

Variables Influencing the Utilization of ICT Integration in a Public High School in the Philippines

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Abstract— This study aimed to investigate how teacher-related and school-related factors influence the integration of Information and Communications Technology (ICT) in Moonwalk National High School for the School Year 2024–2025. The quantitative research design, specifically the descriptive correlational method, was utilized for this study. The survey questionnaire used for the data gathering was adapted from "Teaching and Learning with Technology: Effectiveness of ICT Integration in Schools." The items are stated on a five (4) point Likert-type scale, and the 60 teacher respondents indicated their chosen answer by placing a checkmark in the space. The statistical tools utilized were the frequency, percentage, weighted mean, Kruskal-Wallis, and Spearman's rho. The study revealed that teachers possess a consistent ability to use ICT in their lessons despite differences in their demographic backgrounds. Furthermore, teachers who have undergone adequate ICT training have a more positive perception of its use in education compared to those with less or no training. Also, continuous maintenance and readily available technical support play crucial roles in enabling ICT utilization and positively influencing teachers' attitudes. More importantly, an in-service training program was proposed in order to enhance the ICT skills of teachers.

Keywords— attitude toward ICT integration, ICT utilization, teaching style, and technical assistance.

I. INTRODUCTION

Education has evolved significantly over time. Humanity began storing and sharing knowledge through word of mouth, passing down information about animals, plants, and the land to each successive generation. Digital technology, which includes computers and the internet, represents the second major wave of disruptive technology since the printing press. This technology has completely transformed the possibilities for learning and teaching, making them more engaging and accessible (Muthukumarana, 2022).

Moreover, Integrating Information and Communication Technology (ICT) helps teachers meet global requirements by replacing traditional teaching methods with technology-based tools and resources. Specifically, it is incorporated into the daily classroom instructional process. In addition to preparing students for the current digital era, teachers are recognized as key players in utilizing ICT in their classrooms (Shah, 2022).

However, Villena and Caballes (2020) claims that the process of adopting ICT is not a one-time step; rather, it is an ongoing process that fully supports teaching, learning, and access to information resources. In education, ICT integration generally refers to a technology-based teaching and learning process that closely relates to the use of learning technologies in schools.

According to UNESCO (2019), as we move further into an age increasingly dominated by technology, the urgency of educating individuals—especially young people and their teachers—in information and communication technology (ICT) is becoming more critical. Not only should young people receive training in information technology to enhance their future career prospects, but, as this booklet argues, ICT can also significantly improve education. It provides innovative and more efficient teaching methods, such as distance education and enhanced approaches within educational institutions. In the early 21st century, no education system can afford to overlook the necessity of developing appropriate ICT-in-education policies and implementation strategies at the national level.

In most European countries, the use of ICT in education and training has become a priority over the last decade. However, very few have made significant progress.

Indeed, a small percentage of schools in some countries have achieved high levels of effective ICT use to support and transform the teaching and learning process across various subjects. Others remain in the early stages of adopting Information and Communication Technologies (Montoya, 2023).

According to Nidup (2018) Asian countries have been leading the growth of information and communications technology (ICT) over the past decade. Approximately

49% of people in Asia are using the Internet, the highest percentage among the seven continents. However, Asia and Africa report internet penetration rates of 48% and 35%, respectively—the lowest in relation to their populations. This is primarily due to around 60% of the global population residing in Asia. The slower growth rate of internet usage in Asia and Africa affects accessibility for educators and students in schools. Consequently, this negatively impacts the integration of ICT in schools across countries with low Internet connections.

Countries like Bangladesh, Nepal, Cambodia, the Philippines, Sri Lanka, Azerbaijan, and Bhutan have the lowest numbers of schools connected to the Internet. The student-to-computer ratio varies across countries in Asia, and this disparity will significantly impact Internet access, the integration of ICT in schools, and the use of information for teaching and learning. Consequently, inequality in access to ICT and quality education will persist (Peter, 2025).

The Department of Education launched the computerization program on June 10, 2010, to enhance the teaching and learning process and address the challenges of the 21st century for Filipino learners (DepEd Order No. 79, s2010).

In the Philippines, Sumuob (2023) asserted that governments are responsible for providing quality education for all. The integration of ICT in schools enhances quality education and equal opportunities for all students. Through ICT integration, students can acquire the skills and knowledge necessary to become competent in ICT. However, the obstacles to integrating ICT in the education sector suggest that institutions that base their technology choices on technological possibilities are likely to face challenges. Therefore, institutions should align their choices with educational needs.

There is a dearth of practices for ICT integration in the Philippines; however, there is congruence with the global perspective that context is key.

Therefore, this study is made to assess how teacher-related and school-related factors influence the integration of information and Communications Technology (ICT) in Moonwalk National High School during the school year 2024-2025. It examined the profile of teacher respondents, utilization of ICT integration, and availability and readiness of the school facilities regarding ICT.

The general objective of this study is to investigate how teacher-related and school-related factors influence the integration of Information and Communications Technology (ICT) in Moonwalk National High School for the School Year 2024–2025.

Specifically, the study seeks to answer the following questions:

1. What is the profile of the teacher-respondents in terms of:
 - 1.1 age,
 - 1.2 sex,
 - 1.3 highest educational attainment,
 - 1.4 subject taught,
 - 1.5 teaching experience and,
 - 1.6 seminars and training attended related to ICT?
2. How may the following school-related factors be described in terms of:
 - 2.1 availability and functionality of ICT facilities,
 - 2.2 internet connectivity and bandwidth adequacy and,
 - 2.3 maintenance and technical support of ICT facilities?
3. How may the utilization of ICT integration among teachers be described in terms of:
 - 3.1 ability to utilize ICT in teaching,
 - 3.2 teaching style preference and,
 - 3.3 attitudes toward ICT integration?
4. Is there a significant difference in the ICT utilization when respondents were grouped based on profile variables?
5. Is there any significant relationship between the school-related factor and the utilization of ICT integration?
6. What action plan may be proposed based on the findings of the study?

II. REVIEW OF RELATED LITERATURE

Quality education enables individuals to develop all their attributes and skills to reach their full potential as human beings and members of society. It provides the foundation for equity in society and is one of the most fundamental public services.

There is a widespread belief that ICTs can and will empower both teachers and learners, transforming the teaching and learning processes from being highly teacher-dominated to student-centered. This transformation is expected to lead to increased learning gains for students, creating and facilitating opportunities for learners (Goldhaber, 2021).

Furthermore, integration of Information, Communication, and Technology (ICT) will assist teachers in meeting the global requirement to replace traditional teaching methods with technology-based teaching and learning tools and facilities. In Malaysia, ICT is considered one of the main elements in transforming the country for future development (Shah, 2022).

In a study conducted by Mensah (2022), the results revealed that the teachers had a positive perception that incorporating ICT into the Social Studies classroom makes lessons more engaging, varied, and well-presented, as well as allows the teacher to control the instructional time effectively, aids students in comprehending what they have been taught, makes lessons more concrete, and increases students' attention in class. The findings also showed that ICT tools like computers, internet systems, educational software, printers and overhead projectors were found to be limited in the schools.

Likewise, Chisango (2019) found in his study that the teachers had a positive attitude towards the adoption of technologies and were ready to integrate ICTs in teaching and learning but they lacked the requisite ICT skills. The article concludes that ICT is an important vehicle in education and further recommends the training of both teachers and learners in ICT usage.

In a study conducted Pittas (2019) the results revealed that the majority of students use technology to do projects and research. Both teachers and students enjoy the use of technology in teaching and learning, they feel competent in using it and they similarly evaluate the effectiveness of available technologies. Although the majority of teachers agreed that teaching has become easier and faster with technology, only a small percentage integrates technology into teaching. Factors hindering technology integration concern curriculum design, network issues, time constraint and other. In theory, the study contributes to our understanding of the reasons why teachers' and students' find it challenging to use technological innovations in school.

Boonmoh's study (2024) investigated how teachers in secondary schools use technology in their classrooms and their perceptions of this use. The findings revealed that most of the teachers had knowledge of technological tools and had integrated technologies in their classes. The teachers in this present study seemed willing, ready, and eager to prepare themselves for

integrating technology into their classes. Most teachers had already used technology through computers and mobile devices.

Waiganjo (2020) described the 'how' and 'why' teachers used different types of technology in their teaching, as well as challenges that hindered them from integrating technology in their teaching and learning. The study stipulated that many of the participants used computers in their teaching because of their multi-functioning aspects, and they use technology to save them time. The study also found out that there are challenges such as lack of skills, information and communication technology (ICT) tools, cell phone usage stigma, just to mention a few. The study shows evidently that most teachers have the right attitudes and positive perceptions on the meaningful use of ICT in teaching and learning; therefore, they must be encouraged to use ICT to embrace the Namibian education sector. The study also indicated that most teachers in school management have no positivity toward integrating technology into teaching, and they resist learning, which changes.

Dlamini (2021) explored the lack of information on the enabling and constraining factors in the adoption and utilization of technology in teaching and learning, which is a major challenge in the province. There is evidence that the preparation of teachers for pedagogical ICT integration in the classroom is complex and multidimensional, as ICT skills among teachers do not solve the problem of ICT infrastructure inadequacies, and the availability of ICT infrastructure does not guarantee ICT integration into teaching and learning. For teachers to develop digital pedagogies, they must have access to professional development opportunities. Although most teachers still lack the needed creativity and innovation for pedagogical integration of ICT in their teaching, there is light at the end of the tunnel as most of them are using some form of technology. However, technical competencies and confidence must be achieved for teachers to adopt appropriate technology in their classrooms. Evidently, ICT integration is not prescriptive, as it comprises different interlinked professional and technical activities.

These and several pieces of literature would agree that school-related factors such as availability and functionality of ICT facilities, internet connectivity and bandwidth adequacy, and maintenance and technical support of ICT facilities have an impact on the utilization of ICT integration in the classroom.

Likewise, teachers' ability to utilize ICT in teaching, their teaching style preference, and attitudes toward ICT integration have significance for the successful implementation of ICT integration in learning.

III. RESEARCH METHODS

This study aims to determine the variables influencing the utilization of ICT integration in a public high school in the Philippines.

The questionnaire checklist was adopted from the study conducted by Simin Ghavifekr and Wan Athirah Wan Rosdy of the University of Malaya, Malaysia, titled "Teaching and Learning with Technology: Effectiveness of ICT Integration in Schools"

The items are stated in a five (4) point Likert-type scale in which the respondents indicated their chosen answer, by placing a check mark in the space provided by the respondent for every item given.

The respondents involved 60 teachers at Moonwalk National High School. The researcher utilized the random sampling method. The data were tabulated, analyzed, and presented using appropriate statistical tools like frequency count, mean, and percentage.

Retrieval of responses from the participants through the entire research process may be dependent upon the availability of time identified by them observing ethical considerations as pointed out by Arifin (2018), in his application of appropriate ethical principles.

Confidentiality and anonymity were observed during the entire process. The teacher-respondents may be given the privilege to discontinue participating in the study; should they not be found available at a certain time due to the pressure of activities in school.

The scores obtained were used in analyzing and interpreting the data. All accomplished questionnaires and documents were held in strict confidentiality. The gathered data from the respondents was summarized, analyzed, and interpreted. Upon completion of the study and advise of the graduate school, raw data shall be permanently destroyed.

Moreover, the quantitative research design, specifically, descriptive correlational method was utilized for this study. This research method deals with the collection, organization, presentation and computation of data to describe the samples under investigation. Descriptive research is used to obtain information concerning the

current status of the phenomena to describe what exists with respect to variables or conditions in the situation. The methods involved range from the survey which describes the status quo, to the correlation study which investigates the relationship between variables, to developing studies that seek to determine changes over time. (Bhandari, 2022)

Additionally, Haan (2019) states that descriptive research designs are employed when the researcher intends to describe the characteristics of a population in a systematic and accurate way; a researcher could also employ the descriptive design if it is needful to fully capture the characteristics of a population in such a way as to discover meaning or to discover the frequency of certain events. The descriptive design methodology could also be employed where the researcher wants to understand the relationship between variables and to answer questions which relate to an ongoing invent.

Likewise, Schoeber (2018) states that descriptive correlational research shows whether and to what degree a relationship exists between two or more variables. The correlational coefficient determines the strength of the relation.

Also, correlational research is a type of non-experimental research in which the researcher measures two variables and assesses the statistical relationship between them with little or no effort to control extraneous variables, he added.

Moreover, Stangor (2019) states that correlational research involves the systematic investigation of relationships between or among two or more variables that have been identified in theories, observed in practice, or both. If the relationship exists, the researcher determines the type (positive or negative) and the degree of strength of the relationship.

The study looked into independent variables such as the profile of the teacher-respondents and school-related factors and the dependent variable such as utilization of ICT integration of teachers.

The statistical tests employed in this study were selected based on the nature of the research questions, the type of data collected, and the assumptions underlying each test. For the first research problem, which aimed to describe the demographic profile of teacher-respondents (age, sex, highest educational attainment, subject taught, teaching experience and, seminars and training attended related to ICT), frequency counts and percentages were

utilized. These descriptive statistics are appropriate for categorical variables, as they provide a straightforward summary of the distribution of responses within each demographic category, enabling a clear interpretation of the sample's composition.

Means and standard deviations were calculated for research problems that sought to describe school-related factors and teachers' utilization of ICT integration. These metrics are suitable for Likert-scale or ordinal data, as they quantify central tendency and variability, respectively, allowing for a nuanced understanding of respondents' perceptions. Verbal interpretations were applied to categorize the mean scores, enhancing the practical interpretation of the results.

The study also examined the relationship between teacher profiles and ICT utilization. The Kruskal-Wallis test was chosen here because it is a non-parametric alternative to one-way ANOVA, appropriate for comparing three or more independent groups (age, sex,

highest educational attainment, subject taught, teaching experience and, seminars and training attended related to ICT) when the dependent variable (ICT utilization) is ordinal or not normally distributed. This test is robust against violations of normality and homogeneity of variance, making it ideal for analyzing demographic data that may not meet parametric assumptions.

To assess the relationship between school-related factors and ICT utilization, the Spearman's rho correlation was employed. This non-parametric test is appropriate for measuring the strength and direction of associations between two ordinal or non-normally distributed variables. Unlike Pearson's correlation, Spearman's rho does not assume linearity and is less sensitive to outliers, aligning well with Likert-scale data used by the study to measure perceptions of school-related factors and ICT integration. All hypothesis tests were conducted at a 0.05 significance level, a conventional threshold for balancing Type I error risk with practical relevance.

IV. PRESENTATION AND ANALYSIS OF DATA

Table 1. Summary of School-related Factors

Indicators	Mean	Verbal Interpretation	Rank
Maintenance and technical support of ICT facilities	2.02	Moderate Extent	1
Availability and functionality of ICT facilities	1.74	Moderate Extent	2
Internet connectivity and bandwidth adequacy	1.70	Moderate Extent	3
Overall	1.82	Moderate Extent	

Table 1 summarizes school-related factors regarding the availability and functionality of ICT facilities, internet connectivity and bandwidth adequacy, and maintenance and technical support of ICT facilities. As gleaned from the table, the school-related factors maintenance and

technical support of ICT facilities obtained the highest weighted mean of 2.02 assessed by the teacher respondents. On the other hand, the lowest weighted mean is school-related factor internet connectivity and bandwidth adequacy which obtained 1.70.

Table 2. Summary of Teacher-related Factors

Indicators	Mean	Verbal Interpretation	Rank
Attitudes toward ICT integration	3.20	Great Extent	1
Teaching style preference	2.57	Great Extent	2
Ability to utilize ICT in teaching	2.55	Great Extent	3
Overall	2.77	Great Extent	

Table 2 displays the summary of teacher-related factors in terms of ability to utilize ICT in teaching, teaching style preference and, attitudes toward ICT integration.

Exhibited in Table 2, teacher-related factor attitudes toward ICT integration acquired the highest mean of 3.20. Meanwhile, teacher-related factor ability to utilize ICT in teaching attained the lowest mean of 2.55.

Table 3. Ability to utilize ICT in teaching when respondents are grouped based on profile variable

Profile Variables	H	p-val	Decision	Remarks
Age	7.11	0.213	Do not reject Ho	Not Significant
Sex	0.15	0.697	Do not reject Ho	Not Significant
Education	8.77	0.067	Do not reject Ho	Not Significant
Subject taught	7.35	0.394	Do not reject Ho	Not Significant
Experience	5.79	0.123	Do not reject Ho	Not Significant
Training	0.21	0.976	Do not reject Ho	Not Significant

Table 3 shows ability to utilize ICT in teaching when respondents are grouped based on profile variable.

The results of the Kruskal-Wallis H test indicate that there is no significant difference in teachers' ability to utilize ICT in teaching when grouped according to their profile variables. The test results for age ($H = 7.11$, $p = .213$), sex ($H = 0.15$, $p = .697$), education ($H = 8.77$, $p = .067$), subject taught ($H = 7.35$, $p = .394$), experience ($H = 5.79$, $p = .123$), and training ($H = 0.21$, $p = .976$) all

yielded p-values greater than the standard significance level of .05.

Consequently, the null hypothesis was not rejected for any of these variables, indicating that none of the profile factors significantly influenced teachers' ICT competency in teaching.

These findings suggest that teachers' ability to integrate ICT in their instruction is relatively uniform, regardless of demographic and professional differences.

Table 4. Ability to utilize ICT in teaching when respondents are grouped based on profile variable

Profile Variables	H	p-val	Decision	Remarks
Age	7.43	0.191	Do not reject Ho	Not Significant
Sex	0.29	0.593	Do not reject Ho	Not Significant
Education	8.05	0.090	Do not reject Ho	Not Significant
Subject taught	8.46	0.294	Do not reject Ho	Not Significant
Experience	5.35	0.148	Do not reject Ho	Not Significant
Training	0.47	0.926	Do not reject Ho	Not Significant

Table 4 exhibits ability to utilize ICT in teaching when respondents are grouped based on profile variable.

The results of the Kruskal-Wallis H test indicate that there is no significant difference in teaching style preference when respondents are grouped based on their profile variables. The statistical values for age ($H = 7.43$, $p = .191$), sex ($H = 0.29$, $p = .593$), education ($H = 8.05$, $p = .090$), subject taught ($H = 8.46$, $p = .294$), experience ($H = 5.35$, $p = .148$), and training ($H = 0.47$, $p = .926$)

all yielded p-values greater than the significance level of .05. As a result, the null hypothesis was not rejected for any of these variables, indicating that demographic and professional characteristics do not significantly influence teachers' teaching style preferences. These findings suggest that despite variations in age, gender, educational background, subject expertise, years of experience, and training, teachers exhibit similar teaching style preferences.

Table 5. Attitude toward ICT integration when respondents were grouped based on profile variable

Profile Variables	H	p-val	Decision	Remarks
Age	7.43	0.191	Do not reject Ho	Not Significant
Sex	0.29	0.593	Do not reject Ho	Not Significant
Education	8.05	0.090	Do not reject Ho	Not Significant
Subject taught	8.46	0.294	Do not reject Ho	Not Significant
Experience	5.35	0.148	Do not reject Ho	Not Significant
Training	9.37	0.025	Reject Ho	Significant

It is shown in Table 5 entitled attitude toward ICT integration when respondents were grouped based on profile variable.

The results of the Kruskal-Wallis H test indicate that, for most profile variables, there is no significant difference in respondents' attitudes toward ICT integration in teaching.

The statistical values for age ($H = 7.43, p = .191$), sex ($H = 0.29, p = .593$), education ($H = 8.05, p = .090$), subject taught ($H = 8.46, p = .294$), and experience ($H = 5.35, p = .148$) all have p-values greater than .05, leading to the decision not to reject the null hypothesis.

This suggests that these demographic and professional characteristics do not significantly influence teachers' attitudes toward ICT integration.

However, a significant difference was found when respondents were grouped based on training ($H = 9.37, p = .025$), indicating that ICT-related training plays a crucial role in shaping teachers' attitudes toward technology integration.

This suggests that teachers who have undergone ICT training may have a more positive perception of its use in education compared to those with less or no training.

Table 6. Correlation between school-related factors and integration of ICT utilization among teachers

School Related Factors	Spearman	Utilization of ICT Integration			
		Ability	Preference	Attitude	Overall
Availability and functionality of ICT facilities	rho	.664**	.647**	0.247	.655**
	Correlation	High	High	Small	High
	Sig.	<0.001	<0.001	0.057	<0.001
	Decision	Reject Ho	Reject Ho	Do not Reject Ho	Reject Ho
Internet connectivity and bandwidth adequacy	rho	.559**	.445**	-0.007	.474**
	Correlation	Moderate	Moderate	Negligible	Moderate
	Sig.	<0.001	<0.001	0.957	<0.001
	Decision	Reject Ho	Reject Ho	Do not Reject Ho	Reject Ho
Maintenance and technical support of ICT facilities	rho	.684**	.705**	.426**	.724**
	Correlation	High	High	Moderate	High
	Sig.	<0.001	<0.001	0.001	<0.001
	Decision	Reject Ho	Reject Ho	Reject Ho	Reject Ho
Overall	rho	.673**	.652**	.324*	.686**
	Correlation	High	High	Small	High
	Sig.	<0.001	<0.001	0.012	<0.001
	Decision	Reject Ho	Reject Ho	Reject Ho	Reject Ho

Table 6 reflects correlation between school-related factors and integration of ICT utilization among teachers.

The Spearman correlation results reveal significant relationships between school-related factors and ICT utilization among teachers, particularly in terms of ability, preference, and overall ICT use.

The availability and functionality of ICT facilities showed a high positive correlation with ICT ability ($\rho = .664, p < .001$), ICT preference ($\rho = .647, p < .001$), and overall ICT utilization ($\rho = .655, p < .001$), indicating that well-functioning ICT resources strongly influence teachers' capacity and willingness to integrate technology in their teaching.

However, its correlation with attitude toward ICT ($\rho = .247, p = .057$) was small and not statistically significant, suggesting that while infrastructure supports ICT use, it may not directly affect teachers' attitudes.

Internet connectivity and bandwidth adequacy demonstrated a moderate correlation with ICT ability ($\rho = .559, p < .001$), preference ($\rho = .445, p < .001$), and overall ICT utilization ($\rho = .474, p < .001$). However, its relationship with ICT attitude ($\rho = -0.007, p = .957$) was negligible and not significant, implying that while stable internet access facilitates ICT use, it does not necessarily shape teachers' perceptions of technology.

On the other hand, the maintenance and technical support of ICT facilities had a high correlation with ICT ability ($\rho = .684, p < .001$), teaching preference ($\rho =$

.705, $p < .001$), and overall ICT utilization ($\rho = .724$, $p < .001$), and a moderate correlation with attitude ($\rho = .426$, $p = .001$). This suggests that continuous maintenance and readily available technical support play a crucial role in not only enabling ICT use but also positively influencing teachers' attitudes.

Overall, the combined school-related factors exhibited a high positive correlation with ICT ability ($\rho = .673$, $p < .001$), preference ($\rho = .652$, $p < .001$), and overall ICT utilization ($\rho = .686$, $p < .001$), while their correlation with attitude ($\rho = .324$, $p = .012$) was small but significant. These findings highlight that institutional support, including ICT infrastructure, internet reliability, and technical assistance, is essential in fostering teachers' effective utilization of technology.

Schools should prioritize improving these factors to enhance ICT integration in teaching, ensuring that both technical and attitudinal barriers to ICT adoption are addressed.

V. CONCLUSION

Based on the findings of the study, the researcher arrived at the following conclusions:

1. Teachers possess a consistent ability to use ICT in their lessons despite differences in their demographic backgrounds.
2. Differences in teachers' ICT skills are not greatly affected by factors such as age, sex, highest educational attainment, subject taught, and teaching experience.
3. Teachers who have undergone adequate ICT training have a more positive perception of its use in education compared to those with less or no training.
4. Even when teachers are divided into groups based on their professional and personal traits, the results show that they prefer similar teaching styles. In other words, differences between their demographic profiles don't significantly affect how they like to conduct their lessons.
5. Teachers' demographic and professional factors don't significantly impact their attitudes about using technology in the classroom.
6. Training programs related to ICT were found to have a big effect on teachers' views.
7. Functional ICT equipment is a key part of using ICT in education. However, infrastructure does not directly change teachers' attitudes.
8. Well-functioning ICT resources strongly influence teachers' capacity and willingness to integrate technology into their teaching.
9. Continuous maintenance and readily available technical support play crucial roles in enabling ICT utilization and positively influencing teachers' attitudes.
10. An in-service training program was proposed in order to enhance the ICT skills of teachers.

VI. RECOMMENDATIONS

In the light of the foregoing conclusions, the following recommendations were offered:

1. Schools should give teachers regular opportunities to enhance their skills by providing them with advanced training and allowing them to use new technologies.
2. Professional development programs should focus on inclusive and flexible teaching methods to ensure that all teachers are treated equally.
3. Prioritize ICT-related training programs to ensure that all teachers get enough training and have a better understanding of using technology in the classroom. These will also help the teacher feel more confident and ready to use technology.
4. Professional development programs for teachers should include new ICT-based teaching methods that work with a range of teaching styles and make the classroom more interesting and productive.
5. The Department of Education may use this study as baseline data to craft action plans that focus on giving schools the right institutional support, such as funding and proper policy implementation.
6. It should be standard procedure for ICT facilities to be maintained regularly and for technical assistance to be available so that teaching and learning don't get interrupted. A specialized ICT support team can help teachers when they may require it and ensure seamless utilization of ICT in classrooms.
7. The proposed in-service training may be presented to the Schools Division Office of Parañaque for review and evaluation by the ICT team and other relevant authorities before its implementation in the school.

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