



Research Article

AN ANALYSIS OF THE IMPACT OF THE COMPUTER LITERACY PROGRAM OF THE BULSU-COLLEGE OF SCIENCE ON PANASAHAN ELEMENTARY SCHOOL'S TEACHERS

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ABSTRACT

The study aimed to find out the impact of the computer literacy programs of the BulSU - College of Science on Panasahan Elementary School's Teachers and to improve similar future programs. A survey was conducted using a questionnaire to gather relevant information with 24 teachers who are recipients of the computer literacy program as respondents. The levels of knowledge and skills of the respondents on the topics included in the programs prior to and after participation were determined. The level of agreement of the respondents on statements regarding the computer literacy programs conducted as well as the chances of using the skills developed by the respondents from the computer literacy programs were also determined in this study. The paired samples t-test was used to determine the statistical difference between the mean levels of knowledge and skills of the respondents on the topics included prior to and after participating in the program. The mean was also used to summarize other data gathered. The results showed that the computer literacy programs of the BulSU - College of Science have improved the knowledge and skills of Panasahan Elementary School's Teachers. This brought a remarkable impact to the teachers since the knowledge and skills they learned are useful in performing their work as teachers.

KEYWORDS: Society, Computer Literacy Program, Impact Analysis, Paired Samples t-test, Descriptive Survey

INTRODUCTION

Extension is a fundamental function of every state university or college, along with instruction, research and production. Institutions of higher learning in the Philippines are mandated by the constitution to deliver services to the community based on their capabilities and their own resources. De Leon (2008) emphasized in his book that in order for an educational system to give meaningful reality to its membership in the national society and to enrich its civic participation in program undertaking, they should extend their hands to educationally deprived communities.

The Bulacan State University (BulSU), as an educational system has been actively involved in the extension and community services for several years now. The institution has been experiencing positive developments in becoming an active partner of several government and non-government institutions. Through its extension programs, which are the integration of all the extension programs and projects of its different colleges and campuses, its goal of improving and creating positive change in the lives of the members of its extension partners are realized.

The College of Science, as one of the colleges of Bulacan State University has taken its part in responding to the need of the community according to the university's Vision and Mission. The college has been recognized for its

aggressive participation and significant contributions to the different aspects of life. It has developed a comprehensive extension program to demonstrate to the community the relevance of its academic programs for the improvement of quality of life of its adopted communities.

Various extension and community programs and projects are identified and implemented. One of the college's curricular programs, the Bachelor of Science in Mathematics with specialization in Computer Science has been rendering extension activities that complement its curricular offerings. These extension activities include computer literacy for elementary students and teachers, Mathematics and Science tutorial, and enrichment programs for gifted elementary students. These extension programs are long term in nature and are already in its second year of implementation as of academic year 2014 - 2015.

The computer literacy programs for the teachers of Panasahan Elementary School provided the participants seminar/training on basic and advanced computer lessons and applications. The program consisted of a series of trainings aimed to improve the performance of the participants in doing their work as teachers. And though the trainings always ended successfully, this study had to be carried out to determine the effectiveness as well as the weaknesses/shortcomings of the said program. The study determined whether the knowledge and skills learned by the respondents in the program have translated into improved behavior and have helped them in their work.

OBJECTIVES OF THE STUDY

The study aimed to find out the impact of the computer literacy programs of the BulSU-College of Science on Panasahan Elementary School's Teachers and to improve similar future programs. To realize these objectives, the following were done:

- i. Determine the levels of knowledge of the respondents on the topics included in the programs prior to and after participation.
- ii. Determine the levels of skill of the respondents on the topics included in the program prior to and after participation.
- iii. Compare the mean levels of knowledge of the respondents on the topics included prior to and after participating in the programs.
- iv. Compare the mean levels of skill of the respondents on the topics included prior to and after participating in the programs.
- v. Determine the level of agreement of the respondents on statements regarding the computer literacy programs conducted.
- vi. Determine the chances of using the skills developed by the respondents from the computer literacy programs.
- vii. Elicit from the respondents the practices of the conducted programs that need to be continued and need to be changed to further improve future similar programs.

METHODOLOGY

The study on the impact of the computer literacy programs of the BulSU-College of Science on Panasahan Elementary School's Teachers was conducted during the second semester of school year 2014-2015.

The study utilized the descriptive method of research using a survey questionnaire to acquire relevant data.

The respondents of the study were the recipients of the Computer Literacy Programs For Teachers (Phases I and II) composed of 24 teachers of Panasahan Elementary School.

The researcher-made questionnaire used as main instrument for data collection was patterned by the researcher from the generic Post-Program Evaluation measuring knowledge and skill change, and reactions and aspirations by Richard L. Poling (1999), an extension program evaluation specialist.

The questionnaire was consisted of five parts. Part I assessed the level of knowledge of the respondents prior to and after participating in the Computer Literacy Programs that covered seven main topics: Microsoft Word, Microsoft Excel, Microsoft PowerPoint, Microsoft Publisher, Trouble Shooting, Photoshop and Tarpaulin Lay-outing, and Prezi Presentation. Part II measured the level of skill of the respondents prior to and after participating in the said extension programs. There were a total of 120 skills included, 28 of which were from Microsoft Word, 24 from Microsoft Excel, 20 from Microsoft PowerPoint, 10 from Microsoft Publisher, 9 from Trouble Shooting, 15 from Photoshop and Tarpaulin Lay-outing, and 14 from Prezi Presentation. Part III determined the level of agreement of the respondents on statements regarding the programs. Part IV elicited from the respondents the chances of using the skills they have developed from the seven main topics of the extension programs. Part V was composed of three questions and an item for comments with expected answers that will help improve future similar programs.

Statements measuring the skills developed by the respondents on the topics included in the computer literacy programs were based from computer books and speaker-made pamphlets used in the said programs. The questionnaire was face validated by some experts in the field of computer technology and in research as well.

The collected data from the respondents was encoded and analyzed using the Statistical Package for the Social Sciences (SPSS). The levels of knowledge as well as the levels of skill of the respondents prior to and after participating in the Computer Literacy Programs were summarized using weighted mean, and were compared using paired samples t-test. The mean was also used to summarize other data gathered.

RESULTS AND DISCUSSION

The results of the study are summarized in the following tables and discussions.

Table 1: Knowledge Levels of the Respondents Prior to and After the Computer Literacy Program

Topics	Mean Level of knowledge Prior to Program	Verbal Interpretation	Mean Level of Knowledge After the Program	Verbal Interpretation	t-value	Sig.
Microsoft Word	2.25	Low	4.13	High	9.700	.000
Microsoft Excel	2.08	Low	3.79	High	10.378	.000
Microsoft PowerPoint	2.00	Low	3.63	High	9.094	.000
Microsoft Publisher	1.58	Low	3.42	Average	8.558	.000
Trouble Shooting	1.50	Very Low	3.29	Average	8.983	.000
Photoshop/ Tarpaulin Lay-outing	1.58	Low	3.42	Average	8.239	.000
Prezi Presentation	1.50	Very Low	3.46	High	8.269	.000

Table 1 shows the levels of knowledge of the respondents on each of the topics included in the programs prior to and after participating in the computer literacy programs, and the results when these levels are compared. As shown on the table, the subjects' levels of knowledge range from 1.50 to 2.25 (Very Low to Low) before they participated in the extension program. These levels have increased to 3.29 to 4.13 (Average to High) after they have attended the program. These differences are found significant at $\alpha = 0.01$ and imply that the computer literacy programs conducted by the BulSU-College of Science contributed a lot to the recipients of the program.

Table 2: Mean Levels of Skill of the Respondents in Using Microsoft Word Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Creating a new document.	2.25	Low	4.13	High	8.877	.000
Opening an existing document.	2.33	Low	4.17	High	9.326	.000
Saving a document.	2.38	Low	4.25	High	9.700	.000
Viewing a document.	2.29	Low	4.21	High	9.224	.000
Closing a document.	2.38	Low	4.29	High	10.112	.000
Printing a document.	2.33	Low	4.25	High	9.637	.000
Navigating and moving in document.	2.25	Low	4.04	High	8.600	.000
Inserting and deleting text.	2.21	Low	4.04	High	8.917	.000



Inserting symbols, pictures, graphics and clip art.	2.21	Low	4.08	High	8.877	.000
Cutting, copying, and pasting text.	2.17	Low	4.00	High	9.326	.000
Finding and replacing text.	2.13	Low	4.04	High	9.224	.000
Applying character formatting.	2.13	Low	3.92	High	9.933	.000
Formatting paragraphs.	2.13	Low	3.92	High	9.933	.000
Adding and editing bulleted and numbered lists.	2.25	Low	3.92	High	11.632	.000
Setting paragraph spacing and indents.	2.21	Low	3.96	High	9.081	.000
Creating a table and converting text to a table.	2.17	Low	3.83	High	10.000	.000
Navigating in a table and selecting table elements.	2.04	Low	3.75	High	10.378	.000
Formatting text in a table.	2.13	Low	3.83	High	9.218	.000
Adding and deleting rows and columns in a table.	2.17	Low	4.13	High	9.210	.000
Changing the width of a table column.	2.25	Low	3.96	High	9.747	.000
Changing row height in a table.	2.17	Low	4.08	High	10.664	.000
Aligning a table.	2.17	Low	3.92	High	9.081	.000
Creating and editing headers and footers.	2.00	Low	3.75	High	8.668	.000
Inserting page numbers.	2.08	Low	3.83	High	9.559	.000
Adjusting page margins and orientation.	2.04	Low	3.88	High	9.326	.000
Merging and splitting table cells.	2.29	Low	4.00	High	11.150	.000
Modifying a graphic's position, size, and rotation.	2.00	Low	3.75	High	8.668	.000
Creating business cards.	2.00	Low	3.79	High	8.983	.000
Grand Mean	2.18	Low	3.99	High	112.52	.000

Table 2 shows the levels of skill of the respondents in using Microsoft Word prior to and after the computer literacy programs, and the results when these levels are compared. As revealed in the table, the respondents' levels of skill before the program are described as "low" and have values that range only from 2.00 to 2.38. After the respondents participated in the computer literacy programs, these levels became "high", increasing the level with values that range from 3.75 to 4.29. The same kind of increase happened to the grand mean levels of the skill before and after the program. These differences are all significant at $\alpha = 0.01$, implying that the computer literacy programs conducted benefited the recipients of the program. The programs have enabled them to enhance their skills in using Microsoft Word.

Table 3 reveals the levels of skill of the respondents in using Microsoft Excel prior to and after the computer literacy programs. As indicated in the table, all the skill levels including the grand mean level of the skills are described "low" before the program. After the respondents participated in the computer literacy programs, these levels have been elevated to 'high' except for one skill, the skill for creating, formatting and modifying tables that falls only on the "average" level. The differences in the levels before and after the programs are all significant at $\alpha = 0.01$. These imply that the computer literacy programs contributed positively to the recipients' skills in using Microsoft Excel.

Table 3: Mean Levels of Skill of the Respondents in Using Microsoft Excel Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Starting Microsoft Excel.	2.13	Low	3.96	High	8.917	.000
Identifying rows, columns, cell references, and the active cell.	2.00	Low	3.88	High	9.261	.000
Opening, saving and closing workbooks.	2.21	Low	3.92	High	9.747	.000
Entering and editing text, values, and formulas.	2.08	Low	3.92	High	8.239	.000
Inserting and deleting cells, rows and columns.	2.25	Low	4.00	High	9.559	.000
Inserting, moving, and resizing pictures.	2.08	Low	3.83	High	9.081	.000
Using Auto Fill.	2.17	Low	3.92	High	9.559	.000
Moving and copying data.	2.08	Low	3.92	High	8.239	.000
Using the SUM, AVERAGE and other functions.	2.00	Low	3.88	High	10.208	.000
Formatting text/ numbers.	2.04	Low	3.83	High	10.537	.000
Applying cell borders.	2.04	Low	3.75	High	8.034	.000
Changing column width and row height.	2.04	Low	3.75	High	7.214	.000
Checking spelling in worksheets.	2.04	Low	3.71	High	6.995	.000
Previewing and printing worksheets.	2.08	Low	3.88	High	8.262	.000
Controlling Page Setup, including headers and footers.	2.04	Low	3.67	High	7.264	.000
Creating charts based on worksheet data.	1.83	Low	3.58	High	9.081	.000
Changing chart types and formatting chart elements.	1.83	Low	3.63	High	7.961	.000
Inserting, copying, moving, and deleting worksheets.	2.04	Low	3.75	High	8.034	.000
Merging and splitting cells, and changing cell orientation.	2.04	Low	3.79	High	7.987	.000
Sorting and filtering lists.	1.92	Low	3.63	High	8.767	.000
Creating, formatting and modifying tables.	1.88	Low	3.50	Average	8.210	.000
Using the IF, SUMIF, ROUND and VLOOKUP functions.	1.83	Low	3.54	High	8.377	.000
Printing the entire worksheet or selected parts of the worksheet.	2.00	Low	3.79	High	8.600	.000
Computing grades using MS Excel.	2.08	Low	3.79	High	8.377	.000
Grand Mean	2.03	Low	3.78	High	122.49	.000

Table 4: Mean Levels of Skill of the Respondents in Using Microsoft PowerPoint Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Creating new presentations.	1.96	Low	3.75	High	9.422	.000
Applying Slide layout.	2.00	Low	3.75	High	9.559	.000
Applying design themes.	1.92	Low	3.71	High	8.600	.000
Applying effects.	1.96	Low	3.67	High	8.767	.000
Adding, editing, rearranging, duplicating and deleting slides.	1.92	Low	3.71	High	7.961	.000
Adding, editing, and formatting slide text.	1.92	Low	3.71	High	7.691	.000
Inserting slides from other presentations.	1.92	Low	3.71	High	8.983	.000
Copying and pasting slide text.	1.92	Low	3.75	High	8.917	.000
Drawing and formatting shapes.	1.83	Low	3.67	High	8.917	.000
Inserting and modifying a picture/clip art.	1.92	Low	3.75	High	8.558	.000
Adding and modifying WordArt.	1.88	Low	3.71	High	7.953	.000
Adding, modifying, and formatting tables.	1.83	Low	3.63	High	9.422	.000
Creating and formatting charts and diagrams.	1.75	Low	3.63	High	7.713	.000
Customizing presentations using slide transitions and animations.	1.92	Low	3.67	High	8.668	.000
Previewing and running presentations.	2.04	Low	3.75	High	8.767	.000
Saving presentations.	1.96	Low	3.79	High	9.326	.000
Printing presentations in different format.	1.79	Low	3.67	High	8.537	.000
Creating hand-outs using power point.	1.83	Low	3.58	High	7.987	.000
Utilizing the different pointer options (Ballpoint pen, highlighter, and arrow) during the presentation.	1.92	Low	3.63	High	7.730	.000
Creating a hyperlink on text, buttons and shapes (quizzes and lectures).	1.83	Low	3.58	High	7.987	.000
Grand Mean	1.90	Low	3.69	High	154.82	.000

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Reflected in Table 4, are the levels of skill of the respondents in using Microsoft PowerPoint. As shown, prior to the computer literacy programs, the levels of skill of the respondents are described as “low” with the grand mean interpreted similarly. However, these levels get elevated to “high” after the completion of the program. The differences are all significant at $\alpha = 0.01$, which only indicate that the computer literacy programs conducted have a positive impact to the skill levels of the respondents in using Microsoft PowerPoint.

Table 5: Mean Levels of Skill of the Respondents in Using Microsoft Publisher Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Opening Microsoft Publisher.	1.58	Low	3.50	Average	8.860	.000
Creating a new template.	1.58	Low	3.50	Average	9.637	.000
Inserting text/ pictures.	1.71	Low	3.63	High	9.637	.000
Modifying and resizing text/ pictures.	1.67	Low	3.54	High	10.208	.000
Lay-outing and designing the template.	1.54	Low	3.54	High	9.215	.000
Using predesigned templates.	1.63	Low	3.54	High	9.637	.000
Drawing shapes using Autoshapes.	1.63	Low	3.54	High	9.224	.000
Saving the template.	1.71	Low	3.54	High	10.346	.000
Printing the template.	1.67	Low	3.54	High	10.208	.000
Making calendars, newsletters, certificates and other printed materials.	1.67	Low	3.58	High	9.224	.000
Grand Mean	1.64	Low	3.55	High	135.38	.000

Table 5 shows the levels of skill of the respondents in using Microsoft Publisher. As shown, before participating in the computer literacy programs, the levels of skill of the respondents are “low”, same as their grand mean level of the skills. After participating in the programs, the subjects showed average skills in opening Microsoft Publisher and the creation of a new template while demonstrating high improvement in the rest of the aforementioned skills. The differences of the means are all significant at $\alpha = 0.01$, indicating that the computer literacy programs conducted contribute a lot to the respondents. The programs enable them to enhance their skills in using Microsoft Publisher.

Of the seven topics presented in the computer literacy programs, performing basic trouble shooting is one of the two topics where the respondents considered themselves as having very low knowledge of as shown in Table 1. Such poor knowledge reflects on their poor skills in Basic Trouble Shooting. However, after the exposure to the training programs, the subjects showed an average improvement in basic trouble shooting skills considering that all the differences in the means were proven significant at $\alpha = 0.01$ (See Table 6).

Table 6: Mean Levels of Skill of the Respondents in Basic Trouble Shooting Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Tracing the possible problem in the system unit.	1.46	Very Low	3.17	Average	8.767	.000
Performing trouble shooting on the identified problem.	1.50	Very Low	3.13	Average	9.094	.000
Formatting operating system in the system unit.	1.42	Very Low	3.08	Average	10.000	.000
Updating of operating system.	1.42	Very Low	3.25	Average	11.000	.000



Installing operating system in the system unit.	1.42	Very Low	3.13	Average	8.767	.000
Allocating memory slots.	1.38	Very Low	3.00	Average	9.094	.000
Plugging the components like mouse, keyboard and other peripherals of the computer in the system unit properly.	1.46	Very Low	3.33	Average	9.261	.000
Using DOS command to show the hidden files in the infected flash disk.	1.38	Very Low	3.17	Average	8.983	.000
Performing basic PC trouble shooting.	1.46	Very Low	3.21	Average	10.122	.000
Grand Mean	1.43	Very Low	3.16	Average	59.242	.000

Table 7 shows the levels of skill of the respondents in Photoshop and Tarpaulin Lay-outing prior to and after participating in the computer literacy programs. As indicated in the table, the respondents' mean levels of skill range from 1.46 to 1.67 (Very Low to Low) with grand mean of 1.56 (Low) before they participated in the extension program. These levels have increased to as much as 3.46 (Average Level) after they have attended the program. These differences are found significant at $\alpha = 0.01$ and imply that the computer literacy programs conducted by the BulSU-College of Science contributed positively to the recipients of the program.

Table 7: Mean Levels of Skill of the Respondents in Photoshop/ Tarpaulin Lay-outing Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Starting Adobe photoshop.	1.50	Very Low	3.21	Average	7.459	.000
Utilizing the different photoshop tools such as Move Tool, Crop Tool, Lasso Tool, Brush Tool, Magnetic Tool, etc.	1.46	Very Low	3.25	Average	8.600	.000
Creating new project/canvas.	1.50	Very Low	3.25	Average	10.798	.000
Opening existing images and pictures.	1.58	Low	3.29	Average	9.218	.000
Saving images/ pictures in different formats such as .jpeg, .bmp and .gif.	1.67	Low	3.46	Average	8.983	.000
Setting the dimension or size of the project.	1.63	Low	3.38	Average	9.559	.000
Setting background content as transparent, white or black.	1.58	Low	3.29	Average	9.747	.000
Setting different colors on Photoshop project.	1.58	Low	3.42	Average	9.796	.000
Creating multiple layers in the project.	1.54	Low	3.38	Average	11.000	.000
Copying the outline of the subject and pasting it on the project.	1.54	Low	3.25	Average	10.378	.000
Flipping the picture horizontally or vertically.	1.50	Very Low	3.29	Average	9.422	.000
Rotating and resizing the picture/canvas.	1.50	Very Low	3.29	Average	9.422	.000
Placing the edited project on the desired location.	1.54	Low	3.33	Average	10.537	.000
Editing and lay-outing pictures using a design of your own.	1.58	Low	3.33	Average	10.798	.000
Tarpaulin making.	1.63	Low	3.29	Average	9.405	.000
Grand Mean	1.56	Low	3.31	Average	131.478	.000

Table 8: Mean Levels of Skill of the Respondents in Making Prezi Presentation Prior to and After the Computer Literacy Program

Skills	Mean Level of Skill Prior to Program	Verbal Interpretation	Mean Level of Skill After the Program	Verbal Interpretation	t-value	Sig.
Creating new presentations.	1.42	Very Low	3.25	Average	8.239	.000
Applying Slide layout.	1.46	Very Low	3.25	Average	8.262	.000
Applying design themes.	1.46	Very Low	3.25	Average	8.600	.000
Applying effects.	1.46	Very Low	3.25	Average	8.600	.000
Adding, editing, rearranging, duplicating and deleting slides.	1.46	Very Low	3.29	Average	9.326	.000
Adding, editing, and formatting slide text.	1.42	Very Low	3.33	Average	9.637	.000
Copying and pasting slide text.	1.46	Very Low	3.38	Average	9.224	.000
Drawing and formatting shapes.	1.42	Very Low	3.38	Average	9.603	.000
Inserting and modifying a picture/clip art.	1.46	Very Low	3.42	Average	9.603	.000
Previewing and running presentations.	1.46	Very Low	3.42	Average	10.050	.000
Saving presentations.	1.54	Low	3.38	Average	8.917	.000
Printing presentations.	1.46	Very Low	3.38	Average	8.536	.000
Using pre-designed templates.	1.50	Very Low	3.33	Average	8.917	.000
Creating Prezi presentation of your own.	1.46	Very Low	3.33	Average	9.261	.000
Grand Mean	1.46	Very Low	3.33	Average	106.91	.000

Making Prezi Presentation is another topic presented in the computer literacy programs where the respondents have a very low knowledge of (See Table 1). As shown in Table 8, the respondents showed very low skills in this attribute. However, after participating in the programs, their skill levels increased to “average”. These differences of the means are all significant at $\alpha = 0.01$, which indicate that the programs contribute a lot to the respondents, enable them to learn the skills in making prezi presentation.

Table 9: Level of Agreement of the Respondents Regarding the Computer Literacy Program

Statements Regarding Computer Literacy Program	Mean	Verbal Interpretation
The Computer Literacy Program (Phases I and II) addressed a need that I have on computer technology.	4.17	Agree
The Computer Literacy Program (Phases I and II) was a quality program.	4.42	Agree
The programs were well executed/ implemented.	4.29	Agree
The knowledge and skills I learned in the program will be useful for me especially in relation to my work as a teacher.	4.50	Agree
I am glad that I participated in the Computer Literacy Program (Phases I and II).	4.54	Strongly Agree
Grand Mean	4.38	Agree

Table 9 reflects the level of agreement of the respondents on statements describing the computer literacy programs conducted. The respondents recorded mean values of 4.17, 4.42, 4.29 and 4.50 to the statements that the computer literacy program addressed their need on computer technology; that the extension program was a quality program; that the extension programs were well executed/implemented; and that the knowledge and skills they gained from the program will be useful to them in performing their work as teachers, respectively. These mean values strongly implied the respondents' agreement to the truth of the statements. On the other hand, a mean of 4.54 indicated that the respondents "strongly agree" in their decision of participating in the extension program. The grand mean of 4.38 with verbal description of "agree" indicates that the respondents had a happy and fruitful experience from the training programs given to them by the BulSU-College of Science.

Table 10: Chances of Utilizing the Skills Developed by the Respondents from the Computer Literacy Program

Topics	Mean	Verbal Interpretation
Microsoft Word	3.67	Definitely Will
Microsoft Excel	3.67	Definitely Will
Microsoft PowerPoint	3.50	Probably Will
Microsoft Publisher	3.42	Probably Will
Trouble Shooting	3.25	Probably Will
Photoshop/ Tarpaulin Lay-outing	3.29	Probably Will
Prezi Presentation	3.33	Probably Will

Table 10 shows the respondents' mean responses indicating the chances of them using the skills they gained from the computer literacy programs. As reflected in the table they will definitely apply the skills they learned in Microsoft Word and Microsoft Excel. However, they expressed uncertainty on applying the other skills they have learned from the training program.

Tables 11, 12, and 13 showed the respondents' responses regarding the aspects of the conducted programs that need to be sustained or modified to further improve future related programs.

In particular, Table 11 shows the respondents' responses on the question regarding the best things about the computer literacy programs. Ten out of the 24 respondents responded to the question. And as reflected in the table, the responses are all expressions of happiness for the new knowledge and skills they learned and the usefulness of these knowledge and skills in performing their work as teachers.

Table 11: Respondents' Responses on the Question Regarding The Best Things About the Computer Literacy Programs

Responses	Frequency
All the topics discussed by the discussants were useful.	1
It enhances my skills on the use of computer/ICT. I enjoy the new skills/knowledge on using computers.	1
It helps a lot in my work especially the topic in microsoft word, excel and powerpoint.	1
It helps me especially in work.	1
It helps us to improve our skills.	1
Microsoft Excel, Microsoft PowerPoint	1
Provision of hands-on exercises of the topics discussed	1
The best things about it can help all of us to perform our daily duties in a digitized manner especially in doing forms and computing grades.	1
The best things about the computer literacy program, I learned different skills in using the computer like using the Microsoft Excel, PowerPoint, Microsoft Publisher and many more.	1
Topics discussed were all useful for us teachers because it helps in making our work easier.	1
Total	10

Table 12: Respondents’ Responses on the Question Regarding the Things that Could Have Done Differently that Would Have Improved the Computer Literacy Programs

Responses	Frequency
More hands-on activities.	5
One-on-one tutorial	1
Total	6

Table 12 shows the respondents’ responses on the question regarding the things that could have been done differently to enhance the computer literacy programs. Only 6 out of the 24 respondents responded to this question. Responses pointed out that more hands-on activities should be undertaken and that the training be in a one-on-one tutorial scheme.

Table 13: Respondents’ Responses on the Question Regarding the Additional Topics They Would Like to be included in the Future Computer Literacy Programs

Responses	Frequency
Adobe Photoshop	1
More hands-on activity about trouble shooting	2
Total	3

Table 13 identified the additional topics the respondents want to be included in the future computer literacy programs. These topics include adobe photoshop (with 1 count) and troubleshooting (with 2 counts), which are actually not additional topics for they are already included in the past computer literacy programs. Seemingly, the respondents wanted to have more training for these topics so that they could have mastered the applications.

CONCLUSIONS

In view of the results and discussion presented in this study, the following conclusions were made:

- i. The BulSU-College of Science’s Computer Literacy Program has improved the knowledge and skills of Panasahan Elementary School’s Teachers on topics included in the program.
- ii. The computer literacy program is a quality program. It is well implemented and addressed the specific need of the recipients on computer technology.
- iii. The computer literacy program has brought a remarkable impact to the teachers since the knowledge and skills they gained are useful in performing their work as teachers.
- iv. The BulSU-College of Science’s Computer Literacy Program still needs further improvement to sustainably empower its recipients.

- iv. An impact evaluation should also be conducted to determine the effectiveness as well as the weaknesses/shortcomings of the other BS Mathematics extension programs of the college.

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RECOMMENDATIONS

In the light of the results and conclusion made in this study, the following are offered as recommendations:

- i. The computer literacy program for the teachers of Panasahan Elementary School should be sustained and continued as per request by the teachers themselves.
- ii. The BulSU-College of Science Extension Unit should discuss ways to further improve future computer literacy programs.
- iii. Similar computer literacy program for teachers may be undertaken to other group of elementary teachers in the nearby area.

