

# STUDENTS' ACADEMIC PERFORMANCE AND THEIR PERCEPTION ON THE USE OF GOOGLE APPLICATIONS IN SOCIAL STUDIES

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## ABSTRACT

The aim of this study is to determine the effect on students' academic performance and their perception on the use of Google Applications in Social Studies. It sought to answer the following questions: (1) the level of students' satisfaction in learning Social Studies using Google Applications such as Google Classroom, Google Meet and Google Forms; (2) the mean level of the students' academic performance in learning Social Studies in terms of recitation, performance tasks and written works and (3) the significant effect of using Google Applications to the academic performance of the selected Grade 7 students in learning Social Studies.

Descriptive method was used in this study to be able to answer the hypothesis based from what was observed. The researcher used random sampling. The respondents of this study were one hundred (100) Grade 7 students of Pedro Guevara Memorial National High School. This study was conducted during the Third Quarter of the Academic Year 2020-2021. A self-made questionnaire was formulated and utilized to gather data in determining the level of satisfaction of the students on the use of Google Applications. The researcher used pre-test and posttest to examine the effect of Google Applications to the students' academic performance in learning Social Studies. After the data collection, the researcher analyzed, presented and interpreted them.

The students were satisfied on using of Google Applications in which the Google Classroom got an overall mean of 3.45 (Very Satisfied); Google Forms got an overall mean of 3.31 (Somewhat Satisfied) and Google Meet got an overall mean of 3.41 (Very Satisfied). The students felt satisfied in a sense that these applications are affordable, user-friendly, and easy to use. Moreover, it was found out that there was a "significant effect" of using Google Applications to the academic performance based on pre-test and post-test of the selected Grade 7 students in learning Social Studies. The hypothesis there is no significant effect on using Google Applications to the academic performance of the selected Grade 7 students in learning Social Studies is "not supported".

**KEYWORDS:** Google Applications, Academic Performance, Recitation, Written Works, Performance Tasks, Pretest, Posttest

#### **INTRODUCTION**

Technology is an important tool for learning Social Studies in the 21st Century, and all schools must make sure that all students have access to technology. Technologies help students develop their skills, knowledge and motivate them to enjoy learning Social Studies and stimulate students' interest in learning. Nowadays, the role of technology plays a vital role in education. It is a four-fold: it is comprised as a part of the curriculum, as an instructional delivery modality, as a means of assisting instructions and also as an instrument to develop and improve the entire learning process.

Google Applications for Education (GAFE) is a powerful cloud-computing solution that works regardless of students' location, time, and even the type of device being used (Google Applications in Education, 2018). It enhances education with free and easy-to-use tools for learning. These applications proven that as a valuable tool can improve teaching and SJIF Impact Factor 2021: 8.013| ISI I.F.Value:1.241| Journal DOI: 10.36713/epra2016 ISSN: 2455-7838(Online) EPRA International Journal of Research and Development (IJRD) Volume: 6 | Issue: 7 | July 2021 - Peer Reviewed Journal

learning (Fayez et.al 2016) that can foster collaboration, can assess students' written works and performance output easily and can provide clear guidance for doing their best work. Furthermore, using these Google Applications like Google Classroom, Google Meet and Google forms will improve learners' teamwork, increase competence, save expenses and lessen environmental impact without sacrificing privacy or security.

Educational technology such as Google Apps for Education can make an important contribution to the ideal means in adapting educational methods that can improve the academic performance of the students. An appropriate implementation of technology in education is necessary to ensure a successful 21st century classroom and to set up students for success in their future careers. The integration of these google applications in teaching is truly an aid specially to the Social Studies subject to make the lessons more interactive and more fun. In effect, students can gain better attention, achieve higher retention rate and also encourage better participation rate.

Due to the advancement of technology, it is important to schools to provide, adopt and subscribe to educational technologies that are sustainable, easy to use, free to access and can adapt to the pace of change in education. Google applications is the best example that can enhance enjoyment of students in developing child's well-being and can improve to their academic performance. The Department of Education do not stop in providing learning materials, giving free accounts, and introducing different platforms to support and continue the teaching and learning process. In all, everyone will benefit to the digitization of learning.

#### **OBJECTIVE OF THE STUDY**

This study aims to determine the effect of using Google Applications to the Students' academic performance at Pedro Guevara Memorial National High School Academic Year, 2020-2021.

Specifically, it sought answers to the following questions:

1. What is the level of students' satisfaction in learning Social Studies using Google Applications such as:

- 1.1 Google Classroom,
- 1.2 Google Meet: and
- 1.3 Google Forms?

2. What is the mean level of the students' academic performance in learning Social Studies in terms of:

2.1 recitation;

- 2.2 performance tasks; and
- 2.3 written works?

3. Is there a significant effect of using Google Applications to the academic performance of the selected Grade 7 students in learning Social Studies?

## **RELATED LITERATURE**

Mumba et., al (2013) states that Google Application for Education (GAFE) tools, in particular, allow users to collaborate virtually on documents, presentations, and projects in the cloud. GAFE is used to create developmental websites as an alternative to traditional classrooms. This system has an intuitive and user-friendly interface, allowing most users to make a quick and easy transition to this system. Locketz (2019) developed conclusions, for starters, collaboration motivates school administrators to learn and use Google Apps for Education. Layton et., al (2017) notes that the abilities such as critiquing others' ideas, reasoning abstractly and quantitatively, and employing computational procedures have been developed in Standards for Mathematical Practices (SMPs). Alshihri (2017) found out that multiple and varied levels of knowledge and specific skills can have a significant impact on faculty and academic staff members' ability to apply the benefits of using Google services/tools in their professional activities. Ersoy et., al (2019) revealed that there is significant difference between the achievement test pre- and post-test scores to determine the effectiveness of Google Applications acquiring spatial perception ability in the fourth-grade social studies course. The students stated that the Google Earth-based activities increased their success and allowed them to gain spatial skills.

Cahill (2014) emphasizes that using Google Applications in higher education helped to improve students' communication and collaborative skills, as well as students' perceptions and knowledge of technology use in the classroom. Awuah (2015) also concluded on his study that over 84% of those polled said that using the Google Application for Education (GAFE)-based course website improved their performance. Furthermore, approximately 91 % of participants stated that they were more satisfied with GAFE courses than with traditional methods of instruction with no or moderate use of technology, where the least proportion of content is delivered online; the remaining 9% stated that they were not satisfied. Francisco et.al (2019) states that Technological Acceptance Model (TAM) is a good fit for explaining the need to use Google apps as a personal learning experience in a university setting. Consequently, subjective norms, in particular, played a role in the indirect influence of social image on the



decision to use Google apps and had a major positive impact on the students learning experience. Maqbool (2016) proven that there are two primary areas of interest in the impact of groupwork in using Google Applications. To begin, students' problematic experiences in coordinating or managing the administration element of group work, which includes scheduling meetings, corresponding, communicating, and managing documentation, as well as the challenges of collaborating as a group to produce a coherent and cohesive group work. Secondly, the students were required to use a web-based portal or wiki created with Google Applications to aid in coordinating group effort, managing documents and communication, and collaborating to create the required output in order to complete the group assignment. Alqahtani (2019) found out that Google Clouds environment has the highest usability value (86.45) and that there are statistically significant differences in scholastic achievement when Google Clouds is used in the educational process. The findings of the above literatures were found relevant to the study since the utilization of Google Applications may help the learners in terms of exploring the features of these applications, discovering new way in learning and gaining knowledge in the lessons. In addition, because these educational applications were very useful and user-friendly the students are satisfied in using these applications.

#### **RESULTS AND DISCUSSION**

Level of students' satisfaction of Grade 7 students in learning Social Studies using Google Classroom.	
Table 1. Level of Students' Satisfaction in Learning Social Studies using Google Classroom	

Google Classroom	Str	ongly gree		.gree	Disagree Strongly Disagree		Mean		
	f	%	f	%	f	%	F	%	
1. I can easily access the Google Classroom using my mobile phone or laptop.	66	66%	31	31%	2	2%	1	1%	3.62 (VS)
2. I can clearly understand the instructions in the activities given by the teacher.	40	40%	56	56%	3	3%	1	1%	3.35 (SS)
3. I can learn faster through onlineresources in a Google Classroom.	35	35%	52	52%	12	12%	1	1%	3.21 (SS)
4. I can complete my assignments easily through the Google classroom setup.	48	48%	50	50%	1	1%	1	1%	3.45 (SS)
5. I can do my activities and assignments easier.	42	42%	54	54%	3	3%	1	1%	3.37 (SS)
6. I can easily manage my time in doing activities and assignments in Google Classroom.	36	36%	53	53%	10	10%	1	1%	3.24 (SS)
7. I have a pleasant experience using Google classroom from my mobile device or laptop.	36	36%	58	58%	5	5%	1	1%	3.29 (SS)
8. I am always reminded in the time of submission.	67	67%	29	29%	3	3%	1	1%	3.62 (VS)
9. I can easily see the records of my scores and help me to evaluate my performance.	62	62%	34	34%	3	3%	1	1%	3.57 (VS)
10. The teacher can be able to check/correct my assignments and provide me instant feedback in a Google classroom	77	77%	20	20%	3	3%	1	1%	3.74 (VS)
Overall Mean: 3.45 Very Satisfied									

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Legend:

ena:	
3.40 – 3.99	Very Satisfied (VS)
2.80 - 3.39	Somewhat Satisfied (SS)
2.20 - 2.79	Neutral (N)
1.60 - 2.19	Somewhat Unsatisfied (SU)
1.00 – 1.59	Very Unsatisfied (VU)

The students disclosed their satisfaction with the use of the Google classroom. More than three-fourths of the students strongly agree and claimed that they were very satisfied with the way the teachers provide feedback about their assignments (77%). More than half of them disclosed their very high agreement and that they were very satisfied as they were always reminded of the time of submission (67%). Other factors in which more than half of the students strongly agreed pertains to ease of access through phone or laptop (66%) and access to scores (62%). This means that the students are satisfied using Google Classroom.

Only few students stated that they either disagree or strongly disagree with the satisfying features of the Google Classroom. That is why, in general the students were very satisfied with their experiences in learning Araling Panlipunan using Google classroom, as reflected by the overall mean of 3.45. This means that the students can easily navigate and very familiar with the workings of Google Applications. And also, the feature of this application is easy to access and use so that the students were satisfied using it.

Table 2. Level of Students Satisfaction in Learning Social Studies using Google M											
	Strongly Agree		Disagree		Strongly						
Google Meet		gree		~			Disagree		Mean		
	f	%	f	%	f	%	F	%			
1. I can easily access the Google Meet	51	51%	44	44%	4	4%	1	1%	3.45		
using my mobile phone or laptop.	51	5170		++70	-	7/0	1	1 /0	(VS)		
2. The discussion is more fun and	42	42%	52	52%	5	5%	1	1%	3.35		
interesting using this application.	42	4270	52	3270	5	J 70	1	1 70	(SS)		
3. I effectively interact with my teacher	42	420/	50	520/	4	4%	1	1.0/	3.36		
during discussion.	42	42%	53	53%	4	4%	1	1%	(SS)		
4. I completely understand the									2.22		
information and the concepts about	38	38%	57	57%	57% 4	4%	1	1%	3.32		
the topics.									(SS)		
5. Lectures usually generate curiosity to									2.40		
know more farther motivation	53	53%	44	44%	2	2%	1	1%	3.49		
about the topics.									(VS)		
6. It helps me to understand concept	47	47 4	47 47%	47 47% 48	3 48%	4	4%	1	1.0/	3.41	
and ideas of the lessons very well.	47	4/%	48	48%	4	4%	1	1%	(VS)		
7. I can communicate with my teacher									2.40		
and classmates a share information	49	49	49	49%	45	45%	5	5%	1	1%	3.42
easily through Google Meet.									(VS)		
8. I am more attentive while learning in	20	200/	50	500/	10	1.00/	1	10/	3.18		
a Google Meet.	30	30%	59	59%	10	10%	1	1%	(SS)		
9. I feel that I am more confident in	0.1	01.07	70	5004	17	1.70/		10/	2.96		
sharing my ideas in Google Meet.	21	21%	58	58%	17	17%	4	4%	(SS)		
10. I am enjoying learning through											
Google Meet like to regular	34 34%	34 34	34% 53 5	4 34%	34 34%	53%	11	11%	2	2%	3.19
classroom set-up of teaching.									(SS)		
Overall Mean: 3.31 Somewhat Satisfied								1	1		

Table 2. Level of Students' Satisfaction in Learning Social Studies using Google Meet

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Legend:

Very Satisfied (VS)
Somewhat Satisfied (SS)
Neutral (N)
Somewhat Unsatisfied (SU)
Very Unsatisfied (VU)

The students showed their satisfaction with the use of the Google Meet. Half of the students strongly agree and claimed that they were very satisfied with the lectures that generate curiosity for farther motivation about the topics in Araling Panlipunan (53%) and easy access the Google Meet using mobile phone or laptop (51%). Almost half of them disclosed their very high agreement and that they were very satisfied as they were communicating with their teacher and classmates and share information using Google Meet (49%) and understanding the concept and ideas of the lessons. This means that students are satisfied in using this application because they are curious and interested in learning and understanding the topics in Araling Panlipuan, they can easily connect to their teacher and

classmates in video conferencing, and it is easy to access using cellphone and laptop in a sense that the students do not even have to download and install the software as it works on web based. In all, the students were satisfied in using Google Meet.

Only few students stated that they either disagree or strongly disagree with the satisfying features of the Google Meet. That is why, in general the students were somewhat satisfied with their experiences in learning Araling Panlipunan using Google classroom, as reflected by the overall mean of 3.31. This means that the students were quite satisfied in using Google Meet in class discussion. Some of them cannot express their thoughts and ideas confidently that can affect their class participation.

Google Forms		rongly Agree	A	gree				ngly Igree	Mean
0	f	%	f	%	f	%	F	%	
1. I can easily access the Google Forms using my mobile phone or laptop.	52	52%	45	45%	2	2%	1	1%	3.48 (VS)
2. I can clearly understand the instructions in the quiz given by the teacher.	52	52%	48	48%	0	0%	0	0%	3.52 (VS)
3. I can easily analyze the questions in the quiz through Google Forms.	50	50%	47	47%	3	3%	0	0%	3.47 (VS)
4. I enjoy answering my quizzes using this application.	53	53%	43	43%	3	3%	1	1%	3.48 (VS)
5. I answer the questions in my quizzes in a short period of time.	31	31%	53	53%	15	15%	1	1%	3.14 (SS)
6. I am more focus and concentrated in answering my quizzes.	46	46%	52	52%	1	1%	1	1%	3.43 (VS)
7. I can stimulate positivity and initiative in answering my quizzes using Google Forms.	48	48%	49	49%	2	2%	1	1%	3.44 (VS)
8. I can instantly see my scores and help me to evaluate my performance.	58	58%	40	40%	2	2%	0	0%	3.56 (VS)
9. I feel motivated in answering the questions in Google Forms.	47	47%	46	46%	6	6%	1	1%	3.39 (SS)
10. I can get a good score using Google Forms.	41	41%	57	57%	2	2%	0	0%	3.39 (SS)
Overall Mean: 3.43 Very Satisfied									

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Legend:	
3.40 – 3.99	Very Satisfied (VS)
2.80 - 3.39	Somewhat Satisfied (SS)
2.20 - 2.79	Neutral (N)
1.60 - 2.19	Somewhat Unsatisfied (SU)
1.00 – 1.59	Unsatisfied (VU)

The students disclosed their satisfaction with the use of the Google Forms. Almost three fifth of the students strongly agree and claimed that they were very satisfied with seeing their score instantly and evaluate their performance (58%). Half of them disclosed their very high agreement and that they were very satisfied as they were enjoyed in answering their quizzes (53%), ease of access (52%) and understand the instructions in the quiz (52%). This means that students can easily access the application in terms of answering the quizzes and they can clearly understand the instructions of the teacher. The students enjoyed answering the test because google forms is a new way of assessment and it is not a usual paper-pencil test.

Only few students stated that they either disagree or strongly disagree with the satisfying features of the Google Forms. That is why, in general the students were very satisfied with their experiences in learning Araling Panlipunan using Google Forms, as reflected by the overall mean of 3.43. This means that this application is a very useful assessment tool. The students can easily access and navigate the Google forms. In addition, the learners immediately see the scores and the feedback of the teacher using this application.

Performance	Lowest score	Mean		Standard deviation	Analysis	
Recitation	5	10	8.38	1.309	Excellent	
Performance Task	12	20	18.16	2.097	Excellent	
Written Works	10	20	18.49	2.368	Excellent	
Pre-test	3	18	13.10	3.079	Very Satisfactory	
Post-test	7	20	18.37	2.778	Excellent	
Legend: 16.0 – 19.99 Excellent 12.0 – 15.99 Very Sati		8.0 – 9.99 Ex 6.0 – 7.99 Ve	cellent ry Satisfactory			

Level of Students' Academic Performance in Social Studies Table 4. Level of Students' Academic Performance in Social Studies

4.0 – 5.99 Satisfactory 2.0 – 3.99 Fair

0.0 – 1.99 Needs Improvement

researcher recorded The the students' performance in terms of recitation, performance task, written works, pre-test and post-test. The students showed excellent performance during recitation (M=8.38, SD=1.309), performance task (M=18.16, SD=2.097), and written works (M=18.49, SD=2.368) because the teacher provided effective learning materials that help the students to easily understand the

8.0 – 15.99 Satisfactory 4.0 – 7.99 Fair

0.0 – 3.99 Needs Improvement

lesson. In addition, the ease of use of these Google Applications aided the students to be attentively participate and interact during the discussion.

In terms of the pre-test, the students exhibited very satisfactory performance (M=13.10, SD=3.079) because the students answered the test seriously and focused on the instruction given by the teacher.

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**Difference in the Students' Performance** 

 Table 5. Effect of using Google Applications to the Academic Performance based on the Pre-Test and Post

 Test

	Mean	Mean difference	t-value	p-value	Analysis
Pre-test	13.10	5.27	-19.176	0.000	Significant
Post-test	18.37	5.27	-19.170	0.000	Significant

It means that there was significant effect of using Google Applications to the academic performance based on pre-test and post-test of the selected Grade 7 students in learning Social Studies. Moreover, these applications are effective learning tool and platform that can enhance the students' performance.

#### **CONCLUSION**

Based on the data, the conclusion was derived that there was a "significant effect of using Google Applications to the academic performance based on pre-test and post-test of the selected Grade 7 students in learning Social Studies". It can be inferred that using Google Applications have a "significant effect" to the academic performance of the students.

## RECOMMENDATION

Based on the findings and conclusions presented, the researcher has arrived on the following recommendations:

1. Curriculum planners may include the adoption of the Google Applications permanently for blended and online classes in the educational system. It may suggest to them to utilize these platforms as a tool for eLearning in teaching and learning.

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- 2. Teachers may administer pretest /posttest using Google Applications to identify student's prior knowledge and to focus to the topics that need to be address also to evaluate how much they had learned.
- 3. DepEd Officials and policy makers are encouraged to allocate fund to provide gadgets for the students and teachers that they will use in online session.
- 4. School heads and school administrators may conduct hands-on training to the students and teachers in using these Google Applications and seminars for teachers that will develop their skills and abilities in teaching and using these applications since it enhances the performance of the students.
- 5. Head teachers may plan and add these Google Applications on their project in Basic Education Learning Continuity Plan (BE-LCP) in every Grade Level so that it can find assistance and fund for the teachers and students who are in online classes.
- 6. Future Researchers may conduct further studies that engage the teachers are the respondents and they may conduct also to investigate the challenges and problems encountered by the students and teachers in using these applications.

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