

E-Gadget Utilization, Management Strategies, and Perceived Benefits in Senior High School Classrooms: Evidence from Cuyapo West District

Leonard Paul U. Macaraeg

Cuyapo National High School, DepEd Nueva Ecija

leonardopaul.macaraeg@deped.gov.ph

ABSTRACT

The study examined the e-gadget management practices of Senior High School students in the Cuyapo West District. It employed a descriptive research design using purposive sampling to gather data from both teachers and students. To analyze the data, statistical tools such as frequency, percentage, average weighted mean, t-test for independent variables, Pearson correlation, Spearman rank correlation, point-biserial correlation, and contingency coefficient were utilized. The results revealed that the respondents were predominantly female, aged 21–40, married, and with master's units. Moreover, the majority of both student and teacher respondents reported using electronic gadgets. Students were found to sometimes use e-gadgets such as mobile phones, laptops/netbooks, tablets, earphones/headsets, and iPhones/iPads, while desktop computers were reportedly never used in classroom activities. In contrast, teacher respondents always used e-gadgets such as mobile phones and laptops, sometimes used desktop computers and iPhones/iPads, and never used tablets and earphones/headsets in classroom settings. Furthermore, the findings indicated that respondents demonstrated management skills in the utilization of e-gadgets among Grade 11 students. Teachers consistently perceived e-gadgets as always beneficial in the teaching-learning process, whereas students perceived them as only sometimes beneficial. Based on these findings, the study recommends the following: (a) the conduct of seminars on the effective utilization of e-gadgets in classroom settings; (b) the promotion of proper and responsible use of e-gadgets among both teachers and students; and (c) the conduct of further studies on the utilization of other technological tools such as projectors, televisions, and related devices.

Keywords: E-Gadget Utilization; Classroom Management Strategies; Senior High School Students; Benefits of E-Gadgets; Management of E-Gadgets

INTRODUCTION

Electronic gadgets have become indispensable in modern society, particularly in communication, business, and education. They enable global connectivity and provide students with convenient access to information for assignments, projects, and research (Bartleby, n.d.). In the educational context, these technologies enhance learning experiences by making tasks more efficient and engaging. Government initiatives in the Philippines, such as integrating tablets, laptops, and personal computers into public schools during the K–12 curriculum implementation, further highlight the growing importance of digital tools in education (Enterprise Innovation, 2012). Various programs from the public and private sectors have also aimed to provide students with devices, contributing to increased participation and engagement in classroom activities (Oquias, 2011).

Despite these advantages, the excessive use of electronic gadgets presents significant

challenges, especially among young learners. Overexposure can lead to addiction, distraction, and ultimately lower academic performance. Mobile phones, in particular, offer a wide range of functions—from communication and gaming to internet access—that can divert students' attention from academic tasks. While these features support learning, they also increase the likelihood of misuse, especially when not properly regulated. The rapid growth in mobile phone usage worldwide—from 12.4 million users in 1990 to over 6 billion in 2011—demonstrates how deeply embedded these devices have become in daily life (Saylor, 2012; Heeks, 2008).

Observations among Grade 11 students reveal a high dependence on mobile devices both inside and outside the classroom, often leading to diminished focus on lessons. This trend is also evident among junior high and elementary learners, raising concerns about the long-term impact of gadget overuse on students' academic development.

Given these realities, there is a need to develop effective strategies to manage and regulate the use of electronic gadgets in educational settings. This study aims to identify practical approaches to reduce excessive gadget use and promote disciplined, purposeful engagement with technology in the classroom.

Statement of the Problem

This study sought to determine the E-Gadget Utilization Management among Senior High School Students at Cuyapo West District. It seeks to answer the following specific questions:

1. What is the profile of the respondents of the study in the following:
 - a. age;
 - b. sex;
 - c. civil status;
 - d. highest degree earned; and
 - e. Seminars and trainings attended in relation to ICT?
2. What are the available electronic gadgets among teachers and students?
3. What is the extent of utilization of E-Gadgets in the classroom activities of Grade 11?
4. What are the management strategies employed by teachers in the utilization of E-Gadgets by Grade 11?
5. What are the benefits derived from E-Gadgets utilization in the teaching-learning process as perceived by the respondents?
6. Is there a significant difference in the benefits derived from E-gadgets as perceived by the teachers and students?
7. Is there a significant relationship between the profile and management strategies of E-gadgets utilized by teachers?

Scope and Delimitations

This study examined the utilization and management of e-gadgets among Grade 11 Senior High School students in Cuyapo West District, Nueva Ecija, during the School Year 2018–2019. It focused on the respondents' profiles, availability of e-gadgets, extent of utilization in classroom activities, teachers' management strategies, and perceived benefits in the teaching-learning process. The study employed a descriptive-correlational design involving 29 teachers and 172 students, using survey questionnaires and statistical tools such as frequency, percentage, weighted mean, t-test, and correlation analysis.

The study was limited to selected public secondary schools in the district and relied on self-reported data, which may be subject to bias. It also covered only selected e-gadgets and excluded other digital technologies, thereby limiting generalizability beyond the study context.

Review of Related Literatures

The integration of electronic gadgets in education has significantly transformed teaching and learning processes. E-gadgets such as mobile phones, laptops, and tablets are widely used as instructional tools, facilitating access to information, enhancing communication, and supporting collaborative learning. Studies have shown that these devices improve students' engagement, motivation, and academic performance when used appropriately in classroom settings (Alrasheedi et al., 2015; Sung et al., 2016).

In the Philippine context, the K–12 program has promoted the use of digital technologies in public schools to supplement traditional learning materials. The availability of gadgets enables students to perform academic tasks more efficiently, including research and presentations. However, excessive and unregulated use may lead to distractions, reduced concentration, and lower academic performance (Jacobsen & Forste, 2016; Samaha & Hawi, 2016).

Effective classroom management strategies are essential in regulating e-gadget use. Teachers play a critical role in setting guidelines, monitoring usage, and integrating technology into instruction. Research indicates that structured use of digital devices enhances learning outcomes and minimizes misuse (OECD, 2015; Tondeur et al., 2017). Moreover, teachers' ICT competence significantly influences the effectiveness of technology integration in classrooms.

Differences in perception between teachers and students regarding e-gadget use have also been noted. Teachers generally view these tools as essential for instruction, while students often perceive them as both academic and recreational devices (Chen & Yan, 2016). This duality highlights the need for responsible and guided usage.

Furthermore, studies suggest that demographic variables such as age and educational attainment do not always significantly influence technology management practices. Instead, institutional policies and teacher-led strategies are more critical to ensuring effective use of e-gadgets (Ifenthaler & Schweinbenz, 2016).

Overall, the literature supports the integration of e-gadgets in education, provided that appropriate management strategies are implemented to maximize their benefits in the teaching-learning process.

Theoretical Framework

This study is grounded in the Technology Acceptance Model (TAM) and Constructivist Learning Theory, which explain the use and management of e-gadgets in educational settings. The Technology Acceptance Model posits that individuals' acceptance and use of technology are influenced by perceived usefulness and perceived ease of use (Venkatesh et al., 2016). In this study, students and teachers utilize e-gadgets based on how these devices enhance academic tasks and facilitate learning processes.

Complementing this, Constructivist Learning Theory emphasizes that learners actively construct knowledge through interaction with tools and their environment. Digital devices such as mobile phones and laptops serve as cognitive tools that support collaborative and self-directed learning (Schindler et al., 2017). The integration of e-gadgets in classroom activities enables students to engage in meaningful learning experiences, including research, communication, and content creation.

Furthermore, the study considers the role of Classroom Management Theory, which highlights the importance of teacher supervision, rules, and structured activities in ensuring effective learning environments (Tondeur et al., 2017). Teachers' management strategies, such as setting restrictions and monitoring usage, help regulate students' use of e-gadgets and maximize their educational benefits.

Thus, the framework assumes that the effective utilization of e-gadgets is influenced by users' acceptance of technology, active learning processes, and structured management strategies, which collectively contribute to improved teaching and learning outcomes.

Conceptual Framework

This study is anchored in an Input–Process–Output (IPO) model, illustrating how variables interact in the management of e-gadgets among Senior High School students. The input variables include the profile of teacher-respondents (age, sex, civil status, educational attainment, and ICT-related training), the availability of e-gadgets, and the types of devices used. These factors influence how technology is accessed and utilized in the classroom.

The process component involves the extent of e-gadget utilization in classroom activities and the management strategies employed by teachers, such as monitoring, restrictions, and structured integration of devices into instruction. These processes are guided by principles of technology integration and classroom management, which emphasize effective facilitation and control of digital tools to support learning (Tondeur et al., 2017).

The output reflects the perceived benefits of e-gadget utilization in the teaching-learning process, including improved efficiency, access to information, and enhanced student engagement. However, outcomes may vary depending on the effectiveness of management strategies and responsible use of technology (Sung et al., 2016).

The framework assumes that appropriate management strategies mediate the relationship between input variables and learning outcomes, ensuring that e-gadgets contribute positively to educational experiences.

METHODOLOGY

This study employed a quantitative approach to examine the utilization and management of e-gadgets among Senior High School students. It aimed to describe existing practices and determine relationships among variables using structured data collection and statistical analysis, consistent with established educational research methodologies (Creswell & Creswell, 2018).

Research Design

The study utilized a descriptive-correlational research design to examine the utilization and management of e-gadgets among Senior High School students. Descriptive research was employed to systematically describe existing conditions, including the availability, frequency of use, and management strategies of e-gadgets in classroom settings. This approach is appropriate for identifying patterns and trends without manipulating variables (Creswell & Creswell, 2018).

Furthermore, the correlational component was used to determine relationships between the profile of teacher-respondents and their management strategies, as well as differences in perceived benefits between teachers and students. This design enables the researcher to examine associations among variables in a natural setting (Fraenkel et al., 2015). The use of this design is consistent with prior studies on technology integration in education, which emphasize understanding both usage patterns and influencing factors (Tondeur et al., 2017).

Research Steps

The study followed a systematic process beginning with the identification of the research problem and formulation of objectives. A review of related literature guided the development of the research instrument. Permission was secured from school authorities prior to data collection. The researcher administered survey questionnaires to selected respondents and ensured proper retrieval of completed instruments. Data were organized, coded, and analyzed using appropriate statistical tools. Finally, results were interpreted in relation to the research questions and existing literature, leading to conclusions and recommendations. This structured approach ensured reliability and validity of findings (Creswell & Creswell, 2018).

Data Collection and Sample Selection

The respondents of the study consisted of 29 teachers and 172 Grade 11 students from selected public secondary schools in Cuyapo West District, Nueva Ecija. Teachers were chosen as primary respondents because they directly supervise and manage students' use of e-gadgets in classroom settings. A purposive sampling technique was employed to select participants who have experience in integrating e-gadgets into teaching and learning activities.

Data were collected using a modified survey questionnaire divided into three parts: (1) profile of respondents, (2) availability of e-gadgets, and (3) extent of utilization, management strategies, and perceived benefits. The instrument was designed to capture both descriptive and analytical data aligned with the study objectives. Respondents were given sufficient time to answer the questionnaire to ensure accuracy and completeness of responses.

The use of survey methods is widely supported in educational research for gathering large amounts of data efficiently (Fraenkel et al., 2015). Moreover, collecting data from both teachers and students provided a comprehensive perspective on e-gadget utilization, consistent with studies emphasizing multi-stakeholder analysis in technology integration (Ifenthaler & Schweinbenz, 2016).

Data Analysis Methods

The study employed both descriptive and inferential statistical tools to analyze the data. Descriptive statistics such as frequency counts and percentages were used to summarize the profile of respondents and the availability of e-gadgets. The weighted mean was utilized to determine the extent of e-gadget utilization, management strategies, and perceived benefits based on a Likert scale. These methods are appropriate for describing central tendencies and patterns in survey data (Creswell & Creswell, 2018).

For inferential analysis, the t-test for independent samples was used to determine whether there was a significant difference in the perceived benefits of e-gadgets between teachers and students. This test is commonly applied when comparing the means of two independent groups (Fraenkel et al., 2015).

To examine relationships between variables, Pearson correlation, Spearman rank correlation, point-biserial correlation, and contingency coefficient were employed. These statistical tools are suitable for analyzing relationships between continuous and categorical variables, depending on data characteristics. The use of multiple correlation techniques allowed for a more robust analysis of relationships between teacher profiles and management strategies.

The selection of these statistical methods aligns with previous studies on educational technology, which emphasize combining descriptive and inferential statistics to generate meaningful insights (Sung et al., 2016). Overall, the data analysis procedures ensured objective interpretation and supported evidence-based conclusions.

Research Hypotheses and Validation

The study tested the following null hypotheses: (1) there is no significant difference in the perceived benefits of e-gadgets between teachers and students, and (2) there is no significant relationship between teacher profile variables and management strategies. These hypotheses were tested using appropriate inferential statistical tools.

The t-test for independent samples was applied to test differences between groups, while correlation analyses were used to examine relationships among variables. A significance level of 0.05 was used as the basis for accepting or rejecting the null hypotheses. Results indicated whether observed differences or relationships were statistically significant.

Hypothesis testing is essential in validating research findings and ensuring that conclusions are supported by empirical evidence (Fraenkel et al., 2015). This process strengthened the rigor and credibility of the study.

Study Limitations and Ethical Considerations

The study was limited to Grade 8 students of Carlos P. Garcia High School, which may restrict the generalizability of the findings to other contexts. It focused only on selected variables such as reading attitudes, academic performance, age, and gender, excluding other factors like socio-economic status. The study was limited to selected public secondary schools in Cuyapo West District and may not be generalizable to other contexts. It relied on self-reported data, which may be subject to response bias. Additionally, the study focused only on

selected e-gadgets and did not include other emerging technologies.

Ethical considerations were strictly observed. Permission was obtained from school authorities prior to data collection. Respondents were informed of the purpose of the study and their participation was voluntary. Confidentiality and anonymity of responses were ensured, and data were used solely for academic purposes. These practices align with ethical standards in educational research (Creswell & Creswell, 2018). economic status and teaching strategies. The data were also limited to responses during the survey period.

Ethical considerations were strictly observed. Informed consent was obtained from participants, and confidentiality of responses was ensured. Participation was voluntary, and respondents were assured that their answers would not affect their academic grades. The study adhered to ethical standards in educational research (Resnik, 2018).

RESULTS AND DISCUSSION

Profile of Teachers

Table 1 shows the profile of the teacher respondents. The variables included are sex, age, civil status, highest educational attainment, and attendance to seminar related to ICT.

Table 1: *Profile of the Teachers*

Profile	Category	Frequency	Percentage
Sex	Male	10	34.5
	Female	19	65.5
Age	21-30	11	37.9
	31-40	11	37.9
	41-50	6	20.7
	61 and Above	1	3.4
Civil Status	Single	7	24.1
	Married	22	75.9
Highest Educational Attainment	Bachelor's Degree	2	6.9
	With Master's Unit	26	89.7
Attendance to Seminar Related to ICT	Master's Degree	1	3.4
	Have not attended	25	86.2
	Attended	4	13.8

Sex. Most of the teacher respondents were females gaining 19 or 65.5 percent of the population which dominate the males with only 10 or 34.5 percent. The results signify that female dominates the teaching profession.

Age. Gaining the same frequency and percentage of 11 (37.9%), the respondents are mostly at the age ranging 21-30 and 31-40. In contrast, only 1 respondent has an age of 61 and above and 6 respondents belong to the age bracket of 41-50.

The result implies that teachers are mostly young and new to the teaching profession.

Civil Status. Majority of the respondents are married with a frequency and percentage of 22 (75.9%) and only 7 respondents are single.

Highest Educational Attainment. Teaching profession requires continuous learning which makes the teachers take advanced studies which the results reveals that most of the respondents have units in masteral with a frequency and percentage of 26 and 89.7 respectively. In contrast, only 1 (3.4 %) respondent has a masteral degree and 2 (6.9%) respondents are with bachelor degree.

Attendance to Seminar Related to ICT. In the teaching profession, teachers must continuously grow professionally through different activities like seminars and trainings related to different areas needed in teaching, however, the result shows that most of the teacher respondents have not attended seminars related to ICT gaining frequency and percentage of 25 (86.2%). On the other hand, only 4 (13.8%) respondents have attended such seminars. Thus, teachers needed to attend seminars to broaden their knowledge and skills in the utilization of e-gadgets in the classroom. This factor can affect the teaching-learning process.

Available E-gadgets Among Grade 11 Students and Teachers of Cuyapo West District

Table 2 displays the status of e-gadgets utilization among Grade 11 students and teachers of Cuyapo West District.

Table 2: *Available E-gadgets Among Grade 11 Students and Teachers of Cuyapo West District*

E-Gadgets	Student n=172		Teachers n=29	
	Frequency	Percentage	Frequency	Percentage
Mobile Phone	164	95.35	29	100.00
Desk Top Computers	83	48.26	12	41.38
Laptops or Net Pads	115	66.86	29	100.00
Tablets	131	76.16	11	37.93
Ear Phones/Head Sets	89	51.74	16	55.17
I Phone Pads	102	59.30	8	27.59

It cannot be denied that technology has dominated our daily lives which can be inferred from the table above that almost all of the respondents regardless of position, students or teachers have embraced the use of gadgets.

Students. Almost all of the student respondents have and using mobile phones, desktop computers, laptops, tablets, earphones/headsets, and iPhones/IPads obtaining frequency and percentage of 164 (95.35%), 83 (48.26%), 115 (66.86%), 131 (76.16%), 89 (51.74%), and 102 (59.30%) respectively.

Teachers. As shown in table 2, all teacher respondents are using mobile phones and laptops. Whereas, 16 (55.17%) of the respondents have earphones/ headsets, 12 (42.38%) respondents make use of desktop computers, 11 (37.93%) respondents having tablets, and 8 (27.59%) have iPhones/IPads.

The study of Zickurh (2018) asserts that the acquisition and use of technology or e-gadgets depends on the generation in which mobile phones, for older generations, only used this device for text and call, whereas millennials make used of this for so many other purposes such as taking pictures, sending e-mail, surfing the net, etc. Moreover, millennials mostly used laptops and tablets than elders.

Extent of E-Gadget Utilization in the Classroom Situation as Perceived by the Students

Table 3 on the next page reveals the extent of e-gadget use in the classroom, as perceived by students.

The result signifies that the respondents Based on table 3, majority of the respondents use of mobile phones, laptops, and tablets in research work, reporting presentation, conduct of meeting, program celebration for specific occasion, accessing the website, messaging either sending or receiving, dialing or answering phone incoming calls, movie making, making diorama, and downloading video clips *sometimes* as shown in the table getting the highest frequencies and average weighted means of 2.13, 1.85, and 1.79 respectively.

On the other hand, most of the respondents *sometimes* use the desktop computer for research work and *never* in other activities. Moreover, in terms of the use of earphones/headsets, half of the population answered *sometimes* and the other half on *never* in using the gadget for program celebration for specific occasion and making diorama and almost all of the respondents use this gadget *sometimes* in doing research work and *never* inreporting presentation, conduct of meeting, accessing the website, messaging either sending or receiving, dialing or answering phone incoming calls, movie making, and downloading video clips having an average weighted mean of 1.71 which is equivalent to sometimes. Lastly, iPhones/IPads are sometimes used by the majority in research work, reporting presentation, accessing the website, messaging, either sending or receiving, dialing or answering phone incoming calls, and making diorama, and never in conducting meetings, program celebrations for specific occasions, movie making, and downloading video clips.

As much as e-gadgets are used to hone cognitive skills, students sometimes abuse them, as these devices distract them. Students with gadgets like mobile phones and tablets are less likely to concentrate in class with their phones in hand and learn less during the teaching-learning process. (<https://www.bartleby.com>)

Table 3: *Extent of E-Gadget Utilization in the Classroom Situation as Perceived by the Students*

E-Gadgets	Activities involved in the utilization of the following gadgets.	A	S	S	WM	DE
Mobile phone	1. Research work.	40	111	21	2.11	S
	2. Making diorama.	33	105	34	1.99	S
	3. Program celebration for specific occasion.	33	101	38	1.97	S
	4. Accessing the website.	65	88	19	2.27	S
	5. Downloading video clips.	49	88	35	2.08	S
	6. Movie making.	55	86	31	2.14	S
	7. Reporting presentation.	55	84	33	2.13	S
	8. Messaging either sending or receiving.	68	80	24	2.26	S
	9. Conduct of meeting.	55	77	40	2.09	S
	10. Dialing or answering phone incoming calls.	69	77	26	2.25	S
Average Weighted Mean 2.13(Sometimes)						
Desk top Computer	1. Conduct of meeting.	27	50	93	1.61	N
	2. Dialing or answering phone	29	51	90	1.64	N

	incoming calls.					
	3. Program celebration for specific occasion.	28	53	89	1.64	N
	4. Reporting presentation.	34	51	85	1.7	S
	5. Downloading video clips.	24	61	85	1.64	N
	6. Movie making.	26	60	84	1.66	N
	7. Messaging either sending or receiving.	27	60	83	1.67	S
	8. Accessing the website.	24	67	79	1.68	S
	9. Making diorama.	21	71	78	1.66	N
	10. Research work.	17	78	75	1.66	N
	Average Weighted Mean 1.66(Never)					
Laptops or Net Pads	1. Research work.	35	91	40	1.97	S
	2. Making diorama.	29	76	61	1.81	S
	3. Accessing the website.	35	75	56	1.87	S
	4. Dialing or answering phone incoming calls.	25	75	66	1.75	S
	5. Conduct of meeting.	33	72	61	1.83	S
	6. Program celebration for specific occasion.	31	72	63	1.81	S
	7. Messaging either sending or receiving.	35	71	60	1.85	S
	8. Reporting presentation.	45	70	51	1.96	S
	9. Movie making.	35	69	62	1.84	S
	10. Downloading video clips.	35	67	64	1.83	S
	Average Weighted Mean 1.85(Sometimes)					
Tablets	1. Research work.	24	92	51	1.84	S
	2. Program celebration for specific occasion.	21	82	64	1.74	S
	3. Movie making.	29	82	56	1.84	S
	4. Making diorama.	18	82	67	1.71	S
	5. Reporting presentation.	35	80	52	1.9	S
	6. Dialing or answering phone incoming calls.	24	80	63	1.77	S
	7. Downloading video clips.	22	79	65	1.74	S
	8. Accessing the website.	31	76	60	1.83	S
	9. Messaging either sending or receiving.	37	76	54	1.9	S
	10. Conduct of meeting.	21	71	75	1.68	S
	Average Weighted Mean 1.79(Sometimes)					
Ear Phones/Head Sets	1. Research work.	14	87	63	1.7	S
	2. Accessing the website.	16	82	66	1.7	S
	3. Making diorama.	22	71	71	1.7	S
	4. Dialing or answering phone incoming calls.	14	70	80	1.6	N
	5. Downloading video clips.	21	70	73	1.68	S
	6. Movie making.	24	69	71	1.71	S
	7. Program celebration for specific occasion.	28	68	68	1.76	S
	8. Conduct of meeting.	22	64	78	1.66	N
	9. Reporting presentation.	30	61	73	1.74	S
	10. Messaging either sending or receiving.	37	60	67	1.82	S
	Average Weighted Mean 1.76(Sometimes)					
I Phone/Pads	1. Research work.	19	94	56	1.78	S
	2. Accessing the website.	26	80	63	1.78	S

	3. Reporting presentation.	31	74	64	1.8	S
	4. Messaging either sending or receiving.	28	73	68	1.76	S
	5. Dialing or answering phone incoming calls.	28	73	68	1.76	S
	6. Making diorama.	24	73	72	1.72	S
	7. Downloading video clips.	33	64	72	1.77	S
	8. Conduct of meeting.	30	63	76	1.73	S
	9. Program celebration for specific occasion.	30	63	76	1.73	S
	10. Movie making.	31	63	75	1.74	S
	Average Weighted Mean 1.71(Sometimes)					

Note: Boldface are Highest Frequency

Legend: 1.00-1.66-Never (N), 1.67-2.33-Sometimes (S), 2.34-3.00-Always (A).

Frequency of Use on Activities Involved in E-Gadget Utilization in the Classroom situation for Teachers

Table 4 exhibits the frequency of use on activities involved in E- gadget utilization in the classroom situation for teachers. This study found out that teachers involve the use of gadgets in their classroom settings as a strategy to have an effective teaching-learning interaction and process.

It can be gleaned from table 4 that teacher respondents *always* utilize mobile phones and laptops/net pads in research work, reporting presentation, conduct of meeting, program celebration for specific occasion, accessing the website, messaging either sending or receiving, dialing or answering phone incoming calls, movie making, making diorama and downloading video clips with most of the activities getting the highest frequencies and a weighted mean of 2.39 and 2.40 respectively. On the other hand, teachers perceived to use desktop computers and iPhones/iPads *sometimes* in the aforementioned activities gaining the highest frequencies and weighted means of 1.74 and 1.72. Moreover, tablets and earphones/headsets are *never* used in classroom activities garnering means of 1.59 and 1.38 respectively.

Samuel (2010) asserts that interaction between the teacher and the student is very important. With the use of e-gadgets, there can be an effective connection in the teaching-learning process for the students to better learn and absorb information as well as to get their attention.

Table 4: *Frequency of Use on Activities Involved in E-Gadget Utilization in the Classroom Situation for Teachers*

E-Gadgets	Activities involved in the utilization of the following gadgets.	A	S	S	WM	DE
Mobile phone	1. Dialing or answering phone incoming calls.	25	4	0	2.86	A
	2. Messaging either sending or receiving.	23	6	0	2.79	A
	3. Research work.	17	8	4	2.45	A
	4. Accessing the website.	16	10	3	2.45	A
	5. Program celebration for specific occasion.	15	10	4	2.38	A
	6. Downloading video clips.	14	11	4	2.34	A
	7. Reporting presentation.	12	10	7	2.17	S

Desk Computer	8. Movie making.	12	11	6	2.21	S
	9. Conduct of meeting.	11	12	6	2.17	S
	10. Making diorama.	9	12	8	2.03	S
	Average Weighted Mean 2.39 (Always)					
	1. Reporting presentation.	2	7	10	1.58	N
	2. Conduct of meeting.	4	5	10	1.68	S
	3. Dialing or answering phone incoming calls.	1	8	10	1.53	N
	4. Research work.	3	7	9	1.68	S
	5. Messaging either sending or receiving.	4	6	9	1.74	S
	6. Making diorama.	2	8	9	1.63	N
	7. Downloading video clips.	4	6	9	1.74	S
Laptops or Net Pads	8. Program celebration for specific occasion.	4	7	8	1.79	S
	9. Movie making.	3	8	8	1.74	S
	10. Accessing the website.	3	8	7	2.26	S
	Average Weighted Mean 1.74 (Sometimes)					
	1. Reporting presentation.	22	4	3	2.66	A
	2. Research work.	18	10	1	2.59	A
	3. Conduct of meeting.	17	9	3	2.48	A
	4. Program celebration for specific occasion.	16	9	4	2.41	A
	5. Movie making.	16	9	4	2.41	A
	6. Making diorama.	16	10	3	2.45	A
	7. Downloading video clips.	16	8	5	2.38	A
Tablets	8. Accessing the website.	15	11	3	2.41	A
	9. Messaging either sending or receiving.	15	8	6	2.31	S
	10. Dialing or answering phone incoming calls.	7	12	10	1.9	S
	Average Weighted Mean 2.40 (Always)					
	1. Reporting presentation.	2	5	11	1.5	N
	2. Conduct of meeting.	2	5	11	1.5	N
	3. Making diorama.	1	6	11	1.44	N
	4. Accessing the website.	2	6	10	1.56	N
	5. Dialing or answering phone incoming calls.	3	5	10	1.61	N
	6. Downloading video clips.	4	4	10	1.67	S
	7. Program celebration for specific occasion.	1	8	9	1.56	N
Ear Phones/Head Sets	8. Movie making.	2	7	9	1.61	N
	9. Research work.	3	7	8	1.72	S
	10. Messaging either sending or receiving.	4	6	8	1.78	S
	Average Weighted Mean 1.59 (Never)					
	1. Program celebration for specific occasion.	1	3	19	1.22	N
	2. Reporting presentation.	1	4	18	1.26	N
	3. Research work.	1	5	17	1.3	N
	4. Conduct of meeting.	0	6	17	1.26	N
	5. Accessing the website.	1	7	15	1.39	N
	6. Dialing or answering phone incoming calls.	4	4	15	1.52	N
	7. Movie making.	3	5	15	1.48	N
	8. Making diorama.	2	6	15	1.43	N

I Phone/Pads	9. Downloading video clips.	1	7	15	1.39	N
	10. Messaging either sending or receiving.	2	8	13	1.52	N
	Average Weighted Mean 1.38 (Never)					
	1. Reporting presentation.	1	6	7	1.57	N
	2. Conduct of meeting.	3	4	7	1.71	S
	3. Program celebration for specific occasion.	2	5	7	1.64	N
	4. Movie making.	2	5	7	1.64	N
	5. Research work.	1	7	6	1.64	N
	6. Accessing the website.	2	6	6	1.71	S
	7. Making diorama.	1	7	6	1.64	N
	8. Downloading video clips.	4	5	6	1.87	S
	9. Messaging either sending or receiving.	3	6	5	1.86	S
	10. Dialing or answering phone incoming calls.	1	8	5	1.71	S
	Average Weighted Mean 1.72 (Sometimes)					

Note:
Boldface are
Highest
Frequency

Legend: 1.00-1.66-Never (N), 1.67-2.33-Sometimes (S), 2.34-3.00-Always (A)

Management Strategies Being Involved in E-Gadgets Utilization Among Grade 11 Teachers of Cuyapo West District

Table 5 presents the management skills being involved in e-gadgets utilization among grade 11 Teachers of Cuyapo West District. The table shows how teachers use their Management skills on how to utilized E-Gadgets properly.

It also reflects the level of frequency based on the indicators of management strategies and it arranged into highest to lowest. There are 10 indicators among this area.

Table 5: Management Strategies Being Involved in E-Gadgets Utilization Among Grade 11 Teachers of Cuyapo West District

Indicators of Management Strategies	A	S	N	WM	DE
1. Restrictions on the utilization of e-gadget are strictly enforced.	17	11	1	2.55	A
2. Alertness of teachers in supervising e-gadget utilization in class.	15	13	1	2.48	A
3. Time schedules for the use of e-gadgets for class activities.	15	11	3	2.41	A
4. Submission of outputs are required after e-gadget utilization for control purposes.	15	13	1	2.48	A
5. Classroom policies put in place for e-gadget utilization.	14	14	1	2.45	A
6. It is use as motivational tool in teaching students.	14	14	1	2.45	A
7. E-Gadgets are required to surrender in all subject teachers during class hours.	13	14	2	2.38	A
8. Students who caught using E-Gadgets inside the classroom will bring to guidance office for disciplinary actions.	13	14	2	2.38	A
9. Queuing in the utilization of school's e-gadget for those students who have no units.	9	19	1	2.28	S
10. Time extension of e-gadget utilization beyond class	8	20	1	2.24	S

hours are imposed.					
Weighted Mean 2.41 (Always)					

Note: Boldface are Highest Frequency

Legend: 1.00-1.66-**Never (N)**, 1.67-2.33-**Sometimes (S)**, 2.34-3.00-**Always (A)**

The e-gadgets were *always* utilized in academic purposes such as in classroom policies put in place for e-gadget utilization, alertness of teachers in supervising e-gadget utilization in class, time schedules for the use of e-gadgets for class activities, restrictions on the utilization of e-gadget are strictly enforced, and submission of outputs are required after e-gadget utilization for control purposes, motivational tool in teaching students and *sometimes* in time extension of e-gadget utilization beyond class hours are imposed, queuing in the utilization of school's e-gadget for those students who have no units, E-Gadgets are required to surrender in all subject teachers during class hours and students who caught using E-Gadgets inside the classroom will bring to guidance office for disciplinary actions and use as motivational tool in teaching students.

Overall, the e-gadgets were always utilized by the respondents gaining 2.41 as average weighted mean. The study of Tsitsika & Janikian (2013) asserts that electronic gadgets are better source of information for learning for the youth and these are great source of fun and entertainment that helps the teachers and students distract from daily stresses of life.

Benefits Derived from E-gadgets Utilization in the Teaching - Learning Process as Perceived by Teachers

Table 6 on the next page shows the benefits derived from the utilization of e-gadgets in the teaching-learning process among teachers and students.

The result reveals that the utilization of e-gadgets is always beneficial as perceived by the teachers, obtaining an average weighted mean of 2.58, which signifies that the use of e-gadgets is a modern technique or strategy in the teaching-learning process.

Table 6 shows that the using the e-gadgets in terms of ease of doing class activities among students, precision in the production of desired outputs, messaging either sending or receiving is facilitated, experience in accessing data through the internet for purposes of research and other class work, fast accomplishment of assigned tasks, orderliness in class among students because they enjoy working with the used of e-gadgets, copying of outputs is minimized because of time restrictions, source of information, recreational activities like ML, DOTA etc., and the transportation of fast response from friends abroad is always beneficial gaining the highest frequencies of 15, 16, 19, 22, 17, 13, 20, 18, 16 and 21 respectively.

The study of Ophir, Nass & Wagner (2009) supports that electronic gadgets are most likely to make lifestyle easier in which individuals must be knowledgeable and incorporate the use of these devices in the classroom setting to further enhance their cognitive skills which is beneficial to the teaching-learning process.

Table 6: *Benefits Derived from E-gadgets Utilization in the Teaching - Learning Process as Perceived by Teachers and Students*

Indicators of Benefits Derived for E-Gadget Utilization	Teachers					Students				
	A	S	N	WM	DE	A	S	N	WM	DE
1. Ease of doing class activities among	1	13	1	2.48	A	23	13	16	2.04	S

students.	5						3			
2. Precision in the production of desired outputs.	16	12	1	2.52	A	46	96	30	2.09	S
3. Messaging either sending or receiving is facilitated.	19	9	1	2.62	A	56	96	20	2.21	S
4. Experience in accessing data through the internet for purposes of research and other class work.	22	6	1	2.72	A	52	97	23	2.17	S
5. Fast accomplishment of assigned tasks.	17	11	1	2.55	A	66	89	17	2.28	S
6. Orderliness in class among students because they enjoy working with the used of e-gadgets	13	15	1	2.41	A	47	101	24	2.13	S
7. Copying of outputs is minimized because of time restrictions.	20	8	1	2.66	A	68	87	17	2.30	S
8. It gives source of information.	18	10	1	2.59	A	51	101	20	2.18	S
9. Gives us recreational activities like ML, DOTA etc.	16	12	1	2.52	A	58	90	24	2.20	S
10. It can transport fast response from friends abroad.	21	7	1	2.69	A	76	73	23	2.31	S
Average Weighted Mean 2.58 (Always)						Average Weighted Mean 2.19 (Sometimes)				

Note: Boldface are Highest Frequency

Legend: 1.00-1.66-Never (N), 1.67-2.33-Sometimes (S), 2.34-3.00-Always (A).

Implications of this study reveal that teachers have all the E-gadgets because they have the money to buy their own gadgets, while students have limited resources to own certain gizmos.

Benefits Derived from E-gadgets Utilization in the Teaching - Learning Process as perceived by Students

As evident from the computed average weighted mean of 2.19, which is sometimes described as implying that the use of e-gadgets can be beneficial to students in their academe.

It can be gleaned from table 7 that e-gadgets are always beneficial when it comes to the transport fast response from friends abroad gaining the highest frequency of 76 and *sometimes* beneficial to the students in ease of doing class activities among students, precision in the production of desired output, messaging either sending or receiving is facilitated, experience in accessing data through the internet for purposes of research and other class work, fast accomplishment of assigned tasks, orderliness in class among students because they enjoy working with the used of e-gadgets, copying of outputs is minimized because of time restrictions, source of information, and recreational activities like ML, DOTA etc. with frequency counts of 133, 96, 96, 97, 89, 101, 87, 101, and 90 respectively.

The study of Tsitsika & Janikian (2013) asserts that electronic gadgets are beneficial not just as a great source of information for effective learning but also used as an entertainment to distress.

Difference in the Benefits Derived from E-gadgets as Perceived by the Teachers and Students

Table 7 reveals differences in the benefits derived from e-gadgets as perceived by teachers

and students. This table shows the degree of benefits derived from E-Gadgets among teachers and students, and how these benefits differ between them. Based on the table, there is a significant difference in the perceived benefits from E-Gadgets between teachers and students.

Table 7: *Difference in the Benefits Derived from E-gadgets as Perceived by the Teachers and Students*

Group	Mean	Mean Difference	tc	Sig.
Teachers	2.62	.418	6.29**	.000
Students	2.20			

**Significant at .05% level

In the field of education, technology is acknowledged as a tool for learning. The way teachers perceive the use of gadgets differs from how students use them. As the result shows that there is a significant difference in the level of the benefits derived from e-gadgets as perceived by the teachers and students, based on $t_c = 6.29$ with an associated significant value lower than .05 level.

The utilization of the e-gadgets in the learning process is always beneficial as perceived by the teachers (see table 6), whereas the use of E-gadgets in the classroom settings is sometimes beneficial as perceived by the students. Implications of this study reveal that E-gadgets are beneficial to teachers who serve as their instructional material in teaching students, they use the internet as a source of information, and E-gadgets are used to make reports. Some students use it for research and it serves as a reference when doing assignments, and often most students use E-gadgets for gaming.

Relationship Between the Profile and Management Strategies of E-gadgets Utilized by Teachers

Table 8 shows the Relationship between the Profile and Management Strategies of E-gadgets Utilized by Teachers. The table reflects on the profile and Management Strategies of Teachers and what are the relationship of these two variables. It show also the difference in terms of numerical value between the profile and management strategies.

Table 8: *Relationship between the Profile and Management Strategies of E-gadgets Utilized by Teachers*

Profile	Management Strategies	
	My	Sig.
Age	-.251	.207
Sex	.004	.985
Civil Status	.302	.155
Highest Degree Earned	-.049	.813
Attendance to Seminar related to ICT	-.253	.202

The profile of the respondents is a factor which may affect the management strategies in the utilization of E - Gadgets in the classroom settings. However, it is revealed in table 9 that there is no significant relationship between the profile and management strategies of E-gadgets utilized by teachers gaining r - values of -.251, .004, .302, -.049 and -.253 which signifies that

the utilization of gadgets as perceived by the teachers has no connection on how the students use the gadgets..

SUMMARY

This study examined the utilization and management of e-gadgets among Senior High School students in Cuyapo West District, Nueva Ecija during the School Year 2018–2019. It employed a descriptive-correlational research design involving 29 teachers and 172 Grade 11 students, using a survey questionnaire to gather data on respondents' profiles, availability of e-gadgets, extent of utilization, management strategies, and perceived benefits.

Findings revealed that teacher-respondents were predominantly female, aged 21–40, married, and with master's degrees. Both teachers and students widely used e-gadgets, particularly mobile phones and laptops. Students reported moderate (sometimes) device use during classroom activities, while teachers indicated consistent (always) use of mobile phones and laptops, but limited use of tablets and earphones.

In terms of management strategies, teachers demonstrated a high level of control through rule enforcement, monitoring, scheduling, and requiring outputs, indicating a structured integration of e-gadgets into instruction. Regarding perceived benefits, teachers viewed e-gadgets as highly beneficial in enhancing teaching efficiency and learning processes, whereas students perceived them as moderately beneficial.

Statistical analysis showed a significant difference in perceptions between teachers and students regarding the benefits of e-gadgets. However, no significant relationship was found between teachers' profile variables and their management strategies.

Overall, the study concluded that while e-gadgets are widely utilized and beneficial in education, their effectiveness depends on proper management and guided use in classroom settings.

CONCLUSIONS

From the preceding findings, the following conclusions are drawn:

1. The teacher-respondents were predominantly female, within the age range of 21–40 years, mostly married, and with master's degrees. Most had limited exposure to ICT-related training, indicating a need for further professional development in technology integration.
2. Both teachers and students widely possessed and utilized e-gadgets, particularly mobile phones and laptops, confirming the strong presence of digital technology in the educational environment.
3. Students moderately utilized e-gadgets in classroom activities, while teachers consistently integrated mobile phones and laptops into instruction. However, certain devices, such as tablets and earphones, were minimally or not utilized, indicating selective usage of technology.
4. Teachers effectively implemented management strategies, including strict enforcement of rules, monitoring, scheduling, and control measures, reflecting a structured and regulated use of e-gadgets in the classroom.

5. Teachers perceived e-gadgets as highly beneficial in enhancing the teaching-learning process, while students viewed them as moderately beneficial, suggesting differences in appreciation and utilization of technology.
6. There was a significant difference between teachers' and students' perceptions regarding the benefits of e-gadgets, indicating varying levels of understanding and usage purposes.
7. There was no significant relationship between teachers' profile variables and their management strategies, implying that effective management of e-gadgets is not dependent on demographic characteristics but rather on professional practices.

RECOMMENDATIONS

Based on the above-mentioned findings and conclusions, the following recommendations are hereby presented:

1. Professional development programs focusing on ICT integration should be conducted to enhance teachers' competencies in utilizing and managing e-gadgets effectively in the classroom. Continuous training and seminars will help address the limited exposure of teachers to technology-related practices.
2. Schools should strengthen access to essential e-gadgets, particularly mobile phones and laptops, while also expanding the availability and utilization of other devices such as tablets and desktop computers to support diverse learning activities.
3. Teachers should be encouraged to design structured and engaging classroom activities that maximize the educational use of e-gadgets, ensuring that students move from moderate to more purposeful and consistent utilization of technology.
4. School administrators should institutionalize clear policies and guidelines on e-gadget use, reinforcing effective classroom management strategies such as monitoring, scheduling, and regulated usage to maintain discipline and focus during instruction.
5. Programs that promote responsible and academic-oriented use of e-gadgets among students should be implemented to enhance their appreciation of the benefits of technology in learning.
6. Interventions such as orientations or awareness campaigns should be conducted to bridge the gap between teachers' and students' perceptions regarding the benefits of e-gadgets, fostering a shared understanding of their educational value.
7. Future research may explore additional variables and emerging technologies to further examine e-gadget utilization, as well as investigate other factors influencing management strategies beyond demographic characteristics.

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