Extent of Implementation of Department of Education Computerization Program in Gubat District

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Abstract— This study determined the status of the DepEd computerization Program (DCP) in Elementary Schools in Gubat District, school year 2017-2018. The study employed the descriptive-survey method. It described the extent of implementation of DCP as perceived by the beneficiaries. Survey questionnaire was used as the instrument to gather the data needed. The respondents were 39 School heads and 39 ICT coordinators of the elementary schools in Gubat District.

The findings were: The extent of Implementation of DCP as perceived by the beneficiaries along the utilization for instructional purpose was highly implemented. It has a General Weighted Mean of 3.64. On the other hand, the extent of implementation of DCP along utilization for office as support purposes was also highly implemented with a general weighted mean of 3.86. Finally, along the utilization for ICT to school system obtained a general weighted mean of 3.21 with a descriptive rating of Implemented. Out of seven trainings conducted along technical support, three of which were Effective with a general weighted mean of 3.65, 3.23 and 3.13 respectively. Another three trainings obtained a Moderately effective descriptive rating with a general weighted mean of 2.21, 2.18 and 2.01. Only one training was highly effective with general weighted mean of 3.62. In terms of training for Instructional Implementation, two were highly effective with general weighted mean of 3.81 and 3.79. Four of which were Effective with general weighted mean of 3.44, 3.18, 2.70 and 2.64. However, only one training was Moderately Effective with 2.22 general weighted mean. The highest in rank for the problems encountered by the beneficiaries was the internet connection is limited with a frequency of 70 and a percentage of 89. Second in rank was lack of knowledge of the software to be used with a frequency of 61 and 77 percent. Third in rank was the lack of technical support in utilizing ICT equipment, with a number of 58 and percentage of 73. Next was lack of trainings along DCP implementation with 48 frequency and a total of 61 percent. Lastly, the availability of spacious/ air-conditioned laboratory room with a frequency of 38 and 48 percent. The proposed strategic plan for DCP was developed to enhance the its implementation.

The conclusions were: The extent of implementation of DCP along utilization for the instructional purposes and utilization for offices support was highly implemented. While, for the ICT integration to school system was Implemented. The effectiveness of activities conducted by the agency along technical support trainings was Moderately Effective. While, for the trainings for instructional implementation was Effective. There were problems encountered along the implementation of DCP. The highest in rank for the problems encountered by the beneficiaries of DCP was the internet connection. While, the lowest the availability of spacious/air-conditioned laboratory room. Proposed strategic plan was developed for DCP implementation.

The recommendations: The school may conduct trainings to integrate ICT in the school system. The activities for DCP may be enhanced through the provision of trainings by the agency for technical support and instructional implementation. The school may initiate to put up internet connection through solicitation, fund raising or MOOE. Proposed strategic plan for DCP implementation may be enhanced to improve the services of ICT in the teaching- learning process and office use. Further studies may be conducted to supplement the findings revealed in this study.

Keywords— Extent of Implementation, DepEd Computerization Program, utilization, integration.

I. INTRODUCTION

The modern advancement in technology is evident anywhere in the world. The use of technology in the different sectors of society has bring positive impact in the development and quality of performance, efficiency of work produced and the improvement of day-to-day activities. Most evidently, the integration of ICT in the education sector has tremendously affect the system in which almost everybody is gaining from this advancement.

In the Philippines, the Department of Education aims to improve the quality of education in order to cope up with

the demand of quality graduates who can compete around the world. This high demand calls for global reforms in education with the utilization of ICT technologies. These have contributed to the increase in developing knowledge and innovation in education.

Such reforms in education, enable the concerned agency to implement different programs and policies to improve the system of education at present. These programs benefit the school organizations especially the administrators by enhancing their management to ensure an effective operation in the school.

Among the initiatives includes the DepEd Computerization Program (DCP), which deploys computer packages to public elementary and secondary schools nationwide to support also the teaching-learning process. To date, the program has covered 51 percent of elementary schools and 88 percent of high school as the beginning of school year 2011-2012. Luistro added….

"The improvement of the design and implementation of initiatives such a DCP, which have direct bearing to the overall reforms propounded by the K to 12, is an important undertaking."

Moreover, the advancement in technology give benefits to the different system which uses it in any field of work. The use of computers nowadays, makes tasks easier and systematic. It lessens the time frame to finish tasks such as encoding and processing data, transferring and collecting information.

In the educational field, media and technology have set in. Most schools have already acquired the computerization of most administrative functions. We are now in a fast-faced and efficient process of managing and running the system of administration in school. It is therefore a must that teachers as well as administrators are aware of the computerization program to fully implement it in the educational system that they belong to.

The DCP aims to provide public schools with appropriate technologies that would enhance the teaching-learning process and meet the challenges of the 21st century. This program shall respond to the computer backlog of public schools by providing them hardware and software, and training on simple trouble shooting.

DepEd order #78 s.2010 or the Guidelines on the Implementation of the DCP states that; Through this program and the combined efforts of other government agencies and the private sector, 5,409 public secondary schools have been provided with at least one computer laboratory each. This ranges from 10-20 computer units including other peripherals depending on the agencies providing the computer units. The objectives of the DCP are as follows: Provide computer laboratory packages to secondary schools; Provide e-classroom to elementary schools; Provide laptop units to mobile teachers; Integrate ICT in the school system; Raise the ICT literacy of learners, pupils, students, teachers and school heads; and Reduce the computer backlog in public schools.

Such technologies have become the key driver of the digital network in an era of technology-driven education. More schools now have access to ICT resources to join the global economy with knowledge workers who have the 21st century skills and are inspired by life-long learning. More so, the goal of the Education for All (EFA) highlights the role of ICT in support for effective learning, efficient educational services and knowledge dissemination.

In this millennial stage, everyone should be at par with the rampant changes in the environment. And now that the trend is about computers and the internet, everyone should be provided access to its usage. In line with this, the Department of Education provides its own measure through DepEd Computerization Program (DCP).

To maximize the utilization of DCP e-package, DepEd Order 13, s. 2016 was issued. Otherwise known as Implementing Guidelines on the Direct Release and Use of Maintenance and Other Operating Expenses (MOOE) Allocations of Schools, Including Other Funds Managed by Schools, school can now allocate budget for internet connectivity. With this, the SDO Sorsogon ICT Unit informed the schools during the Project BULIG Consultative Meeting. Technical assistance on quality service providers was also given emphasis.

Many schools in the Division of Sorsogon are recipients of the DCP. However, there are problems which arise in the process of implementation of this program. Several factors contribute to the full implementation of the computerization program. The elementary schools in Gubat Cluster have faced with the challenges of sustaining and enhancing the operation of this program.

However, there are problems which could not be avoided along its implementation. In Gubat District there are still many schools which do not have internet connection. Limited trainings for ICT coordinators and teachers were conducted as well as on troubleshooting and repair of computer units.

This study aimed to determine the status of the computerization program in Gubat District school year 2017-2018. This also determined the activities conducted by the agency and the problems encountered in the implementation of the program in order to design strategic plan to improve and continue its operation.

II. STATEMENT OF THE PROBLEM

This study determined the extent of the implementation of the Department of Education Computerization Program (DCP) in Elementary Schools in Gubat District, school year 2017-2018.

Specifically, it answered the following questions:

1. What is the extent of implementation of DCP as perceived by the beneficiaries along the following areas:
   a. Utilization for instructional purposes
   b. Utilization for office as support purposes
   c. Integration for ICT to school system
2. What are the activities conducted by the agency in terms of the extent of effectiveness along the following:
   a. Technical support training
   b. Training for instructional implementation
3. What are the problems encountered by the beneficiaries during the implementation of the DCP?
4. What could be proposed based form the result of the study?

III. RESEARCH DESIGN AND METHODOLOGY

Research Design

This study determined the extent of the DepEd computerization Program in Gubat District , school year 2017-2018. Descriptive research, method was utilized by the researcher.

The respondents of this study were the 39 school heads and 39 ICT coordinators of the elementary schools in Gubat District. Survey was employed to gather the primary data of this study from the respondents through questionnaire. The data to be gathered was tallied, analyzed and interpreted using statistical measures such as frequency count, rank and percentage.

The Sample

The respondents of this study were the ICT coordinators and school heads of elementary schools in Gubat District. Purposive sampling was used to determine the respondents. The distribution of the respondents was shown on the table below.

TABLE 1

The Respondents

Respondents	Frequency	Percentage
ICT Coordinators	39	50
School Heads	39	50
Total	**78**	**100**

There were 39 ICT coordinators and 39 school heads from the different schools in Gubat Cluster. A total of 78 respondents which were the sources of data needed on this study.

The Instrument

The instrument used in this study was a researcher-made questionnaire. The first part was all about the extent of implementation of DCP as perceived by the beneficiaries along the following areas; Utilization for instructional purposes, Utilization for office as support purposes and Integration for ICT to school system The second composed of the activities conducted by the agency in terms of effectiveness along the following; Technical support training and Training for instructional implementation. The last part focused on the problems encountered by the beneficiaries during the implementation of the DCP.

A dry run was conducted at Layog Elementary School in Barcelona, Sorsogon last January 6, 2018. The questionnaire was crafted by the researcher and was

checked by the adviser and panel for revisions. It was validated to ascertain the correctness of the instrument.

Data Collection Procedures

In collecting the data, the researchers first secured a letter of permission from the Schools Division Superintendent of Sorsogon Province to conduct this study. A letter to the School Heads of the Elementary School was drafted to inform them in their involvement in this study and to ask permission to administer the questionnaire to the school ICT coordinators and school heads.

Upon approval, the researcher personally distributed the questionnaires to the respondents in Gubat District last January 10, 2018. The researcher gave the respondents convenient time to answer the questionnaire. Then, the researcher retrieved all the answered questionnaires on the same date. The result was tallied in specific table for analysis and interpretation.

Data Analysis Procedure

To arrive at quantitative answer and qualitative analysis of the data, the following measures and statistical tools were used:

To determine the extent of the implementation of DCP, weighted mean was used. Likewise, to interpret the computed mean and the computed average weighted mean the following scale was used:

Scale	Description
4.50-5.0	Very Highly Implemented
3.50-4.49	Highly Implemented
2.50-3.49	Implemented
1.50-2.49	Moderately Implemented
1.0-1.49	Not Implemented

To determine the activities conducted by the agency and the problems encountered by the beneficiaries during the implementation of the DCP, the researcher used frequency and ranking

IV. RESULTS AND DISCUSSION

This chapter presents, analyzes and interprets the gathered data from the respondents. Tables are used to present the data and are grouped as follows to facilitate data analysis and interpretation. 1)Extent of the implementation of the DCP as perceived by the beneficiaries along: a. Utilization for instructional purposes, b. Utilization for office as support purposes, c. Integration for ICT to school system 2) Activities conducted by the agency in terms of effectiveness along the following: a. Technical support training, b. Training for instructional implementation 3) Problems encountered by the beneficiaries during the implementation of the DCP and 4) Proposed output based form the result of the study.

1. Extent of the implementation of the Department of Education Computerization Program as perceived by the beneficiaries along:

The table below shows the results of implementation of the DCP in the two clusters of Gubat district as perceived by the respondents. The perceived implementation of the project had been divided in three areas such as for instructional purposes, office-support purposes, and integration of ICT in the school system.

TABLE 2A

Extent of the Implementation of DCP Along Instructional Purposes

Instructional Purposes	GWM	Description
1. Help facilitate the teaching-learning process.	4.01	*Highly Implemented*
2. Use as tools in making worksheets, activities sheets and visual aids	4.05	*Highly Implemented*
3. Enable the teachers to create PowerPoint presentations	4.01	*Highly Implemented*
3. Use to create documents for the lessons	4.05	*Highly Implemented*
4. Provide teachers with learning materials through DepEd Portals	3.23	*Implemented*
5. Help students to access, organize and interpret information	3.04	*Implemented*
6. Provide students with quality learning materials/information from the reputable sites	3.07	*Implemented*
General Weighted Mean	3.64	Highly Implemented

Along instructional purposes, the respondents identified four criteria that were highly implemented and the remaining criteria were Implemented. Criteria that were perceived by the respondents as highly implemented help facilitate the teaching-learning process with a weighted mean of 4.01; use as tools in making worksheets, activity sheets and visual aids had an average of 4.05. Enable the teachers to create powerpoint presentations and use to create documents for the lessons have the weighted mean of 4.01 and 4.05, respectively.

This result means that most of the respondents usually utilized the computers for their daily activities related to their instructional purposes. As perceived by the teachers, these computers mainly augment the teaching-learning process to improve the delivery of instructions by conveying the ideas or concepts with real-life visual aids to maintain longer attention span of their pupils. Nevertheless, teachers highly implemented the teaching-learning process with computers to inculcate interest among pupils so it would develop the sense of curiosity among them. In addition, lesson preparation such as worksheets and visual aids among teachers becomes much easier as data from the other references can be easily imported to presentations formats.

Among the criteria that were perceived by the respondents as Implemented were provide teachers with learning materials through DepEd portals, help students to access, organize, and interpret information, and provide students with quality learning materials/information from the reputable sites had the weighted means of 3.23, 3.04, 3.07, respectively.

This result suggests that teachers utilize the computers to regularly check the DepEd portals and other educational websites for learning materials that would help them to prepare instructional materials. DepEd portals provides also the site to download materials for teaching such as teacher and student guides for their daily lessons. Internet-related work had been Implemented as perceived since some of the teachers that were already in the teaching service just before the DepEd portal opens to widely disseminate the lecture guides that were created at the DepEd Central Office, they are still comfortable with the usual visual aids in teaching their own subjects and lesson preparations.

The result is an implication that DCP plays a significant role in the improvement of the school system especially in the teaching-learning process. If it is utilized well and effectively it will improve the performance of the students and the school in general. Therefore, teachers are encourage to integrate the use of ICT in their teaching. This could be one of the best strategies also that can motivate their students to learn.

Senator Escudero, (2003) highlights the use of computer in the educative process in the House Bill No. 632. It is an act to integrate a computer education program into the educational system and for other purposes, for pursuing the objectives in achieving goals for better quality education.

Aside from the teaching roles of teachers, they also have designations that manned the office as support personnel to manage and prepare documents as well as their financial management. Thus, one of the purposes of DCP projects is to utilize their computers for office support. Hence, the results on table 2B suggests the perceived extent of implementation of DCP on office-support.

TABLE 2B

Extent of Implementation of DCP along Office Support Purposes

Office as Support Purposes	GWM	Description
1. **Use** in making and submitting reports	4.26	*Highly Implemented*
2. **utilize** for planning and organizing school's activities	4.14	*Highly Implemented*
3. **Facilitate** in keeping and updating school's personnel's information	4.11	*Highly Implemented*
4. **Provide** assistance for bookkeeping and disbursing	4.00	*Highly Implemented*
5. Provide updates on DepEd orders and memos through DepEd website	3.35	*Implemented*
6. **Assist** school administrator in formulating policies and preparing memorandum	3.55	*Highly Implemented*
7. Help maintain students records keeping	3.58	*Highly Implemented*
General Weighted Mean	3.86	*Highly Implemented*

Along office support, computers were usually used in making and submitting reports, utilize for planning and organizing school's activities, and assist school administrator in formulating policies and preparing memorandum with a weighted means of 4.26, 4.14, and 3.55 respectively, that is interpreted as highly implemented. Nowadays, most of the school's offices no longer use typewriters for such purposes due to its efficiency in capturing data presentation in the printed copy. Changes in the documents during creating or merging are much easier to integrate specially if office staff is creating office memo or creating school's activities.

Facilitate in keeping and updating school's personnel's information and help maintain students records keeping with the weighted mean of 4.11 and 3.58, respectively, which is interpreted as highly implemented. This suggests that teachers utilize also the computers deployed in the DCP project to create a more efficient storage of essential data such as personnel and students records. Using computers to store data makes it easier to encode and retrieved data especially for students records such as grades and other pertinent information.

Provide assistance for bookkeeping and disbursing had a weighted mean of 4.0, which is interpreted as highly implemented. this results suggest that they utilize their computers to effectively managed their financial records such as bookkeeping and disbursing. Hence, the advancement of software applications along this purpose were already available in market to effectively track the expenses of every company to maximize their financial spending.

However, respondents perceived the criterion on provide updates on DepEd order and memos through DepEd website has a weighted mean of 3.35, which is interpreted as Implemented.

Along DCP project, it only deploys computer machines where internet connection is not included in the project. thus, it is now the decision of the school heads to establish internet connection in their premise. As perceived, it is rated as satisfactory since most of the memos from the DepEd Division or Central office is the main concern of every school head to interpret and widely disseminate among its subordinates. Along this study, most of the respondents were teachers that heavily rely on new memos or orders that might be disseminate by their school heads from time to time.

This is an implication that ICT supports office works such as planning, organizing, monitoring and evaluating. It makes works easier, faster and more accurate. It is also helpful in record keeping especially students data that are important and confidential.

Torres et al. (2002), conducted a study that resolves around the importance computerization of student information. This study was conducted with the hope that it would help minimize time and effort in processing student's information in Mulawin National High School. The basic feature of this study is after the storage and access of retrieving and updating the data.

The utilization of the computers does not end in teaching-learning process, however, it had been extended to store students' and personnel data to augment both teaching-learning environment and office support purposes. Table 2C shows the results of extent of implementation in the integration of ICT in the school system using the computers deployed in the DCP project as perceived by the respondents.

TABLE 2C

Extent of Implementation of DCP Along ICT Integration to School System

Indicators	GWM	Description
1. Update students' records through LIS	3.61	Highly Implemented
2. Update and ensure the accuracy of school's data through EBEIS	3.58	Highly Implemented
3. Help the teachers in preparing school forms	3.73	Highly Implemented
4. Provide access to the stakeholders on school's updates, activities and plans through school website	3.21	Implemented
5. Provide e-Library for the students	2.32	Moderately Implemented
6. Improve the process of enrolment in terms of searching, retrieving and subject schedules	2.78	Implemented
General Weighted Mean	3.21	Implemented

Update students' records through LIS was perceived with a weighted mean of 3.61, which is interpreted as highly implemented. few years ago, the problem with tracking the number of students/pupils that were in school becomes a perennial problem for school administrator since it takes months to finally consolidate all these students' information nationwide. To minimize the backlogs on consolidating all these data, every school in the country had been provided with computers for easier consolidation and direct access to online application using the Learner's information system(LIS). As perceived, it is highly implemented since every teacher were required to manually input the students' information into the website for national consolidation and update the data. This purpose had been applied also on update and ensure the accuracy of school's data through EBEIS with a weighted mean of 3.58 which is also interpreted as highly implemented.

Along computer utilization, it helps teachers in preparing school form was perceived with a weighted mean of 3.73 which is interpreted as highly implemented. mass producing of school's forms layout is much easier to reproduce and integration of its previous related data like students' grade and alike.

Respondents perceived the indicators that DCP integration to school system to provide access to the stakeholders on school updates, activities, and plans through school website; and, improve the process of enrolment in terms of searching, retrieving and subject schedules to be Implemented with the weighted mean of 3.21 and 2.78, respectively. School enrolment is a regular activity where sorting and listing of names in all year level can be easier with the aid of computers. However, since it is being done once a year, they perceived it as Implemented since they could accomplish their enrolment for easier consolidation of names for each section and grade level.

Utilization of DCP computers to provide e-library for the students was perceived it by the respondents as Moderately Implemented with a weighted mean of 2.32. this results suggest that the deployed computers were not utilized as e-library for students to access related data.

Teaching-learning process in the elementary schools especially in lower grade levels, a teacher-cantered model for conveying ideas were usually utilized. Hence, pupils were instructed to accomplish worksheets or activities in accordance with the lesson guide, thus, e-library is not really a requirement for them just to establish a self-paced learning.

This is an implication that DCP must reached its full implementation in order to facilitate the work of the school personnel especially the teachers. However, the teachers must equip themselves with the ICT skills so that they could be able to integrate it in teaching as well as in other school related works or activities.

According to Rowley (2005), information systems are a tool to support information management. Information systems are increasingly being used in organizations with the objective of providing competitive advantage. The information systems used by organizations can be grouped into different types such as transaction processing system, management information system, decision support system, executive information system, expert systems and office information system. Information Technology has heralded the advent of the information society.

2. Activities Conducted by the agency in terms of effectiveness along:

Table 3A shows the perception of the respondents regarding the trainings conducted by the agency along technical support. The agency conducted seven trainings after the deployment of computers during the DCP implementations. Among its trainings, only training of trainers of ICT integration perceived with a weighted mean of 3.62 which is interpreted as highly effective. This interpretation suggests that trainers involved in DCP implementation though cascades the information and help the teachers in their respective schools to learn the basic ICT skills for them to maximize the utilization of their computers. Most of these trainers were ICT coordinators in their respective schools where they extend their time to responds on queries of their colleagues and students as well. In the case of the computer jobs that were complicated to some teacher, then they were assigned have the solutions or complete the task.

TABLE 3A

Technical Support Trainings

Trainings	GWM	Description
1. ICT Literacy Workshop for school ICT Coordinators	3.65	*Effective*
2. Maintenance/Repair of the DCP Equipment	2.18	*Moderately Effective*
3. Computer Troubleshooting	2.01	*Moderately Effective*
4. Training on Computer Installation	2.21	*Moderately Effective*
5. Division Orientation of Recipient Public Elementary and Secondary Schools under DCP	3.23	*Effective*
6. Training of Trainers for ICT integration	3.62	*Highly Effective*
7. Seminar/Training on system integration	3.13	*Effective*

On the other hand, three out of seven trainings conducted were interpreted as Effective such as ICT literacy workshop for school ICT coordinators with weighted mean of 3.65, division orientation of recipient public elementary and secondary schools under DCP with a weighted mean of 3.23, and seminar and trainings on system integration with a weighted mean of 3.13. as perceived by the respondents, these trainings were usually conducted one or two times after the deployment of the computers where participants are being oriented along its purpose with respect to the project goals and objectives. Hence, the computers deployed along the DCP implementation already serves its purpose, thus the respondents perceived it to be Effective.

Eventually, three trainings were interpreted as Moderately Effective as perceived by the respondents such as maintenance/repair of the DCP equipment with a weighted mean of 2.18, computer troubleshooting with a weighted mean of 2.01, and training on computer installation with a weighted mean of 2.21. these three trainings mentioned were strictly technical for teachers practice, however, novice users can easily understand the terms and procedures to practice the concepts that had been conveyed during the trainings. Thus, this training had been assigned only to ICT coordinators in every schools that's why most of the respondents perceived it as Moderately Effective since they don't actually practice the concepts or ideas on what was imparted during the trainings or workshop. Nevertheless, respondents who undergo these training requires more ideas or concepts to practically solve problems that may arise with respect to the computer problems or updates especially on software installation.

The result means that the trainings conducted are not effective thus, the agency must provide quality trainings that will help the teachers and school personnel in the utilization of DCP. On the other hand, the school administrators must also initiate activities like seminar workshops which may be funded by the local government or other stakeholders for the DCP implementation and integration in the school system.

This is an implication that the school administrator has a big role in the maintenance and sustainability of the DCP. They have to initiate programs and activities that will improve its implementation and utilize ICT effectively and efficiently.

Rodrigo (2009) stresses in his study on ICT use in Philippine public and private schools. He emphasizes that the Philippine government and the private sectors have initiated program such as the ICT implementation in school. He emphasizes that teachers need further training in computer literacy for there is a great faith that ICT will improve teaching and learning, and provide this country a greater state in today's societal knowledge.

Table 3B shows the trainings conductive by the agency along the instructional implementation as perceived by the respondents regarding its effectiveness. Among its training indicators, two of them were interpreted as highly effective such create reports, letters, manuscripts, certificates, and other documents using Microsoft word had a weighted mean of 3.81, and create PowerPoint presentation with a weighted mean of 3.79. This result suggests that teachers in the elementary schools of Gubat District perceived that their training on the use of Microsoft word and PowerPoint as the provided software in the computers of DCP implementation were

very useful for their teaching-learning process. Hence, the effectiveness of these software for their conveying ideas along their pupils was much easier to grab the attention of their students especially using PowerPoint presentations. In addition, the computers deployed in the

DCP implementation makes an available computer for teachers' utilization to create reports and letters especially during release of grades on a quarterly basis and regular reports that usually required by their respective administrators.

TABLE 3B

Trainings for Instructional Implementation

Indicators	GWM	Description
1. Create reports, letters, manuscripts, certificates, and other documents using	3.81	*Highly Effective*
2.Microsoft Word	2.22	*Moderately Effective*
3. Use Cortana	2.64	*Effective*
4. Create one Notebook, and publisher application	3.79	*Highly Effective*
5. Create powerpoint presentation Orientation workshop on the creation of DepEd employee email account and enterprise Human Resource Information System(EHRIS)	3.44	*Effective*
6. Training on Creating and formatting worksheets/Excel	3.18	
7.Training on Desktop Publishing	2.70	*Effective* *Effective*

Along the trainings that were conducted that were interpreted as Effective were create one notebook and publisher application with a weighted mean of 2.64, orientation workshop on creation of DepEd employee email account and Enterprise Human Resource Information System(EHRIS) has a weighted mean of 3.44, training on creating and formatting worksheets on excel application has a weighted mean of 3.18, and training on desktop publishing has a weighted mean of 2.70. this perceived weighted mean and its interpretation suggests that respondents knows how to use these application software as one of their instructional materials but not as often that they were utilizing it. For example, pupils usually do not use emails to send their projects or any school output, though teachers know how to use email but seldom used it for exchanging information. Even though, they were knowledgeable on how to utilize the publishing software they perceived their trainings on it as Effective since they will not use it on regular basis. nowadays, DepEd provides class records that were based on excel-application to make it easier for the teachers to compute for the grades on the quarterly basis since it is now pre-configured to the number of quizzes and other criteria. Thus, formatting values in a worksheets make it easier for them even they have the templates for their class records.

The use of cortana had a weighted mean of 2.22, which is interpreted as Moderately Effective. The availability of cortana widget is dependent on windows operating system available. However, this feature is simply like an artificial intelligence but it processes the query either through text-to-speech or voice recognitions by connecting its algorithm to one of the servers of the Microsoft.

The results suggest that teachers must be equipped with the knowledge and skills in using ICT especially in their teaching-learning process. They have to be open minded that the system of education has changed and that they have to upgrade their strategies with the new instructional materials. How to utilize it and allow themselves to be trained in order the overall performance of the school.

Veer (2005) states that the progress of a country depends on the quality of its teachers, and training is essential for every teacher. Trained teachers can do much more than untrained teachers. Teachers need continuous program for the development in the field of education. The globalization of computer system has made it compulsory for them to learn how to use the computer system in order to enhance effective teaching and learning in the school system.

3. Problems Encountered by the Beneficiaries during the Implementation of the DCP

Table 4 presents the problems encountered by the respondents along DCP implementations in their respective schools. Among the encountered problems, internet connection is limited observed to be the first in rank as identified by 89% of the respondents. The deployment of the computers for the DCP implementation, the internet connection is not included in the implementation. Thus, it is the initiative of the school heads to established connections for their computers. The expenditures of every school for internet connection is only a percentage of their MOOE, that is why those elementary schools with significant budget for MOOE, they could establish internet connection on a monthly basis. otherwise, they opt to prepaid internet connection like those broadband internet connections which dubbed as pocket WIFI.

TABLE 4

Problems Encountered by Elementary Schools in the Gubat District

Problems Encountered	Frequency	Percentage	Rank
Internet Connections is Limited	70	89%	1
Lack of knowledge of the software to be used	61	77%	2
Lack of Technical support in utilizing ICT equipment	58	73%	3
Lack of Trainings along DCP implementation	48	61%	4
Availability of spacious/air-conditioned laboratory room	38	48%	5
Not secured for the natural calamity/thieves	17	22%	6
Negative attitude towards ICT use in classroom	10	13%	7
Lack of skills to use the ICT resources	9	11%	8
Not enough power supply to run the computers	6	8%	9

As identified by 77% of the respondents that they lack of knowledge of the software to be used which is second in rank for problems encountered. This suggests that teachers don't have ample time to explore other application software that they could use to enhance instructional delivery. Application software that were not included in the DCP implementation as well as during orientation is now the initiative of the ICT coordinators or school heads to provide other software that might be able to use by the teachers utilizing computers that were deployed in the project.

Lack of technical support in utilizing ICT equipment were identified by 73% of the respondents as third in rank for the problems encountered along DCP implementations. Each school has their own ICT coordinators, however, most of the technical support assigned for the DCP implementation is the nearest secondary high school ICT coordinators. This system of providing technical support manifest delays since it may require inspections and channel of communications in order to provide technical support. In some cases, it may depend on the availability of the personnel that were assigned as technical support in the area. Negative attitudes towards ICT use in classroom were identified by 13% of the respondents which is seventh in rank.

Lack of skills to use the ICT resources is eighth in the ranking of problems encountered as identified by 11% of the respondents. It suggests that some of the teachers were having hard time using the computers and other related equipment to be used for instructional delivery or office support. On the other hand, ICT skills can be learned through practice with the proper guidance. Thus, these teachers may only seek an assistance with their ICT coordinator.

Not enough power supply to run the computers were observed by 8% of the respondents, where this problem encountered rank last. This implies that their electrical systems could not be able to accommodate the additional electrical loads to run the computers since their electrical wirings were designed only to handle lightings and small motors like electric fan and the like. This problem is now beyond the respondents can handle, but, it is now the initiatives of the school head to improve the electrical system to handle the simultaneous operations of the computers that were deployed in the DCP implementation.

This result reveals that there were many problems encountered along the DCP implementation. That is why, the full utilization of DCP in the school system has not been realized. This means that the agency in coordination of the school administrators must make ways or interventions that will improve its implementation. Through programs related to DCP, not only the students will be benefited but also the teachers, other school personnel and even stakeholders.

Andoh (2012) revealed that there are barriers that prevent teachers in using ICT. These barriers include lack of teacher's ICT skills, lack of teacher's confidence, lack of pedagogical teacher's training, lack of suitable educational software, limited access to ICT.

PROPOSED STRATEGIC PLAN FOR DCP IMPLEMENTATION. This is a 3-year plan which will be based on the School Improvement Plan (SIP) that includes the activities or strategies, objectives, resources needed, and the possible outcome or result. This plan will be utilized by the school head or the teachers in proposing trainings/ seminars that will improve the DCP implementation.

V. SUMMARY, FINDINGS, CONCLUSIONS, AND RECOMMENDATIONS

This chapter presents the summary, findings and conclusions. Some recommendations are also given based on the analysis and interpretation of data.

Summary

This study determined the status of the DepEd computerization Program (DCP) in Elementary Schools in Gubat District, school year 2017-2018.

Specifically, it answered the following questions:

1. What is the extent of implementation of DCP as perceived by the beneficiaries along the following areas:
   a. Utilization for instructional purposes
   b. Utilization for office as support purposes
   c. Integration for ICT to school system
2. What are the activities conducted by the agency in terms of effectiveness along the following:
   a. Technical support training
   b. Training for instructional implementation
3. What are the problems encountered by the beneficiaries during the implementation of the DCP?

4. What could be proposed based form the result of the study?

Survey-questionnaire was employed to gather the primary data of this study from the elementary schools in Gubat Cluster. The data to be gathered was tallied, analyzed and interpreted using statistical measures such as frequency count, rank and percentage.The study employed the descriptive-survey method. It describes the status of the DCP along its implementation.

Appropriate statistical tools such as frequency count, weighted mean, and ranking were used to analyze and interpret the gathered data.

Findings

Based on the analysis and interpretation of the data the following findings were revealed:

1. The extent of Implementation of DCP as perceived by the beneficiaries along the utilization for instructional purpose was highly implemented. It has a General Weighted Mean of 3.64. On the other Rhand, the extent of implementation of DCP along utilization for office as support purposes was also highly implemented with a general weighted mean of 3.86. Finally, along the utilization for ICT to school system obtained a general weighted mean of 3.21 with a descriptive rating of Implemented.
2. Out of seven trainings conducted along technical support, three of which were Effective with a general weighted mean of 3.65, 3.23 and 3.13 respectively. Another three trainings obtained a Moderately Effective descriptive rating with a general weighted mean of 2.21, 2.18 and 2.01. Only one training was highly effective with general weighted mean of 3.62. In terms of training for Instructional Implementation, two were highly effective with general weighted mean of 3.81 and 3.79. Four of which were Effective with general weighted mean of 3.44, 3.18, 2.70 and 2.64. However, only one training was Moderately Effective with 2.22 general weighted mean.
3. The highest in rank for the problems encountered by the beneficiaries was the internet connection is limited with a frequency of 70 and a percentage of 89. Second in rank was lack of knowledge of the software to be used with a frequency of 61 and 77 percent. Third in rank was the lack of technical support in utilizing ICT equipment, with a number of 58 and percentage of 73. Next was lack of

trainings along DCP implementation with 48 frequency and a total of 61 percent. Lastly, the availability of spacious/ air-conditioned laboratory room with a frequency of 38 and 48 percent.

4. The training matrix for DCP was developed to enhance its implementation.

Conclusions

Based on the findings on the study, the following conclusions were drawn.

1. The extent of implementation of DCP along utilization for the instructional purposes and utilization for officer support was highly implemented. While, for the ICT integration to school system was Implemented.

2. The effectiveness of activities conducted by the agency along technical support trainings was Moderately Effective. While, for the trainings for instructional implementation was Effective.

3. There were problems encountered along the implementation of DCP. The highest in rank for the problems encountered by the beneficiaries of DCP was the internet connection. While, the lowest the availability of spacious/air-conditioned laboratory room.

4. Training matrix was developed for school's development.

Recommendations

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

1. The school may conduct trainings to integrate ICT in the school system.

2. The activities for DCP may be enhanced through the provision of trainings by the agency for technical support and instructional implementation.

3. The school may initiate to put up internet connection through solicitation, fund raising or MOOE.

4. Training matrix for DCP implementation may be adopted and implemented.

5. Further studies may be conducted to supplement the findings revealed in this study.

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