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PRE-ASSESSMENT OF THE LEVEL OF COMPUTER LITERACY AMONG TANOLONG ELEMENTARY SCHOOL TEACHERS: A TRAINING NEEDS SURVEY

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ABSTRACT

The purpose of this study is to determine the levels of teacher's computer literacy, which is need for both reaching information and making the process of learning ang teaching more effective. A survey was conducted to assess the level of computer literacy among the teachers of Tanolong Elementary School. A descriptive research method was adopted. The respondents were the 11 teachers of Tanolong Elementary School who are active in service and rarely attend computer literacy training. Questionnaire was the main data gathering tool used in this study. The researcher conducted a training needs survey to assess the knowledge of the teachers towards using the computers and different applications. The data collected were analyzed using frequency counts and AWM. The findings of the study indicate that 54.55% respondents attended and participated in computer – related trainings. The perceived level of computer skills result shows the 45.45% have basic and intermediate computer skills while only 1 respondent have advanced computer skills. In terms of the frequency of usage of computer applications, only 54.55% of the respondents used MS office applications frequently to support their work. In terms of self-efficacy of the teachers on computer operations and MS Office Applications, the overall computed mean was 3.295 which indicates that they have very high computer self-efficacy. Moreover, it was recommended that teachers should have follow-up training to be conducted to improve their computer skill level concentrating in the development of IM using Multimedia Software and using Excel in performing calculations in their job.

Keywords: Computer, Computer Literacy, Impact, Teacher, Computer Skills

INTRODUCTION

This extension program is in support to the government project which aims to upgrade the education in the country through the application of ICT which is already widely recognized as a potent tool for socioeconomic upliftment. No less than the 1987 Constitution gives cognizance to ICTs role in nation – building. The Aquino Administration's Medium-Term Philippine Development Plan (MTPDT) identifies ICT as one of the drivers of education, job creation and investments. In fact, President Benigno Aquino III created the ICTO to man the ICT Roadmap of the Philippines in recognition that one of its agenda is to make a cyber corridor in the country[1]. Furthermore, this extension activity will also support the thrust of the Department of Education (DepEd), which is to target holistic growth for learners towards ICT by integrating it to curriculum standards for K-12 schools in the Philippines[2].

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One of the schools under the supervision of Department of Education is Tanolong Elementary School. Currently, there are 20 faculty members in the school and is currently headed by Dr. Darcy Rio G. Lopez. The need for computer literacy is seen as one of the relevant skills in performing one's duties. This is driven by the fact that almost all processes and transactions are all conducted with the aid of computers. In the education setting, computers can help assist the teachers to create relevant reports, documents, and compute student performance. However, there were faculty members who expressed difficulty in operating and using computer applications. Hence, to systematically design an appropriate training design for the faculty members, the researchers conducted a study on training needs to determine the profile of the teachers and their level of computer self-efficacy. The result of the study was used as the basis of the researchers and the IT department in developing training design to the Tanolong Elementary School teachers.

METHODOLOGY

This study used descriptive research method. This is because the student intends to describe the profile of the respondents and determine their level of self-efficacy in terms of using computers and their use of MS Office based applications.

The subjects were the teachers of Tanolong Elementary School who are currently active in the service and rarely attend a computer literacy training or seminar. Questionnaire was used as the main data gathering tool in this study. The questionnaire is divided to three parts. The first part of the questionnaire focused on the demographic profile of the respondents. While the second part of the questionnaire concentrates on the information about the teachers in terms of the attended computer literacy training attended by the respondents, perceived level of computer skills, computer applications used, and the frequency in which the respondents use MS Office applications. The third part of the questionnaire focused on determining the computer self-efficacy of teachers on operating computers and utilization of computer applications.

To develop an effective training design for the workshop, the researcher conducted a training needs survey to assess the knowledge of the teachers towards using computers and different applications.

Frequency counts, percentages and weighted means were the statistical tool used. The computer weighted means were interpreted using the following scale.

Scale Value	Description	Meaning
3.25-4.00	Strongly Agree	Very High
2.50-3.25	Agree	High
1.75-2.49	Disagree	Low
1.00-1.75	Strongly Disagree	Very Low

In this study, a 4-point scale was used. This is to produce an ipsative (forced choice) measure that does not include indifferent option[3].

RESULTS AND DISCUSSION

Table 1 presents information about the profile of teachers in terms of the computer – related trainings that they attended at the time the survey was conducted. It shows that 6 or 54.55% of

the Tanolong Elementary School Teachers have previously attended Computer Literacy Training at the time the survey was conducted. However, it was not specified when was the last computer literacy training they attended. Likewise, only 1 of the respondents was enrolled or attending a training related to computer operations.

Table 1. Profile of the Teachers Based the Trainings Attended

Questions	Responses	Frequency	Percentage (%)
1. Have you completed or attended Computer Literacy Training before?	Yes	6	54.55
	No	5	45.45
	Total	11	100
2. Are you currently taking Computer Literacy Training?	Yes	1	9.09
	No	10	90.91
	Total	11	100

The researcher also determined the perceived level of computer skill, computer applications used and the frequency on the use of MS Office Applications. Table 2 shows the profile of the teachers in terms of the areas cited.

Table 2. Perceive Level of Computer Skills, Computer Applications Used and Frequency of Use of MS Office Applications

Questions	Responses	Frequency	Percentage (%)
B. Perceive Level of Computer Skill	No Computer Skill	0	0.00
	Basic	5	45.45
	Intermediate	5	45.45
	Advance	1	9.09
C. Computer Application Used	MS Word	10	90.91
	MS Excel	9	81.82
	MS PowerPoint	7	63.64
	Internet / Social Media	6	54.55
D. Frequency of Use of MS Office Application	Never	0	0.00
	Sometimes	5	45.45
	Always	6	54.55

Table 2 is divided into three sections. The first section is the perceive level of computer skill of the teachers. The result shows the 45.45% of the have basic and intermediate computer skills. While only 1 or 9.09% of the respondents have advance computer skills. This implies that the teachers can at least operate a computer.

The second section of Table 2 is the Computer Applications Used. The results show that most 10 teachers or 90.91% of the respondents are using MS Word. It was followed by MS Excel with 81.82% of the respondents and PowerPoint with 63.64% of the total number of respondents. When ask about the frequency in which they use MS Office

Applications, 6 out of 11 respondents or 54.55% answered Always which implies that they are faculty members who frequently use these applications to support their day-to-day task. Although only 5 of the respondents do not use the applications frequently, it should not be ignored considering that the task they need to perform in their job involves computer-based applications.

The researcher also determined the self – efficacy of the teachers on computer operations and MS Office Applications. The questionnaire in this section was divided into 4 parts which focused on Computer Operation, MS Word, MS Excel, and MS PowerPoint. The items included in each section pertains to the basic tasks they can perform with specific application. The result in these sections reflect how familiar the respondents are in performing these basic tasks. Table 3 shows the perception of the respondents in these areas.

Table 3. Computer Self Efficacy of the Teachers

Computer Task		
A. Computer Operation	**WM**	**Interpretation**
1. Launching windows applications	3.00	Agree
2. Organizing files and folders on drives	3.18	Agree
3. Creating a file	3.55	Strongly Agree
4. Saving a file	3.64	Strongly Agree
5. Creating a folder	3.55	Strongly Agree
6. Deleting a file or folder	3.55	Strongly Agree
7. Copying a file or folder	3.64	Strongly Agree
8. Cutting/Moving a file or folder	3.36	Strongly Agree
9. Renaming a file or folder	3.64	Strongly Agree
10. Searching for files or folders	3.55	Strongly Agree
AVERAGE WEIGHTED MEAN	**3.46**	**Strongly Agree**
B. MS Word	**WM**	**Interpretation**
1. Creating a New Document	3.55	Strongly Agree
2. Search and Replace Text	3.55	Strongly Agree
3. Changing font size, style, color and effects	3.45	Strongly Agree
4. Formatting paragraph	3.27	Strongly Agree
5. Creating bulleted and numbered lists	3.36	Strongly Agree
6. Inserting shapes and graphics	3.27	Strongly Agree

7. Creating and formatting table	3.36	Strongly Agree
8. Creating header and footer	3.18	Agree
9. Formatting a document	3.18	Agree
10. Printing a document	3.55	Strongly Agree
AVERAGE WEIGHTED MEAN	**3.37**	**Strongly Agree**
C. MS Excel	**WM**	**Interpretation**
1. Select Cells	3.27	Strongly Agree
2. Cut, Copy and Paste data	3.45	Strongly Agree
3. Creating formula	3.00	Agree
4. Copying a formula	3.09	Agree
5. Formatting Cell	3.09	Agree
6. Inserting and deleting rows and columns	3.27	Strongly Agree
7. Creating border	3.18	Agree
8. Using excel functions such as Sum, Average, Count, Min and Max functions	3.00	Agree
9. Creating different kinds of charts	3.00	Agree
10. Filling cells automatically with a series	2.91	Agree
AVERAGE WEIGHTED MEAN	**3.13**	**Agree**
D. MS PowerPoint	**WM**	**Interpretation**
1. Creating a Title Slide	3.45	Strongly Agree
2. Creating New Slides	3.45	Strongly Agree
3. Making Changes to Your Slides	3.36	Strongly Agree
4. Applying a Theme	3.18	Agree
5. Running PowerPoint Slide Show	3.18	Agree
6. Adding Animations	3.09	Agree
7. Adding Transitions	3.18	Agree
8. Use the Slide Sorter View	3.00	Agree
9. Creating slide master	3.09	Agree
10. Printing	3.18	Agree
AVERAGE WEIGHTED MEAN	**3.22**	**Agree**
OVERALL WEIGHTED MEAN	**3.295**	**Strongly Agree**

As shown in Table 3, the teachers have a very high computer self – efficacy on computer operation, MS Word, MS Excel and MS PowerPoint as indicated by the overall mean of 3.295. This may be attributed to the fact that majority of the teachers have undergone Computer Literacy Training before. Although there are many items whose means can be interpreted as Agree and Strongly Agree, it is important to note that the resulting is not that high and only achieve the minimum acceptable mean for each interpretation.

Considering the result, there is still a need to conduct a computer literacy training program for the faculty members of the Tanolong Elementary School teachers. The result shown in table 2 implies that while there are faculty members who can operate computers and specific applications, there are still faculty members who do not have those skills. In addition, table 3 implies that although the faculty members can use or perform specific tasks using specific applications, they seem not able to maximize the features of the applications. In addition, they still requested that the computer literacy training be pursued since there are still teachers who have not yet participated in any seminar, training or workshops related to Computer Literacy. Likewise, to really benefit from using these applications to their work, follow up trainings should be conducted to master these skills. This is also because the applications continuously provide updates and new features which the teachers still need to learn.

CONCLUSION

This study was conducted to analyze the training needs for the teachers of Tanolong Elementary School. The result shows that even though there are faculty members who can use computers and its applications, a training must still be conducted to enhance their skills and maximize the use of the features of these applications. Those faculty members who cannot use computers should be trained to gain skills in operating computers and using different computer software so that they will be able to perform their day-to-day tasks in a more efficient way.

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