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Research Article

Technology Utilization in Teaching and the Work Performance of Junior High School Teachers

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ABSTRACT

This study investigated the technology utilization in teaching and work performance of Junior High School Teachers in Zambales. The findings of the study revealed that the majority of the teacher-respondents are female, in their early adulthood, married, with earned units in MA, Mathematics major, Mathematics teaching load, with adequate years in service, Teacher I, and have attended numerous trainings related to the use of technology. The teacher-respondents perceived the use of ICT in their teaching to be highly utilized. Teachers performed very satisfactorily in their job using ICT in teaching. ICT training attended was found to significantly influence utilization across most dimensions, including planning, monitoring, implementation, productivity, and enrichment. Despite this high utilization and Very Satisfactory job performance, the study found no significant relationship between the utilization of ICT in teaching and the overall work performance of teachers, suggesting that high ICT use alone does not predict superior job outcomes. The proposed model plan has been developed to address difficulties in the technology utilization in the teaching of teachers.

Keywords: *Technology utilization, Teaching, Work performance, Junior High School teachers*

Background

Technology utilization in teaching has been used to improve the knowledge and skills of teachers in delivering lessons to the learners. It played a vital role in providing various learning opportunities in this new normal of education. Teachers' knowledge in using technology has been an advantage in being more effective and

efficient in teaching. Acquiring new knowledge and skills in technology utilization in teaching was the new trend in technology in education. The shifting of traditional to online mode of teaching and learning was used to maximize learning, especially the secondary students. Different countries have used technology in online teaching for a limited time, responding

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to crises and shutdowns of schools and universities. The mode and acquiring of learning was not limited to modular but with online platforms. Educators are fast realizing that the utilization of computer-assisted teaching and learning might be convenient for the users. In this transition, new technological tools were used for both learners and teachers for the continuity of learning despite of pandemic situation. Learning is not limited by classroom partitions and time, but can browse information online through computers and smartphones, so that the 21st century demands innovation in the learning process. According to the United Nations Educational, Scientific, and Cultural Organization (2018), "ICT was a scientific, technological, and engineering discipline and management technique used in handling information; it is the application and association with social, economic, and cultural matters. The rapid development in technology has made creative changes in the way we live, as well as the demands of society.

In the Philippines, together with the Basic Education- Learning Continuity Plan 2020-2021 (BE-LCP) aimed to empower teachers to carry out quality instruction that recognizes the diversity of learners inside the classroom, was committed to learners' success, allows the use of varied instructional and formative assessment strategies including the use of information and communications technologies (ICTs), and enables the teacher to guide, mentor, and support learners in developing and assessing their learning across the curriculum.

In this new normal education, the importance of technology was used from the planning of lessons to the enrichment activities of the students. Since the traditional mode of teaching was limited, some teachers had a hard time familiarizing themselves and equipping themselves to use technology in teaching. Teachers continued to accept and adopt technological advances and changes despite some difficulties in using technology in teaching. The major gap in the research was to determine the precise extent and specific dimensions of ICT utilization and, critically, whether this utilization translates into improved overall teacher work performance as measured by official ratings. It also ascertained the challenges in using

technology by educators. This was the reason why the researcher decided to determine the Technology Utilization in Teaching and Work Performance of Junior High School Teachers in the Division of Zambales.

This study aimed to determine the Technology Utilization in Teaching and Work Performance of Junior High School Teachers in Zone 2 Schools Division of Zambales.

Specifically, it sought to answer the following questions:

1. What is the profile of the secondary teacher in terms of highest educational attainment, specialization, teaching load, years in service, position, and number of trainings attended in the use of technology?
2. How is the utilization of ICT in teaching by the respondents described as to planning lessons, monitoring learners, implementing lessons, planning teaching according to individual differences and special needs, productivity and professional practice, assessment, and enrichment?
3. What is the work performance of the Junior High School Teachers based on the IPCRF SY 2021-2022?
4. Is there a significant difference in the utilization of ICT in teaching when respondents are grouped according to profile variables?
5. Is there a significant relationship between the utilization of ICT in teaching and work performance?
6. Based on the findings, what model plan can be proposed to address difficulties in the technology utilization in teaching and work performance of junior high school teachers?

Framework of the Study

The following models and theories serve as the foundation and/or interpretative lenses in the conduct of this research study. Constructivist learning has developed as a compelling approach to teaching. According to Vygotsky, learning occurs through interactions with the environment and the people in it. In constructivism, 'knowledge' is actively constructed by learners as they are trying to make sense of their experiences. Constructivist Learning Theory has been used to study the utilization of technology in teaching. Followers of

constructivism include such names as Vygotsky, Piaget, Dewey, Vico, Rorty, and Bruner. Constructivist thinking has rightly made technology utilization in teaching make them become more aware of the needs of the learners.

Cognitive Learning Theory has always focused on how students process information and the best educational strategies educators can use to promote student understanding of material. As educators, it is up to us to vary our teaching strategies with the understanding that individual students process information in unique ways. Cognitive Learning Theory states three phases of information processing: beginning with the sensory input of information, passing then to the short-term or working memory, and finally, after being elaborated, is stored in the long-term memory.

Engagement Theory is intended to be a conceptual framework for technology-based learning and teaching. In addition, students are intrinsically motivated to learn due to the meaningful nature of the Engagement theory has emerged from the authors' experiences teaching in electronic and distance education environments. The fundamental idea underlying engagement theory is that students must be meaningfully engaged in learning activities through interaction with others and worthwhile tasks. Engagement theory is one of several epistemologies that have emerged from student-centered learning, reflecting constructivism. Engagement theory is translated into the classroom through three basic principles

consistent with constructivist beliefs and molded from particles of other epistemologies: active learning, problem-based learning, and case-based learning. One such application, student-centered learning environments (SCLs), is designed to scaffold learning and provide interactive, complementary activities that enable students to address learning interests, study at multiple levels, and deepen their understanding of complex concepts. Through instructional models such as project-based, technology-based, student-centered, and collaborative learning, students are more actively engaged in activities and in the classroom.

Koehler, M. J., & Mishra, P. (2008). developed the Technological Pedagogical Content Knowledge (TPACK) framework. They defined CK as knowledge about the actual subject matter that is to be learned or taught. Mishra and Koehler (2008) observed that a teacher must know and understand the subject that he/ she teaches, including knowledge of central facts, concepts, theories, and procedures, if the teacher is to integrate technology in teaching. TPACK is a framework that introduces the relationships and the complexities between all three basic components of knowledge (technology, pedagogy, and Figure 1: At the intersection of these three knowledge types is an intuitive understanding of teaching content with appropriate pedagogical methods and technologies.

Figure 1 shows the framework of the study proposal. The model was composed of three parts, namely: Input, Process, and Output (IPO).

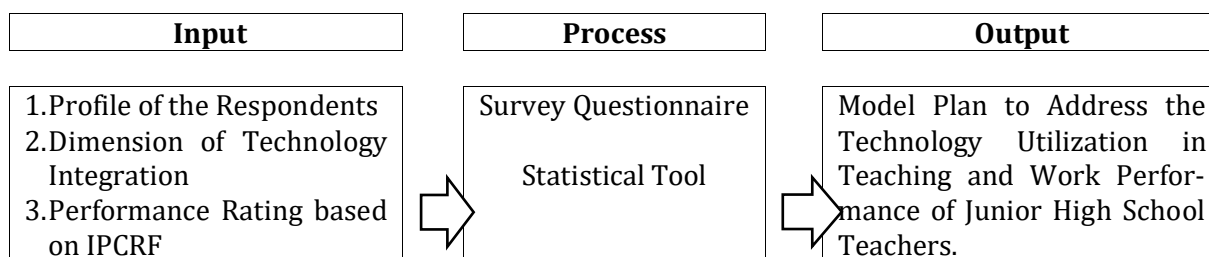


Figure 1. Paradigm of the Study

This study utilized an Input-Process-Output frame. The Input frame explored the aspects of different Demographic profiles of the Respondents described in terms of highest educational

attainment, area of specialization, years in service, present position, and number of trainings in the use of technology. The study also focused on the utilization of technology be described in

different dimensions. The teaching performance of teachers was determined through their latest performance rating. The perceptions and insights would be solicited from the teacher respondents.

The process included data gathering through survey questionnaires. The data collected were analyzed and interpreted through statistical tools, including the Frequency Distribution, Mean, Likert Scale, Analysis of Variance (ANOVA), and Correlation Analysis. A Model Plan to Address the Technology Utilization in Teaching and Work Performance of Junior High School Teachers is the expected Output of the study.

Hypothesis

The following hypotheses were tested.

1. There is no significant difference in the utilization of technology when teachers are grouped according to profile.
2. There is no significant relationship between the utilization of technology and teaching performance as described in IP-CRF.

Methods

Research Design

The descriptive research design and quantitative analysis were employed in this study. The instrument was used to gather responses from the teachers' profile variables and Technology Utilization in Teaching and Work Performance of Junior High School Teachers in Zone 2 Schools Division of Zambales. The study used a survey questionnaire since it statistically treated the data gathered using a formula.

In this research, descriptive research was utilized. Descriptive research aimed to describe a population, situation, or phenomenon accurately and systematically. It could answer what, where, when, and how questions, but not why questions.

The researcher did not control or manipulate any of the variables, but only observed and measured them. The study was towards describing, analyzing, and interpreting the status and issues in the preparation and utilization of supplementary tools. The perceptions and insights were solicited from the teacher-respondents. The result was correlated to the teachers'

work performance in Junior High School Secondary Schools, Zone II, Schools Division of Zambales.

Participants and Location

The respondents of the research study were the selected Junior High School Teachers of Secondary Schools located in Zambales. Using Slovin's Formula, the calculated sample size was approximately 196 teachers were sampled using simple random sampling." The Slovin's Formula, with a 95% confidence level and 5% margin of error was employed by the researcher to compute the sample size of the respondents that would be employed in this study. Simple random sampling is a sampling technique in which each member of a population has an equal chance of being chosen through the use of an unbiased selection method. Each subject in the sample is given a number, and then the sample is chosen by a random method. A total of eleven (11) schools were included as school respondents in the study.

Instruments

The main instrument used in gathering the data for the present study was a survey questionnaire. According to Himalin, H.D & de Guzman, M.F.D. (2020), questionnaire is a set of closed and open-ended questions used to collect data and can be administered face-to-face by an interviewer, over the telephone, on the web, or by self-completion. In the preparation of the survey questionnaire, the researcher conducted literature reviews to identify the items/indicators of the research instrument. The items/indicators of the questionnaire were based on and patterned from the studies conducted by the World Bank.

The survey was a flexible research approach used to investigate a wide range of topics. Surveys often employed the questionnaire as a tool for data collection. This resource considers the use of surveys and questionnaires in descriptive and social sciences research. In the preparation of the survey questionnaire, the researcher conducted literature reviews to identify the items/indicators of the research instrument.

The contents of the survey checklist were adapted from Coklar, A. N., & Odabasi, H. F. (2009). The survey questionnaire had three (3) parts. The first part of the survey checklist would focus on the profile of the teacher respondents, which includes the highest educational attainment, area of specialization, years in service, present position, and number of trainings in the use of technology.

The second part would assess the dimensions of technology utilization in teaching of Junior High School teachers in terms of technology operations and concept, planning and designing learning environments and experiences, assessment and evaluation, productivity and professional practice, social, ethical, legal, and human issues, planning of teaching according to individual differences and special needs. The teachers used a Likert scale ranging from 3.25–4.00 = Highly Utilized, 2.50–3.24 = Moderately Utilized, 1.75–2.49 = Slightly Utilized and 1.00–1.74 = Never Utilized. The last part appraised the latest Individual Performance and Commitment Form (IPCRF). Answers of the respondents were within a scale ranging from 5 (Outstanding), 4 (Very Satisfactory), 3 (Satisfactory), 2 (Unsatisfactory), and 1 (Poor).

The research instrument was subjected to validity and reliability tests. Since the instrument was a researcher-made. It was submitted to the research adviser and the members of the oral examiners for checking. Their corrections, comments, and suggestions were highly considered in finalizing the instrument. The survey questionnaire was also subjected to pilot testing.

A pilot project ensured that the survey instrument was clear in its objectives and instructions and could be easily completed by the respondents. After the pilot test, the data obtained were subjected to the computation of Cronbach's alpha values. The values were followed: Planning Lessons (0.987), Monitoring Learners (0.965), Implementation of Lessons (0.975), Planning of Teaching According to Individual Differences and Special Needs (0.983), Productivity and Professional Practice (0.969), Assessment (0.976), and Enrichment (0.962).

Data Collection

Before the conduct of the study, a letter regarding to conduct of the study was submitted to the Thesis Adviser. Once signed, the researcher needed to secure a written permit and endorsement from the Schools Division Superintendent of the DepEd Division of Zambales. Once approved, the researcher would personally administer the distribution of the questionnaire to the teacher respondents. The researcher allotted two weeks for the scheduled retrieval of the instrument. The researcher sought the assistance of the School Principals and School Heads regarding the conduct of the study and distribution of the survey questionnaire to selected Junior High School teachers under their supervision. The researcher explained the objectives of the study and informed them to answer all the items, and their responses were treated with utmost confidentiality.

The researcher personally administered the survey instrument to the teacher respondents. After two weeks, the researcher collected the questionnaires from the respondents for tabulation, analysis, and interpretation of the data.

Data Analysis

The Statistical Package for Social Sciences (SPSS) computer software and MS Excel were used for the computations and interpretations of data. The statistical tools in the analysis and interpretation of data and hypothesis testing include frequency distribution, weighted mean, analysis of variance, and correlation analysis.

Result and Discussion

1. Profile of the Respondents

The frequency and percentage distribution on the teacher-respondent's profile of sex, age, civil status, highest educational attainment, area of specialization, teaching load, years in service, position, and number of trainings attended in the use of technology is shown in

Table 1. Frequency and Percentage Distribution on the Teacher-respondents' Profile Variable

Highest Educational Attainment	Frequency	Percent
Doctorate Graduate	6	3.10
Master's with Doctorate units	13	6.60
Masters Graduate	33	16.80
Bachelor's degree with MA units	108	55.10
Bachelor's degree	36	18.40
Area of Specialization	Frequency	Percent
Filipino	17	8.70
English	26	13.30
Mathematics	47	24.00
Edukasyon sa Pagpapakatao	4	2.00
TLE	29	14.80
Science	28	14.30
MAPEH	12	6.10
Araling Panlipunan	33	16.80
Teaching Load	Frequency	Percent
Filipino	18	9.20
English	27	13.80
Mathematics	44	22.40
Edukasyon sa Pagpapakatao	9	4.60
TLE	28	14.30
Science	29	14.80
MAPEH	13	6.60
Araling Panlipunan	28	14.30
Years in Service (WM = 10.41 years)	Frequency	Percent
36-40	1	0.50
31-35	3	1.50
26-30	4	2.00
21-25	14	7.10
16-20	16	8.20
11-15	32	16.30
6-10	82	41.80
0-5	44	22.40
Position	Frequency	Percent
Master Teacher II	1	0.50
Master Teacher I	5	2.60
Teacher III	80	40.80
Teacher II	26	13.30
Teacher I	84	42.90
Number of ICT Trainings Attended (WM = 4.22 or 4)	Frequency	Percent
16-20	4	2.00
11-15	8	4.10
6-10	20	10.20
1-5	164	83.70

Highest Educational Attainment. The majority of the respondents have a Bachelor's degree with earned units in MA, with one hundred eight (108) or 55.10%. The highest educational attainment of teachers is related to their ICT teaching performance. Dela Fuente & Biñas (2020) concluded that the respondents' highest educational attainment revealed that whether bachelor's or master's degree holders, respondents are advanced in Word Processing and Presentation. However, they are Intermediate in Spreadsheet and Information and Communication. The Bachelor's degree holders are Intermediate in the same skill set.

Area of Specialization. Most of the respondents are Mathematics majors with forty-seven (47) or 24.00%. According to Wang (2014) that the professional knowledge and skills that the professional teachers of different specializations need are analyzed, as it concludes fundamental methods to develop professionally for professional teachers of different specializations. To realize the specialization of a teacher and to enhance the professional development, one must do the following actions: actively doing research, frequently rethinking, being willing to communicate, and being good at learning.

Teaching Load. There are forty-four (44) or 22.40% with the Mathematics subject teaching load. Teaching load allocation, that is, which teaching staff teaches which subject, is an essential task that is carried out in all teaching and teaching/research institutions every year or every semester. Teaching load allocation has been well recognized as a major contributing factor to teaching quality. The teaching load must be reallocated for changes of staff and/or program. As a consequence, teaching load has to be reallocated in each teaching unit at least once a year. We have interviewed 15 teaching units in 8 universities in Asia, Europe, and Australia, and found that all the teaching units allocate teaching load manually in a trial-and-error manner. As a result, teaching load allocation is a time-consuming process.

Years in Service. There are eighty-two (82) or 41.80% with 6-10 years in service. The

computed mean years in service of the teacher-respondents was 10.41 or 10 years. According to Osamwonyi (2016) that in-service education is designed for the manpower development of the school system and the educational enterprise as a whole. If teachers are to perform their functions effectively and efficiently, it becomes imperative for them to receive training in new skills and modern methodology.

Position. Teachers are ranked based on criteria as performance rating, experience, outstanding accomplishments, education, training, potential, and psycho-social as per Department Order 66, series of 2007. Given the teaching position, whether Teacher I, II, III, or Master Teacher, it was found out that they are Advanced in Word Processing; however, they are Intermediate in ICT-Basic, spreadsheet, and in information and communication. Teacher I is more advanced in Presentation compared to Teacher II, III, and the Master teacher, for they are Intermediate. The Teacher II and the Master Teacher respondents are more advanced in Computer Ethics and Security compared to Teacher I and III in who are Intermediate. In general, Teacher II is more competent in terms of teaching position since most of them are pursuing a master's degree, which provides them a wider learning experiences and hands-on ICT-related activities.

Number of ICT Trainings Attended. There are one hundred sixty-four (164) or 83.70% of respondents who attended 1-5 trainings related to the use of technology. According to Bansa & Asrini (2020), since the technology has been developed, so a need for training and seminars; educators should consider this to be a value for educational purposes. In millennial teaching, the use of ICT is common nowadays, especially in higher education. The use of ICT is meaningful and helpful for lecturers to enhance their teaching performance.

2. Utilization of ICT in Teaching

The utilization of ICT in teaching as perceived by teacher-respondents is presented in Table 2.

Table 10. Utilization of ICT in Teaching as Perceived by Teacher-respondents

Dimensions		<i>x</i>	DE
1	Planning Lessons	3.61	HU
2	Monitoring Learners	3.63	HU
3	Implementation of Lessons	3.62	HU
4	Planning of Teaching According to Individual Differences & Special Needs	3.58	HU
5	Productivity and Professional Practice	3.59	HU
6	Assessment	3.61	HU
7	Enrichment	3.50	HU
Grand Mean		3.59	HU

*HU – Highly Utilized

It can be noted that the teacher respondents perceived the utilization of ICT in teaching to be “Highly Utilized” in terms of “Monitoring Learners”, as manifested with the highest overall weighted mean of 3.63 (rank 1); followed by “Implementation of Lessons” with an overall weighted mean of 3.62 (rank 2); “Planning Lessons” and “Assessment” with an overall weighted mean of 3.61 (tied at rank 3.5); “Productivity and Professional Practice” with an overall weighted mean of 3.59 (rank 5); “Planning of Teaching according to Individual Differences & Special Needs” with an overall weighted mean of 3.58 (rank 6); and “Enrichment” with the lowest computed overall weighted mean of 3.50 (rank 7).

The grand mean of responses of teachers on ICT utilization in teaching was 3.59, with a qualitative interpretation of “Highly Utilized”. The result manifests that the teacher-respondents perceived the use of ICT in their teaching to be highly utilized for monitoring the learning of their students, while needing attention on ICT technical enrichment.

ICT provides help and complementary support for both teachers and students, where it involves effective learning with the help of computers to serve the purpose of learning aids. Computers and technology do not act as a replacement tool for quality teachers, but instead they are considered as an add-on

supplement needed for better teaching and learning. The need for ICT integration in education is crucial, because with the help of technology, teaching and learning are not only happening in the school environment, but also can happen even if teachers and students are physically distant. However, ICT integration is not a one-step learning process, but it is a continual process of learning that provides a proactive teaching-learning environment. In addition, the study showed that ICT has a significant impact on teachers and teaching processes. The growing use of ICT will change many of the strategies employed by both Teachers and Students in the learning process. According to Kubat (2018) that in the process of learning-teaching, the teacher must plan learning by considering these individual differences. When planning teaching, it is more likely that a plan based on the learning style and speed of the students, rather than the collective instruction, will lead to a more efficient learning environment.

3. Work Performance of Teachers based on IPCRF

The mean work performance of Junior High School teachers, as shown in Table 3, was 4.48, indicating “Very Satisfactory” performance. Teachers performed very satisfactorily in their job using ICT in teaching.

Table 3. Frequency and Percentage Distribution on the Work Performance of the Junior High School Teachers based on IPCRF

Descriptive Equivalent	Frequency	Percent
Outstanding	126	64.30
Very Satisfactory	70	35.70

Descriptive Equivalent	Frequency	Percent
Satisfactory	0	0.00
Unsatisfactory	0	0.00
Poor	0	0.00
Mean 4.48 (Very Satisfactory)		

According to Ghavifekr & Rosdy (2015), the ICT integration in education generally means a technology-based teaching and learning process that closely relates to the utilization of learning technologies in schools, which affects teaching performance. Since students are familiar with technology, and they will learn better within a technology-based environment, the issue of ICT integration in schools, specifically in the classroom, is vital.

This is because the use of technology in education contributes a lot to the pedagogical

aspects, in which the application of ICT will lead to effective learning with the help and support of ICT elements and components.

4. Test of Difference on the Utilization of ICT in Teaching Across Profiles

Table 4 shows the analysis of variance to test the difference in the utilization of ICT in teaching when respondents are grouped according to profile variables.

Table 4. Test difference on the Utilization of ICT in Teaching Across Profiles

Variables		Sig.	Decision
Planning Lessons	Educational Attainment	0.219	Not Sig.
	Specialization	0.334	Not Sig.
	Teaching Load	0.309	Not Sig.
	Years in Service	0.008	Sig.
	Position	0.990	Not Sig.
	Training Attended in ICT	0.044	Sig.
Monitoring Learners	Educational Attainment	0.547	Not Sig.
	Specialization	0.384	Not Sig.
	Teaching Load	0.263	Not Sig.
	Years in Service	0.324	Not Sig.
	Position	0.023	Sig.
	Training Attended in ICT	0.014	Sig.
Implementation of Lessons	Educational Attainment	0.127	Not Sig.
	Specialization	0.990	Not Sig.
	Teaching Load	0.907	Not Sig.
	Years in Service	0.106	Not Sig.
	Position	0.755	Not Sig.
	Training Attended in ICT	0.025	Sig.
Planning of Teaching According to Individual Differences & Special Needs	Educational Attainment	0.011	Sig.
	Specialization	0.979	Not Sig.
	Teaching Load	0.941	Not Sig.
	Years in Service	0.083	Not Sig.
	Position	0.858	Not Sig.
	Training Attended in ICT	0.046	Sig.
Productivity and Professional Practice	Educational Attainment	0.060	Not Sig.
	Specialization	0.322	Not Sig.
	Teaching Load	0.277	Not Sig.
	Years in Service	0.066	Not Sig.
	Position	0.756	Not Sig.

	Variables	Sig.	Decision
Assessment	Training Attended in ICT	0.005	Sig.
	Educational Attainment	0.313	Not Sig.
	Specialization	0.969	Not Sig.
	Teaching Load	0.913	Not Sig.
	Years in Service	0.702	Not Sig.
	Position	0.766	Not Sig.
	Training Attended in ICT	0.172	Not Sig.
Enrichment	Educational Attainment	0.116	Not Sig.
	Specialization	0.780	Not Sig.
	Teaching Load	0.781	Not Sig.
	Years in Service	0.509	Not Sig.
	Position	0.594	Not Sig.
	Training Attended in ICT	0.029	Sig.

Planning Lessons. The result implies that the utilization of ICT in teaching among teachers in terms of planning lessons differs in terms of their years in service and the number of trainings they attended related to the use of technology. Planning is important in teaching as it ensures learning progression in subject learning and in the general capabilities of the curriculum. Planning ensures that all students learn from the curriculum and that the content of the key learning areas is considered.

Monitoring Learners. The result implies that the utilization of ICT in teaching among teachers in terms of monitoring learners differs in terms of their position and the number of trainings attended in the use of technology. This includes information, such as availability of digital infrastructure, internet connection speed, school activities in which teachers use ICT, training received by teachers to empower them to integrate ICT into their practices, strategies implemented by schools to develop digital skills, and perceptions by principals and teachers on ICT use in education and its barriers.

Implementation of Lessons. The result implies that the utilization of ICT in teaching among teachers in terms of implementation of lessons differs accordingly to their involvement in seminars and trainings related to the use of technology. According to Elmaifi (2014) that the virtue of government Interventions and training seminars organized in this regard, ICT tools stimulate teachers. Indeed, an absolute majority of teachers claim to use ICT to do

tasks, such as preparing lessons, sequencing classroom activities, etc.

Teachers can plan their lessons more efficiently through sharing ideas related to the school's curriculum.

Planning of Teaching According to Individual Differences & Special Needs. The result implies that the utilization of ICT in teaching among teachers in terms of planning of teaching according to individual differences & special needs differs accordingly to their age, highest educational attainment, and number of trainings attended in the use of technology. ICT tools stimulate teachers. The use ICT serves as aid to do tasks, such as preparing lessons, sequencing classroom activities, etc. Therefore, teachers plan their lessons more efficiently. ICT also helps teachers to work in teams and share ideas related to the school's curriculum. However, very few have achieved progress. Indeed, a small percentage of schools in some countries achieved high levels of effective use of ICT to support and change the teaching and learning process in many subject areas.

Productivity and Professional Practice. The result implies that the utilization of ICT in teaching among teachers in terms of productivity and professional practice differs accordingly on male and female, age, and the number of attended trainings related to the use of technology of respondents. According to Drossel & Eickelmann (2017), the increasing availability of new technologies in an ever more digitalized world has gained momentum in practically all spheres of life, making technology-related

skills a key competence not only in professional settings. Thus, schools assume responsibility for imparting these skills to their students, and hence to future generations of professionals. In so doing, teachers play a key role with their competencies in using new technologies, constituting an essential prerequisite for the effective implementation of such skills.

Assessment. The result implies that there is no statistically detected difference in the utilization of ICT in teaching among teachers in terms of assessment as to sex, age, civil status, highest educational attainment, area of specialization, teaching load, years in service, position, and number of trainings attended in the use of technology. Assessment is always considered a key component in the process of teaching and learning. A major role is being played by ICT in making the process of assessment easy for teachers. As the use of ICT is increasing, the assessment is now made in a new and innovative manner. Assessment has a lot of importance in improving the learning of the students in class.

Enrichment. The result implies that the utilization of ICT in teaching among teachers in terms of enrichment differs accordingly on male and female, marital status, and the

number of attended trainings related to the use of technology of respondents. ICT opens opportunities for learning because it enables learners to access, extend, transform, and share ideas and information in multi-modal communication styles and formats. It helps the learner to share learning resources and spaces, promote learner-centered and collaborative learning principles, and enhance critical thinking, creative thinking, and problem-solving skills.

5. Test of the Relationship between Utilization of ICT in Teaching and Work Performance

As presented in Table 5, the findings signify that the ICT utilization of teachers does not affect their work performance. There is no relationship between teacher ICT competency and teacher acceptance and use of SMS in Negeri Sembilan secondary schools in Malaysia. This is non-experimental quantitative research using a survey technique through the administration of a set of questionnaires that comprised teacher demographic variables, teacher ICT competency, and teacher acceptance and use of SMS.

Table 5. Test of the Relationship between the Utilization of ICT in Teaching and the Work Performance of Teachers

Correlations		Sig.	Decision
ICT Utilization	0.118	0.100	Accept Ho
Work Performance			

IPCRF Focus: ICT utilization did not predict higher IPCRF scores because the IPCRF rating system may prioritize non-ICT related pedagogical skills like content knowledge and pedagogy, learning environment, diversity of learners, curriculum and planning and assessment and reporting and community linkages and professional engagement and personal growth and professional development. The paper-based assessment, non-technology-dependent goals are more heavily used. Utilization Quality: High utilization does not necessarily mean high quality or effective utilization like using Power-Point heavily doesn't guarantee pedagogical

effectiveness. Ceiling Effect: Since the mean work performance is already Very Satisfactory 4.48, there is little room for ICT use to cause further improvement.

6. Proposed Model Plan

The proposed intervention plan has been developed in order to address the technology utilization in teaching of teachers in terms of planning lessons, monitoring learners, implementation of lessons, planning of teaching according to individual differences & special needs, productivity and professional practice, assessment, and enrichment.

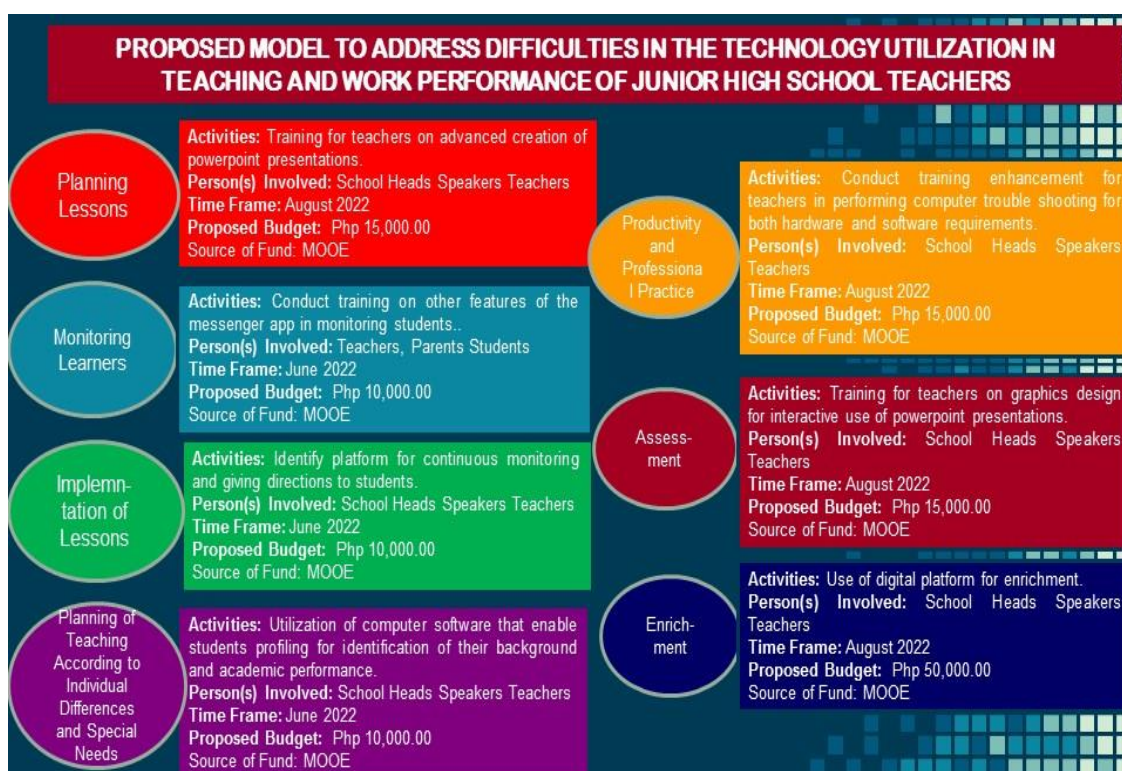


Figure 2. *Proposed Model to Address the Difficulties in the Technology Utilization in Teaching and Work Performance of Junior High School Teachers*

Conclusion

In conclusion, majority of the teacher-respondents are female, in their early adulthood, married, with earned units in MA, Mathematics major, teaching Mathematics subject, with adequate years in service, Teacher I, and have attended numerous trainings related to the use of technology. They perceived the use of ICT in their teaching to be highly utilized. They performed very satisfactorily in their job using ICT in teaching. Finding revealed that there was significant difference on the utilization of ICT in teaching as to planning lessons when grouped according to years in service and number of trainings attended in the use of technology; significant as to monitoring learners when grouped according to position and number of trainings attended in the use of technology; significant as to implementation of lessons when grouped according to number of trainings attended in the use of technology; significant as to planning of teaching according to individual differences & special needs when grouped according to highest educational attainment and number of trainings attended in the use of

technology; significant as to productivity and professional practice when grouped according to number of trainings attended in the use of technology; and significant as to enrichment when grouped according to number of trainings attended in the use of technology. There was no significant relationship between the utilization of ICT in teaching and the work performance of teachers. The proposed model plan has been developed to address the technology utilization in the teaching of teachers. With this, teachers are encouraged to attend trainings and seminars in advancing techniques in preparing their lessons. DepEd may consider creating program software for the utilization of student profiling for the identification of their background and academic performance. School heads may facilitate training enhancement for teachers in performing computer troubleshooting for both hardware and software requirements. Department heads and master teachers may design a training for teachers on moving beyond basic ICT use toward High Quality, Performance-Driven ICT Integration like troubleshooting, graphics design that

explicitly linked to improving the quality and effectiveness of utilization to potentially impact work performance.

Further studies on technology utilization in teaching and work performance of teachers may be conducted involving a wider scope of sample and research locale.

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