulacan, 14 from Manila, and 8 from Pampanga.

### *Instrument and Procedures*

Davis' TAM, published in 1989, is one of the most popular technologies acceptance models, focusing on two primary factors that affect an individual's intention to use new technology: perceived ease of use and perceived utility (Charness et al., 2016). The instrument

was adopted from the study of Saeed and Mostafa Al-Emran (2018) entitled “Students Acceptance of Google Classroom: An Exploratory Study using PLS-SEM Approach”.

TAM was used to evaluate the acceptability of Google Classroom among teacher-students. The four TAM factors, which are: (1) perceived usefulness, (2) perceived ease of use, (3) behavioral intention to use, (4) and actual system use, were used as the independent variables which influence the consistency of the respondents' use of Google Classroom.

As part of the research procedures, the respondents enrolled themselves in the Google Classroom created for the class. For ten class meetings, the respondents were exposed to the use of Google Classroom. All class announcements, posting of materials, and submission of assignments were made in the Google Classroom. Each submission was recorded as part of their requirements. After the semester, the respondents were asked to answer an online form using the TAM, followed by an open-ended survey regarding their perception of their use of Google Classroom.

### *Data Analysis*

The data collected were classified, tabulated, and coded for analysis. Data were analyzed using a statistical tool software. Weighted mean and standard deviation were used to describe the technology acceptance of the respondents in Google Classroom. A stepwise multiple regression analysis was carried out by specifying the TAM factors: perceived usefulness, perceived ease of use, behavioral intention to use, and actual system use as independent variables while the respondents' consistency of using Google Classroom as the dependent variable. A scale of 1 to 4 (1.00-1.74: Strongly Disagree; 1.75-2.49: Disagree 2.50-3.24: Agree; 3.25-4.00: Strongly Agree) was used to represent the perception of the respondents on the level of acceptance of Google Classroom through the TAM survey questionnaire. The open-ended survey led the researcher to identify the respondents' perceived experiences on their use of Google Classroom.

## **Research Results**

The study identified the respondents' level of acceptability on the use of Google Classroom in terms of the four factors namely: (1) perceived usefulness, (2) ease of use, (3) behavioral intention of use, and (4) actual system use. The respondents' frequency of submission was also presented to describe their consistency of using Google Classroom. The regression analysis on determining which of the TAM factors appeared to be significant is presented in Tables 6 and 7. Lastly, the summary of the open-ended survey exposed the respondent's view on the strengths and drawbacks of using Google Classroom.

### *Level of Acceptability on the use of Google Classroom*

Perceived usefulness (PU) refers to how confident people are that using a particular method can increase their job execution.

**Table 1**  
*Perceived Usefulness of the Respondents on the Use of Google Classroom*

Items	Mean	Verbal Interpretation
1. Google Classroom enhances my efficiency.	3.70	Strongly Agree
2. Google Classroom enhances my learning productivity.	3.34	Strongly Agree
3. Google Classroom enables me to accomplish tasks more quickly.	3.77	Strongly Agree
4. Google Classroom improves my performance.	3.68	Strongly Agree
5. Google Classroom saves my time.	3.80	Strongly Agree
6. Google Classroom does not have any distinctive useful features.	3.32	Strongly Agree
7. Google Classroom is not applicable to all academic courses.	3.32	Strongly Agree
General Mean	3.56	Strongly Agree
SD	0.5	

Table 1 shows the respondents' perceived usefulness of Google Classroom. With a general mean of 3.56 with a standard deviation of .5, the respondents strongly agree that Google Classroom helps them with their tasks as a teacher. Among the items, "Google Classroom saves my time" got the highest mean of 3.80. The statements "Google Classroom is not applicable to all academic courses" and "Google Classroom does not have any distinctive useful features" were rated the lowest (3.32).

The term "perceived ease of use" (PEOU) refers to how much a user uses a tool without exerting effort.

**Table 2**  
*Ease of Use as Perceived by the Respondents*

Items	Mean	Verbal Interpretation
1. Google Classroom is easy to use.	3.73	Strongly Agree
2. Google Classroom enables me to access the course material.	3.82	Strongly Agree
3. Google Classroom is convenient and user-friendly.	3.71	Strongly Agree
4. Google Classroom allows me to submit my assignments.	3.88	Strongly Agree
5. Google Classroom requires no training.	3.41	Strongly Agree
6. Google Classroom makes it easier to avoid future academic difficulties.	3.70	Strongly Agree
General Mean	3.71	Strongly Agree
SD	0.37	



Table 2 describes the perceived use of Google Classroom by the teacher-students. They all strongly agree with all items having a general mean of 3.71 with a standard deviation of .37. The highest-ranked (3.88) statement describes the Google Classroom's feature to allow them to submit their assignments. Behavioral intentions (BI) refer to how much control people think they have over resources and opportunities in performing a specific behavior. In other words, perceived behavioral control means the degree of difficulty people perceive to conduct a specific behavior.

**Table 3**  
*Behavioral Intention to Use*

Items	Mean	Verbal Interpretation
1. I intend to increase my use of Google Classroom.	3.70	Strongly Agree
2. It is worth recommending Google Classroom for other students.	3.79	Strongly Agree
3. I am interested in using Google Classroom more frequently in the future.	3.80	Strongly Agree
General Mean	3.76	Strongly Agree
SD	0.47	

The respondents' BI to use Google Classroom is discussed in table 3. The results show that the teacher-students have a strong will to continue using the GC and recommend it to others with a general mean of 3.76 with a standard deviation of .47. The respondents' interest in using GC more frequently in the future got the highest mean of 3.80.

**Table 4**  
*Actual System Use of Google Classroom by the Respondents*

Items	Mean	Verbal Interpretation
1. I use Google Classroom daily.	2.98	Agree
2. I use Google Classroom frequently.	3.20	Agree
General Mean	3.09	Agree
SD	0.63	

Table 4 displays the actual system use of Google Classroom by the respondents. The respondents rated their actual system use and generated a general mean of 3.09, which verbal interpretation is only "agree." Using GC daily is rated as 2.98 (Agree), while using Google Classroom frequently is rated 3.20.

The respondents' consistency with the use of Google Classroom was measured by the number of activities required to submit online. There is a total of twelve (12) activities in the semester, and the record shows how the students were consistent in the submission. Since the use of Google Classroom, all the students' activities are required to be submitted online via Google Classroom. Therefore, consistency of use of Google Classroom refers to how consistent the respondents use the tool in terms of their recorded number of submissions.

**Table 5**  
*Consistency of Use of the Respondents of Google Classroom Based on their Submission Frequency*

No of submitted activities	Description	f	%
3-4	Needs Improvement	1	1.8
5-6	Acceptable	2	3.6
7-8	Good	3	5.4
9-10	Very Good	15	26.8
11-12	Outstanding	35	62.5
Total		56	100

Table 5 reveals the respondents' recorded number of submissions using Google Classroom. Out of 56 respondents, 1 (1.8%) submitted 3-4 activities (Needs Improvement), 2 (3.6%) submitted 5-6 activities (Acceptable), 3 (5.4%) submitted 7-8 activities (Good), 15 (26.8%) submitted 9-10 activities (Very Good), and 35 (62.5%) submitted 11-12 activities (Outstanding). The data is skewed to the left or negatively skewed because the majority of the data is on the right (positive) side of the curve. This indicates a positive picture in terms of consistency of the respondents' submission of activities.

*Regression Analysis*

Regression analysis was used in this study to describe the relationship between Technology Acceptability Model (TAM) factors and consistency of use of the classroom as the dependent variable. Regression analysis produces a regression equation where the coefficients represent the relationship between each independent variable and the dependent variable (Frost, 2020). This analysis can be used to predict which of the independent variables influences the students' consistency.

**Table 6**  
*ANOVA Table*

	Model	Sum of Squares	df	Mean Square	F	p
1	Regression	23.906	4	5.976	1.725	.159 <sup>b</sup>
	Residual	176.648	51	3.464		
	Total	200.554	55			

a. Dependent Variable: Consistency

b. Predictors: (Constant), Actual System Use, Perceived Usefulness, Behavioral Intention to Use, Perceived Ease of Use

Overall regression: right-tailed,  $F(1,14) = 1.725$ ,  $p\text{-value} = .159^b$ . Since  $p\text{-value} < \alpha$  (.05), it is right to say that the null hypothesis is rejected. There is a significant influence of TAM factors on the students' consistency in submitting their activities and assignments using Google Classroom.



**Table 7**  
*Coefficient Table*

Model		Unstandardized Coefficients		Standardized Coefficients	t	p
		$\beta$	$\alpha_x$	$\beta$		
1	(Constant)	9.188	2.554		3.597	.001
	Perceived Usefulness	0.240	0.755	.063	0.318	.752
	Perceived Ease of Use	0.731	1.073	.142	0.681	.499
	Behavioral Intention to Use	0.417	0.826	.102	0.505	.616
	Actual System Use	-1.185	0.477	-.393	-2.487	.016

*Dependent Variable: Consistency*

The following independent variables are not significant as predictors for consistency of submission of the student using GC: Perceived Usefulness (PU), Perceived Ease of Use (PEU), and Behavioral Intention to Use (BIU). Therefore, the calculator excluded these variables from the model. Table 7 shows how Actual System Use (ASU) significantly influences students' consistency when using Google Classroom. Google Classroom is extremely useful in understandability, attractiveness, and operability. The current study's findings emphasize the TAM factor, ASU, which influences the respondents' consistency in using Google Classroom, and the other TAM factors are not significant.

#### *Google Classroom into the Lens of the Respondents*

Effective learning takes place through experience. Through a written interview using Google Form, the respondents answered the following questions: (1) Do you think Google Classroom helps both teachers and students? Please elaborate on your answer. (2) What do you think are the hindrances in using Google Classroom? (3) Are you going to recommend using Google Classroom to your students and co-teachers? (4) Are you going to use Google Classroom as a teacher and in your classes?

All of the teachers say they allow students to use the code to enroll in the newly formed class. For teachers, the use of Google Classroom helps them a lot for several reasons. With the use of GC, the submission of files has become very convenient. Class announcements and submissions are updated, class works are tracked to know who is not yet submitting and if the activities are done late. Access to instructional materials is another reason why respondents consider the use of Google Classroom helpful. Google Classroom supports a paperless learning system through a unique design for lecturers and students.

All of the respondents agree that Google Classroom is easy to use, and there is no need for complex training because it is user-friendly. Students who view Google Classroom as simple and useful are highly motivated to incorporate such pedagogical resources into their learning process. The respondents have the same answer regarding the problems related to using Google Classroom, one of which is internet connection availability. Despite the worries about internet connectivity, the respondents will still recommend the application to their co-teachers and students, and they are also willing to use it in their classes.

## Discussion

The respondents of the study were given the opportunity to experience the use of Google Classroom for the first time in their Research Methodology class in Graduate School. Assessing the level of acceptability of TAM and identifying the TAM factor that influences their experience of the use of Google Classroom are the main objectives of the research.

The respondents rated the level of acceptability of Google Classroom in terms of perceived usefulness ( $\mu = 3.56$ ,  $\sigma = 0.5$ ); ease of use ( $\mu = 3.71$ ,  $\sigma = .37$ ); behavioral intention to use ( $\mu = 3.76$ ,  $\sigma = .47$ ); and actual system use ( $\mu = 3.09$ ,  $\sigma = .63$ ). The first three factors have a verbal interpretation of 'Strongly Agree'. The respondents found out that their experience in using Google Classroom opened the possibility of working smarter with the use of technology.

Having the highest mean of 3.8 to the item "Google Classroom saves my time" got the highest rating in terms of perceived usefulness. The experiences of the teachers in receiving announcements, setting deadlines, submitting online assignments, and receiving grades through Google Classroom made them realize that the traditional classroom setup where things are done face-to-face are time-consuming. By providing easy access to the necessary information, an online platform like Google Classroom helps minimize missed work and save time and effort (Alqahtani, et al. 2019).

The use of Google Classroom made the respondents realize that the use of the platform can make their work lighter and faster. In terms of the factor ease of use, submitting assignments through Google Classroom got the highest mean of 3.88. The convenience of not printing their outputs and going to school just to beat the deadline was appreciated by the respondents. The time they saved to submit their assignments was practical for professionals like them who are also working. According to the respondents, the implementation of Google Classroom in their class has made sending assignments simpler (Shaharane et al, 2016). Lessening the paper being used to print their outputs saves money and is nature-friendly too.

The interest in using Google Classroom more frequently in the future under the factor behavioral intention to use got the highest mean of 3.80. In a related study, students recommend the learning method of using Google Classroom be applied to another appropriate subject (Shaharane et al., 2016). Meanwhile, in another study, 94.9% of the respondents agreed that they would recommend it for online learning, and 44.1 % agreed that Google Classroom is highly recommended; the data revealed the respondents' level of satisfaction with using the Google Classroom (Ventayen et al., 2018). Since this is the first time the respondents used Google Classroom and found out that its features will also help them as professional teachers, made them interested to use the application in their own school.

The actual system use of Google Classroom was rated the lowest. It is a fact that the use of the respondents only happened in one of their classes in Graduate School and this only happens once a week. Not everyone who uses Google Classroom has a strong desire to use all its features; others only use it when sharing assignments with the class and when checking and grading assignments (Shaharane et al., 2016). The respondents did not have any other opportunity to explore Google Classroom with their other subjects and even in their own school where they teach.

Among all factors of TAM, actual system use was found to have a significant influence on the consistency of use of the respondents based on their submission online. Though actual system use got the lowest mean, this result concurs to the 52% of respondents who submitted all their activities in the Google Classroom. While it is convenient in non-academic activities, the platform is extremely useful in assignments and collaborative learning (Ventayen et al., 2018). A study conducted in Oman showed that all variables are substantially successful in terms of both behavioral intention and actual Google Classroom use. Its familiarity in terms of utility and ease of use is emphasized. The emphasis is on understanding usefulness and

ease of use as crucial features of Google Classroom. These two features significantly affect the chosen sample of undergraduates' intention as Google Classroom works as a facilitator to develop their learning activities (Saeed et al., 2018). All respondents mentioned that internet connection availability is a hindrance to the consistent use of Google Classroom. Low internet speed is a hindrance in successfully implementing Google Classroom as a learning management system (Iftakhar, 2016). For the respondents, the use of Google Classroom as an extension of the physical classroom opens them the opportunity to be more efficient in organizing their own classroom. The stressful experiences of having a lot of papers on top of their table in the faculty room waiting to be checked, waiting for the next meeting for the students to submit their assignments, allotting time to give feedback on the performances of the students, identifying who did not submit and those who are submitting late can be more organized with the use of the Google Classroom.

This research is limited to identifying factor/s that may significantly affect the consistency of the use of Google Classroom as a learning platform using the TAM survey. Other factors outside the TAM survey that may have significantly affected the consistency of the use (e.g., age, SES, tech knowledge, etc.) were not identified. No training was also given to the students in using the platform except for a brief orientation which introduced its basic features. The students were given the opportunity to explore and discover on their own while they are experiencing it in class. Communication lines were opened between the professor and the students which served as a helpline in case any of them got stuck on anything.

## Conclusions and Implications

The research brought light to the respondents' use of Google Classroom to find the four Technology Acceptability Model (TAM) factors' correlation and how demographic profile affects Google Classroom use. This research looked into the applications in other areas of use by identifying which TAM factor significantly influenced the respondents' consistency in using Google Classroom. Among the four TAM factors: perceived usefulness (PU), perceived ease of use (PEOU), behavioral intention (BI), and active system use (ASU), the ASU significantly influenced the respondents to use GC consistently. The respondents saw the necessity to use GC frequently and even daily if time permits. The fact that announcement and submission postings on the application were made easy, tasks were accomplished more quickly. The use of this LMS may be new to the respondents, but the impact it brought them is significant enough to say its effectiveness. Overall, the teachers appreciated its use in many aspects. The result of this study is an encouragement for teachers to go online. With the advancement of technology, teachers should see opportunities on how it can be used to make their classroom management adaptable to the changes of time. The use of Google Classroom as an educational platform is not yet widely used in the Philippines setting during the conduct of this study. This research is a valid proof of the possibilities of making online classroom management work for both the teachers and students.

## Recommendation

Though the current study has provided answers to one of the recommendations in a recent study of Saeed (2018) which is determining further factors that may influence the acceptance of Google Classroom, it also found other problems that need to be addressed. Follow-up studies on the use of Google Classroom in various subjects and a deeper dive into the students' experiences in the implementation of Google Classroom are recommended. This research can serve as a basis for conducting teachers' training to help them organize and facilitate their online lessons better.

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## Appendix A. Survey Questionnaire

The instrument is adopted from the study of Saeed & Mostafa Al-Emran (2018) entitled “Students Acceptance of Google Classroom: An Exploratory Study using PLS-SEM Approach”.

Please rate your experience in using Google Classroom in our Research Class. Your honest rating and comment are highly appreciated. Please use the scale below for your reference:

- 4 - Strongly Agree
- 3 - Agree
- 2 – Disagree
- 1 – Strongly Disagree

Perceived Usefulness
1. Google Classroom enhances my efficiency.
2. Google Classroom enhances my learning productivity.
3. Google Classroom enables me to accomplish tasks more quickly.
4. Google Classroom improves my performance.
5. Google Classroom saves my time.
6. Google Classroom does not have any distinctive useful features.
7. Google Classroom is not applicable to all academic courses.
Perceived Ease of Use
1. Google Classroom is easy to use.
2. Google Classroom enables me to access the course material.
3. Google Classroom is convenient and user-friendly.
4. Google Classroom allows me to submit my assignments.
5. Google Classroom requires no training.
6. Google Classroom makes it easier to avoid future academic difficulties.



Behavioral Intention to Use
1. I intend to increase my use of the Google Classroom.
2. It is worth to recommend the Google Classroom for other students.
3. I'm interested to use the Google Classroom more frequently in the future.

  

Actual System Use
1. I use the Google Classroom on a daily basis.
2. I use the Google Classroom frequently.

### Appendix B. Screenshot of Sample Google Classroom Marks for submitted activities

The screenshot shows a Google Classroom interface for a class named 'RESEARCH METHODOLOGY'. The 'Marks' tab is selected, displaying a table of student scores for various assignments. The table includes columns for assignment names and due dates, and rows for individual students and a class average. The class average row shows scores of 8.94, 78.13, 43.64, 44.5, 17.31, 65.71, 14.41, 14.41, 15.33, 22.37, and 27.53 across the assignments. Individual student scores vary, with some marked as 'Missing' or 'Done late'.

	No due date Quiz_Basi C... out of 10	14 Dec 20... Proposal Paper out of 90	16 Nov 20... Edited Instrume... out of 50	9 Nov 2019 Instrumen t of the... out of 50	25 Oct 2019 Methods and... out of 20	12 Oct 2019 Matrix of Literatur... out of 70	5 Oct 2019 Definition of Terms out of 20	5 Oct 2019 Research Hypothe... out of 20	28 Sept 20... Theoretica l and... out of 20	21 Sept 20... Scope and Delimitat... out of 30	8 Sept 2019 Research Designs out of 30
Class average	8.94	78.13	43.64	44.5	17.31	65.71	14.41	14.41	15.33	22.37	27.53
SARA MARIE BARIA	8	85	50	45	15	70	20	20	20 Done late	26	30
Ma. Ann Bernardo		Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing
Monica Bondoc		Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing	Missing
celia cabacang	8	75	50 Done late	40 Resubmitted	15 Done late	50 Done late	10 Done late	15 Done late	10 Done late	20 Resubmitted	30 Done late
Jayve Cabe		Missing	Missing	Missing	Missing	Missing	20	20	Missing	21	30 Done late
GODOFREDO II CASABAR	10	85 Done late	50 Done late	50 Done late	15	50 Done late	10 Done late	10 Done late	15 Done late	22	30 Done late
Cheryl Castro Ruiz	10	90	45	45	20	70	20	10 Done late	20	22	30 Done late
AnriJane Climaco	10	90 Done late	40 Done late	40 Draft	20	60 Done late	20	20 Draft	20	24	24 Done late

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