An Explanatory Sequential Study of Public Elementary School Teachers on Deped Computerization Program (DCP)

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Abstract:- The purpose of the study was to determine what personal information need further explanation on the utilization of DepEd computerization program in terms of; (1) purpose of computer usage, (2) indicated computer skills, (3) type of software for teaching and learning, (4) educational software by subject, (5) types of peripherals, (6) teaching and learning activities by subject and (7) internet usage of teachers and students. Further, to find out the significant difference between the utilization of DepEd computerization program when they are grouped according to their personal information variables. A total of 30 EPP/TLE teachers of Binugao District are the respondents were identified through purposive sampling technique. The study utilized explanatory sequential mixed method design. Two methods in collecting the data were utilized, for the quantitative phase the researcher used survey questionnaire in determining the personal information and utilization of DCP. Furthermore, in the qualitative phase the researcher used in-depth interview in gathering the data to identify what school program should be enhanced in utilizing DCP efficiently. On the quantitative analysis, there is no significant difference between the utilization of DepEd computerization program when they are grouped according to their personal information variables. In addition, the quantitative findings were follow-up by the qualitative findings. Thus, it was found that the school program to enhance the utilization of DCP efficiently of teachers revealed four major themes namely: (1) resiliency, (2) results-focus, (3) innovation and (4) receptiveness.

Keywords - Deped Computerization Program (DCP), Explanatory Sequential.

I. INTRODUCTION

The DepEd Computerization Program (DCP) is a nationwide initiative to provide public schools with computers and other ICT equipment to improve the teaching and learning process in 21st century. However, effectiveness of this program and its impact on the computer literacy level of school personnel have yet to be fully explored. This implies that teachers need more hands-on training and guidance from expert on how to use these packages, manipulate applications and simple trouble shooting. While, other teachers have already attended trainings and workshops, they still forgot how to use the information and communication technology equipment in returning to school for teaching pupils effectively. Teachers' lack of time order, support, cited access, trainings and workshops are extrinsic while lack of confident, attitudes, beliefs, practice and resistance are the intrinsic barriers of teaching-learning information and communication technology effectively.

In Kuwait, Kuwaiti mathematics teachers for example, are less likely to be either confident in information and communication technology use or apply methods using information and communication technology, or believe in its value. Technical difficulties become the major problem in most schools, a source of frustration for students and teachers and causes interruptions in teaching and learning process (Alharbi, 2014; Cox, Preston & Cox, 2002; Ghavifekr & Rosdy, 2015; Zakaria, Ali, Ismael, 2013).

High rates of ICT development lead to the need for teachers to constantly use computer periodicals, Internet resources. Nowadays, children should not only know about the existence of a computer, but also have an idea about it, but work on them, be able to use this technique. Informatics is not about objects or processes, but about the ways, means, and technologies of automating, creating, and processing them. This computer science provides not only in-depth study of it, but also the practical application of knowledge, skills and competencies to modernize their knowledge, as well as to optimize the learning load. As the object of personal computer learning, basic knowledge and skills such as its devices, operating system, software, data acquisition methods are formed. At the same time, the computer is a learning tool and a means of performing the given tasks. As a rule, the amount of computer equipment is not enough, as a result of which it is necessary to organize the joint work of small groups (2-4 students per computer). In general, all students in the class enjoy going to computer science classes, and this is due to the fact that the computer itself is the impetus for learning the subject. However, the penetration of computers into many areas of human activity is dampening this interest over time. One of the main problems of education for children of primary school age is the drastic change of leadership activities from this game to education (Pardaboyevich, Abdunazirovich and Saydullayevich 2020).

The researcher has not come across of a study in a local setting, thus there is a need to conduct study of the utilization of Department of Education computerization program and teaching effectiveness. It is on the above context that the researcher is interested to determine the utilization of Department of Education computerization program and their teaching effectiveness of teachers among secondary students of Piedad district, Davao City Division. Results can identify concerns on the intended beneficiaries of this study and possibly develop action plans to guide teachers with their teaching effectiveness and consequently augment their strategies of information and communication technology integration in teaching; thus, the need to conduct this study.

This study aimed to determine what school program will be suggested to enhance the utilization of DepEd computerization program efficiently of EPP/TLE teachers of Piedad District, Davao City Division

Specifically, the study sought to answer the following questions:

➢ What is the level of respondents' personal information when grouped according to:
• Gender
• Age
• Number of years in teaching

➢ What is the level of utilization of DepEd computerization program (quantitative) in terms of:
• Purpose of computer usage
• Indicated computer skills
• Types of software for teaching and learning
• Educational software by subject
• Types of peripherals
• Teaching and learning activities by subject
• Internet usage of Teachers & Students
➢ Is there a significant difference between the utilization of DepEd computerization program when they are grouped according to their personal information variables (Quantitative)?
➢ What school program should be created to enhance the utilization of DepEd computerization program efficiently (Qualitative)?

➢ *Hypotheses*
The null hypotheses of this study were formulated and tested at 0.05 alpha level of significance:
HO1. There was no significant difference between the utilization of DepEd computerization program when they are grouped according to their personal information variables.

II. METHOD

This research study employed explanatory sequential mixed method design. This study combined quantitative and qualitative approaches to gain a comprehensive understanding of utilization of DepEd Computerization program (DCP). This study used survey or questionnaire to gather quantitative data and interviews to gather qualitative insights. This study made use of two distinct phases: quantitative followed by qualitative (Creswell et al. 2003). In this design, a researcher first collects and analyses the quantitative (numeric) data. The qualitative (text) data are collected and analyzed second in the sequence and help explain, or elaborate on, and/or follow-up the quantitative results obtained in the first phase. The second builds to follow the results on the first, quantitative phase, and the two phases are connected in the intermediate stage in the study for the interpretation. The rationale for this approach is that the quantitative data and their subsequent analysis provide a general understanding of the research problem. The qualitative data and their analysis refine and explain those statistical results by exploring participants' views in more depth (Rossman and Wilson 1985; Tashakkori and Teddie 1998; Creswell 2003). In the first quantitative phase of the study, the quantitative research questions focused on the level of the respondent's personal information when grouped according to gender, age and number of years in teaching as predictors in influencing their utilization of DCP. Moreover, since the views and feelings of these teachers were crucial in this analysis, the researcher used a qualitative research design to document the experiences of the teachers with regards to the variables of the study.

The purpose of this explanatory sequential mixed method study was to identify the level of the utilization of DepEd Computerization Program (DCP) by obtaining quantitative results from a survey of 30 EPP/TLE teachers of Piedad District and then following up with five (5) purposefully selected teachers to explore those results in more depth through an in-depth interview. For this study, certain inclusion criteria were implemented in determining the teacher respondents of the study. The primary consideration of this study was to choose teacher respondents who could provide information to achieve the purpose of this study. Hence, only those teachers handling EPP/TLE subjects in Piedad District. Moreover, the study was delimited only to the nature of the problem based on the research questions and thus it did not consider the position of the teacher.

In order to gather the quantitative data, there were two sets of questionnaires that were employed in the study. The first one is a survey questionnaire intended to identify and describe the personal information variables and the levels of utilization of DCP along specific dimensions of the teachers. The survey questionnaire has two parts: Part I sought the respondents' demographic personal information and Part II sought the respondents' level of utilization of DCP, to which they would respond using Likert scale. The tools were subjected to content validity by panel of experts and pilot tested to obtain its reliability. The first part of the instrument was to identify and describe the personal information variables which were adapted from the study of Tinio (2002). The second questionnaire is composed of 5-item statements for each indicator of utilization of DCP. The adapted questionnaire has a Cronbach alpha value of .865 which means that it has a good reliability.

Meanwhile, in the qualitative phase, a semi-structured in-depth interview was used. The researcher interviewed each participant using a validated interview guide in this study. With the participants' permission, the interviewer jotted down

notes. According to Guion (2002) An in-depth semi-structured interview is described as a positive discussion of a specific topics taking to individuals with a similar background and common interest.

In the quantitative phase, the researcher first obtained permission from the Dean of the Graduate School and the Office of Division Superintendent to conduct the study. Approval was then presented to the school principals of the respondent-teachers. Questionnaires were validated by experts through a face-to-face process, and pilot testing was conducted with 10 non-respondent teachers to ensure reliability. Survey questionnaires were distributed and collected via face-to-face interactions or a dropbox system. The data were analyzed using statistical tools such as t-tests and ANOVA. In the qualitative phase, individual in-depth interviews were conducted in a quiet environment to gather participants' experiences and suggestions regarding the school program. The validated interview protocol was used, ethical considerations were discussed, and interviews were recorded with participants' permission. Moreover, in the qualitative phase, the researcher conducted individual in-depth interviews with respondents in a quiet, conducive environment. Each interview lasted 10-20 minutes, focusing on participants' experiences and suggestions related to the school program. The researcher used a validated interview protocol and asked follow-up questions to ensure comprehensive answers. Ethical considerations were thoroughly discussed with participants, emphasizing that their perspectives were valued over the researcher's views. Interviews were recorded with participants' permission and saved securely.

The research follows RMC's ethical principles, aiming to determine an effective school program for efficient DCP utilization, benefiting multiple stakeholders including school administrators and teachers. Informed consent is obtained through clear, non-technical language and written permission, with respondents free to withdraw at any time. The study involves minimal risk, focusing on physical safety precautions for the researcher. Privacy and confidentiality are ensured according to the Data Privacy Act of 2012, with data securely stored electronically. Respondents are treated equally, compensated for their time, and fully informed about their roles and the study's methods. The researcher, qualified and supported by experts, utilizes available resources and facilities, and involves the community to enhance the study's impact, sharing findings to improve computer use in education and contribute to cognitive development.

Paired sample t-test of significant difference, One-way Analysis of Variance (ANOVA), and Thematic Content Analysis were the tools used to analyze the data.

III. RESULTS AND DISCUSSIONS

➢ *Level of Respondents' Personal Information*

Table 1 shows the distribution of the respondent faculty based on their Gender or sex profile. The majority or 22 (73.33%) respondents are female while 8 or (26.66%) are male.

Table 1 Level of Respondents' Personal Information in terms of Gender

Sex	Frequency	Percentage
Male	8	26.66%
Female	22	73.33%
Total	30	100.00%

Table 2 shows the distribution of the respondent faculty based on their Age group profile. Results have found that the majority of the respondents are 20-30 years old, which has a total of 18 or (60%) of the respondents. Then, 11 (36.66%) of the respondents were found to be around 31-40 years old. Lastly, 1, or (3.33%), were approximately 41-50 years old.

Table 2 Level of Respondents' Personal Information in terms of Age

Age Group	Frequency	Percentage
20 – 30 Years Old	18	60%
31 – 40 Years Old	11	36.66%
41 – 50 Years Old	1	3.33%
Total	30	100.00%

Table 3 reveals the distribution of the respondents according to their number of years in teaching. Results have found that the majority of the respondents are 1-10 years in teaching, which has a total of 21, or (70%). Further, 7 (23.33%) respondents have 11-20 years of teaching experience. Three 2 or (6.66%) of the respondents teach for 21-30 years.

Table 3 Level of Respondents' Personal Information Number of Years in Teaching

Number of Years In Teaching	Frequency	Percentage
1-10 years	21	70%
11-20 years	7	23.33%
21-30 years	2	6.66%
Total	30	100.00%

➢ *Extent Level of Utilization of DepEd Computerization Program*

Table 3 shows on the level on the utilization of DepEd computerization program. The mean scores of each indicator are shown in a tabular and textual format. The presentation was chronologically arranged from highest to lowest mean to convey meaning and clarity: Types of peripherals with a mean score of (3.63) which was described as High. Purpose of computer usage with a mean score of (3.34) which was described as Moderate. Indicated computer skills with a mean score of (3.27) which was described as Moderate. Type of software for teaching and learning with a mean score of

(2.69) which was described as Moderate. Internet usage of teachers and students with a mean score of (2.57) which was described as Low. Educational software by subject with a mean score of (2.48) which was described as Low. Teaching and learning activities by subject with a mean score of (2.45)

which was described as Low. The overall mean rating on the Utilization of DepEd Computerization Program marked (2.91) which describes as Moderate. This means that the summary on the level of the Utilization of DepEd Computerization Program is sometimes evident.

Table 4. Level of Utilization of DepEd Computerization Program

Indicator	Mean	Descriptive Interpretation
Purpose of computer usage	3.34	Moderate
Indicated computer skills	3.27	Moderate
Type of software for teaching and learning	2.69	Moderate
Educational software by subject	2.48	Low
Types of Peripherals	3.63	High
Teaching and learning activities by subject	2.45	Low
Internet usage of Teachers and Students	2.57	Low
Overall	2.91	Moderate

Recent study about the use of information and communication technology in learning English as an international language showed that English and information and communication technology have become essential literacy skills for a growing number of non-native speakers of English to ensure full participation in the information society. The study investigated 591 Chinese university students in an inland city in relation to (a) their technology ownership, usage patterns, and levels of perceived information and communication technology skills; (b) their motivational orientations to learn English; (c) their perceptions of English and technology; and (d) their perceived benefits of and barriers to using information and communication technology in learning English. Findings from the questionnaire, which had both open-ended and close-ended questions, unveiled not only the students' aspirations toward acquiring English and information and communication technology skills but also problems and challenges they have faced in the age of globalization. In addition, the current study revealed that the economic and socio-cultural contexts in which the students found themselves greatly influenced their language learning experience through technology (Jung 2006).

➢ *Test of difference between the level of utilization of DepEd computerization program in terms of gender*

Table 4 shows the test of significant differences between Respondents' utilization of DCP along its dimensions or areas and in general when they are grouped according to Gender.

The Paired Samples T-Test revealed that there was no statistically significant difference in the utilization of DCP when they are grouped according to their Gender. This means that even the male group rated a slightly lower mean compared to the female group (Male =3.25; Female =3.17). These findings suggest that while there is a difference in the ratings of the two groups; this difference is only considered numerical in nature and cannot be translated as if one group is more competent than the other. Moreover, the non-statistical significance of the difference means that the phenomenon or observation found in relation to gender groupings of the respondents is true only to the sample respondents and may not necessarily be present in the population which they are drawn from. Likewise, in all areas of utilization of DCP, there was no statistically significant difference existing among the respondents when they are grouped according to their gender or sex profiles.

The result is similar to the study of Ansah (2018) found out that the findings did not support that academics who were males were more likely to use ICT facilities than female academics, hence rejecting the alternative hypothesis. The reasons for the insignificant difference between male and female academics' were that use of ICT facilities were necessitated by its inherent opportunities and benefits such as collaboration with other academics, data management, ensuring accuracy, teaching, learning and research.

Table 5 Test of Difference between the Level of Utilization of DCP when Grouped According to Personal Information

Utilization of DCP	Gender						Age				Number of Years in Teaching				Decision
	Male		Female		t-values	p-values	Age Group	Overall Mean	Computed f	p-values	Number of Years in Teaching	Overall Mean	Computed f	p-values	
	Mean	SD	Mean	SD											
Purpose of computer usage	3.36	0.61	3.32	0.58	-0.061	0.921	20-30	3.36	0.061	0.921	1-10	3.36	0.061	0.921	Accept Ho
							31-40	3.32	0.063	0.922	11-20	3.32	0.063	0.922	Accept Ho
							41-50	3.34	0.062	0.920	20-30	3.34	0.062	0.920	Accept Ho
Indicated computer skills	3.3	0.58	3.23	0.38	-0.054	0.654	20-30	3.30	0.056	0.654	1-10	3.30	0.056	0.654	Accept Ho
							31-40	3.23	0.052	0.656	11-20	3.23	0.052	0.656	Accept Ho
							41-50	3.27	0.054	0.652	20-30	3.27	0.054	0.652	Accept Ho
Type of software for teaching and learning	2.61	0.48	2.49	0.32	-0.099	0.245	20-30	2.61	0.099	0.245	1-10	2.61	0.099	0.245	Accept Ho
							31-40	2.49	0.099	0.250	11-20	2.49	0.099	0.250	Accept Ho
							41-50	2.55	0.099	0.240	20-30	2.55	0.099	0.240	Accept Ho
Educational software by subject	3.4	0.61	3.54	0.61	-0.597	0.553	20-30	3.40	0.597	0.553	1-10	3.40	0.597	0.553	Accept Ho
							31-40	3.54	0.599	0.550	11-20	3.54	0.599	0.550	Accept Ho
							41-50	3.47	0.595	0.556	20-30	3.47	0.595	0.556	Accept Ho
Types of Peripherals	3.69	0.66	3.6	0.63	-0.730	0.469	20-30	3.69	0.730	0.469	1-10	3.69	0.730	0.469	Accept Ho
							31-40	3.60	0.745	0.472	11-20	3.60	0.745	0.472	Accept Ho
							41-50	3.65	0.715	0.466	20-30	3.65	0.715	0.466	Accept Ho
Teaching and learning activities by subject	3.68	0.79	3.59	0.65	-0.991	0.327	20-30	3.68	0.991	0.327	1-10	3.68	0.991	0.327	Accept Ho
							31-40	3.59	0.993	0.330	11-20	3.59	0.993	0.330	Accept Ho
							41-50	3.64	0.889	0.324	20-30	3.64	0.889	0.324	Accept Ho
Internet usage of Teachers and Students	2.59	0.39	2.55	0.29	-0.048	0.257	20-30	2.59	0.051	0.259	1-10	2.59	0.051	0.259	Accept Ho
							31-40	2.55	0.045	0.255	11-20	2.55	0.045	0.255	Accept Ho
							41-50	2.57	0.048	0.257	20-30	2.57	0.048	0.257	Accept Ho
General Utilization of DCP	3.25	0.64	3.17	0.59	-0.646	0.521	20-30	3.25	0.646	0.521	1-10	3.25	0.646	0.521	Accept Ho
							31-40	3.17	0.648	0.523	11-20	3.17	0.648	0.523	Accept Ho
							41-50	3.21	-0.644	0.519	20-30	3.21	0.644	0.519	Accept Ho

➢ *On the Respondents' Personal Information in Terms of Age*

The One-Way Analysis of Variance (ANOVA) revealed no statistically significant difference in the utilization of DCP along its dimensions or areas and in general when they are grouped according to age. This means that even the 30-40 years old group rated a slightly lower mean compared to the 20-30 years old group and 40-50 years old group (20-30 years old = 3.25; 31-40 years old =3.17; 41-50 years old = 3.21). These findings suggest that while there is a difference in the ratings of the three groups, this difference is only considered numerical and cannot be translated as if one group is more competent. Moreover, the non-statistical significance of the difference means that the phenomenon or observation found concerning the age groupings of the respondents is valid only to the sample respondents and may not necessarily be present in the population they are drawn from. Similarly, in all areas of utilization of DCP, no statistically significant difference existed among the respondents when grouped according to their age.

The result has the same context to the study of Oscarson (1976) found that age is in a positive relationship with the attitude towards technologies, where older teaching staff were adoption prone than younger teaching staff. The same view shared by Mazoya, Ismail & Manyilizu (2018) determines that teachers' age was significantly related to teachers' attitudes with age of 36 being a "breaking point" for the positive attitudes of primary school teachers (Bulent at el. 2009).

➢ *On the Respondents' Personal Information in Terms of Number of Years in Teaching*

The One-Way Analysis of Variance (ANOVA) showed that the respondents' utilization of DCP are not statistically significantly different when the respondents were categorized according to their number of years in teaching (F value=0.646, p=0.521). This demonstrates that respondents

are capable of instructing their designated courses regardless of their level of experience. Although the respondents' ratings for each profile were slightly varied, this does not necessarily imply that one group was superior. Additionally, because the difference lacks statistical significance, the phenomenon or observation regarding the respondents' Number of years in Teaching profile categories is important only for the sample respondents and might not necessarily be present in the community they are recruited from. Likewise, in all areas of utilization of DCP, there was no statistically significant difference existing among the respondents when they are grouped according to their number of years in teaching profiles.

The result is similar to the study of Russell, O'Dwyer, Bebell & Tao, (2018) showed that teachers who had been teaching for 6-15 years reported the highest use of e-mail for professional purposes. As many observers ha assumed, teachers who entered the teaching profession within the previous five years used technology significantly more for preparation than teachers who have taught for 15 or more years. However, new teachers used technology for delivering instruction less frequently than teachers who have been teaching six or more years.

➢ *On the Qualitative Phase*

Fig 1 School Project to Enhance the Utilization of DepEd Computerization Program Efficiently

Figure 1 shows the school program to enhance the utilization of DepEd computerization program. Four (3) themes were found namely: (1) resiliency, (2) results-focus, (3) innovative, and (4) receptive. The results showed based on the participants' responses were based on their experiences on how they cope up with the situation concerning on their utilization of DepEd computerization program.

The first theme is resiliency. Resilient teachers are more adaptable and can quickly adjust to technological changes and challenges that may arise while using ICT in the classroom. Resilient teachers can engage students more effectively with ICT tools, creating a dynamic and interactive learning experience. Incorporating ICT in teaching can enhance lessons, but challenges are inevitable.

"As a EPP teacher and ICT Coordinator as well, I feel I am just like a rubber band that is more adjustable or adaptive enough to the abrupt changes in our department." (P1-D1)

"There is a constant change in the software and websites I taught to my learners, that is why I should open the browser First before introducing to my class" (P3-D1)

Resilience helps teachers bounce back from technical issues or failures in integrating ICT, ensuring that these setbacks don't disrupt the learning process. Resilient teachers are effective problem solvers, which is crucial when dealing with technology-related issues in the classroom. Resilience equips teachers to overcome these challenges, ensuring a smoother and more effective integration of technology in education.

The second theme found on the statements of the participants on their experiences and coping strategies as well as their suggestions in creating efficient utilization of DCP is results-focus. Being a results-focused teacher when using Information and Communication Technology (ICT) in teaching can be highly beneficial. A results-focused teacher sets clear learning objectives and uses ICT tools to help students achieve those objectives. This ensures that technology is not used for its own sake but as a means to an end. A results-focused teacher uses ICT to continually improve teaching methods. They collect and analyze data to refine their approach, keeping the focus on achieving better learning outcomes.

"I love computer class because learners are Excited to learn, however some if pc wont Functional that would be burden to me I wish each school has an IT" (P2-D1)

ICT provides valuable data on student performance. Results-focused teachers analyze this data to make informed decisions about instructional strategies, interventions, and resource allocation. ICT allows for real-time assessment and feedback. A results-focused teacher can use online quizzes, interactive platforms, and data analysis to gauge student progress and adapt teaching methods accordingly. With ICT, teachers can tailor resources and assignments to individual students' needs. A results-focused teacher can use data and analytics to identify areas where students need additional support and provide it effectively.

The third theme is innovation. Innovative teachers find creative ways to integrate ICT into their lessons, making the learning experience more engaging and interactive for students. This can include using multimedia, interactive software, or online resources. Innovative teachers can leverage ICT to make education more accessible, ensuring that students with various learning styles and abilities can benefit from technology-assisted learning.
"if all pc are functional, they is no way that learners Can't learn how to create and send files and I can track their outputs easily" (P3-D3)

" learners too are always updated with the ICT than teachers" (P1-D3)

ICT allows for personalized learning experiences, and innovative teachers can tailor technology-based activities to meet individual student needs, helping them learn at their own pace. Innovative teachers often embrace continuous learning and professional development related to ICT. They stay up-to-date with new technologies and best practices, ensuring that they can effectively integrate them into their teaching.

The fourth theme found on the statements of the participants is being receptive. Receptive teachers are open to new ideas and technologies. They are more willing to adapt to the changing educational landscape and incorporate ICT tools into their teaching methods. Receptive teachers are more likely to explore and integrate innovative ICT tools and strategies into their lessons, making learning more engaging and effective for students.

"I love computer class because learners love to explore too. That is why I keep on browsing the internet so that I have something new and I do trouble shooting to learn." (P1-D4)

"There are always new in computer class, learners will bore, if I will teach the same lesson that is why I will suggest capacitating teachers every now and then." (P3-D4)

ICT can make learning more interactive and fun. Receptive teachers can use various multimedia resources, online platforms, and educational apps to engage students more effectively. With ICT, teachers can tailor learning experiences to individual students' needs. Receptive teachers are more likely to embrace these customization opportunities.

IV. CONCLUSIONS AND RECOMMENDATIONS

On the personal information of the respondents in terms of gender, the majority of the respondents are female 22 (73.33%), while 8 or (26.66)% are male. On the personal information in terms of age, majority of the respondents are 20-30 years old, which has a total of 18 or (60%) of the respondents. Then, 11 (36.66%) of the respondents were found to be around 31-40 years old. Lastly, 1, or (3.33%), were approximately 41-50 years old. On the personal

information in terms of number of years in teaching, 21 or (70%) have 1-10 years of experience in teaching. Further, 7 (23.33%) respondents have 11-20 years of teaching experience. Lastly, 2 (6.66%) of the respondents have taught for 21-30 of teaching experience.

On the other hand, level of utilization of DCP in terms of purpose of computer usage was sometimes evident. The level of utilization of DCP in terms of indicated computer skills was sometimes evident. The level of utilization of DCP in terms of indicator type of software for teaching and learning was sometimes evident. The level of utilization of DCP in terms of educational software by subject was seldom evident. The level of utilization of DCP in terms of types of peripherals was always evident. The level of utilization of DCP in terms of teaching and learning activities by subject was seldom evident. The level of utilization of DCP in terms of internet usage of teachers and students was seldom evident. The overall level of utilization of DepEd computerization program was sometimes evident.

On the test results of significant difference, there was no statistically significant difference in the utilization of DCP when grouped according to their gender personal information. Further, there was no statistically significant difference in the utilization of DCP along its dimensions or areas and in general when they are grouped according to age. Furthermore, no statistically significant difference existed among the respondents in all areas of utilization of DCP when grouped according to their number of years in teaching.

Meanwhile, for the qualitative data, four themes emerged after the thematic content analysis. School program that learners can suggest to improve utilization of DCP efficiently are: (1) resilience, (2) results-focus, (3) innovative and (4) receptive.

Based on the findings and conclusions of the study, the following recommendations are given:

➢ On the level of utilization of Department of Education computerization program suggest that school administrators may consider the result of the study as their basis to monitor the status of all DCP packages received. The purposes of monitoring is to identify those unserviceable units that need to be repaired or replaced, to procure additional units or peripherals so that more teachers and students can utilize and upgrade useful software for teaching and learning.

➢ Further, the Department of Education implementers need to conduct training for teachers on the use of DCP packages, software applications and internet connectivity lessons. This will help to broaden their awareness and be competent enough in ICT integration classes. This further suggests that teachers must adapt the trend and be confident in teaching the DCP packages. Integration of Information, Communication, and Technology (ICT) will assist teachers to the global requirement to replace traditional teaching methods with a technology-based teaching and learning tools and facilities. Results indicate that teachers' well-equipped preparation with Information, Communication, and Technology tools and facilities is one of the main factors in success of technology-based teaching and learning.

➢ Furthermore, the results suggest that if school has fully equipped with the serviceable DCP units, upgraded latest software and provide sufficient maintenance for hardware and peripherals and have well trained teachers will produce globally competitive 21st century learners. This addressed to school heads and teachers to do their task in attaining the goal.

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