RESEARCH ARTICLE

UNRAVELING THE SENTIMENTS AND PERCEPTION ON THE IMPACT OF ICT LITERACY COMMUNITY EXTENSION PROGRAM: SEQUENTIAL TRANSFORMATIVE STUDY

*Jeffrey C. Cinco, Las Johansen B. Caluza, Devine Grace D. Funcion, Micheline A. Gotardo Lowell A. Quisumbing and Rommel L. Verecio

Leyte Normal University, Philippines

ARTICLE INFO	ABSTRACT
	ICT training plays an important factor in 21st-century instruction. Basic computer training provides a pedestal on which employees can build new skills on the job. With an ICTs particular computer, the internet and related engineering sciences are becoming more and more ubiquitous. One of the most commonly cited reasons for using ICTs in the classroom is to nurture a favorable learning environment. Technological literacy, or the ability to use ICTs effectively and efficiently, is thus seen as representing a competitive edge in an increasingly globalizing job market. However, this study examined the respondents' perception of the Computer literacy Enhancement Program conducted by the IT faculty unit. Data were gathered through survey questionnaire and interpreted frequency count and mean percentages. The result shows apositive response from the participants of the training were a satisfactory impact was rated in the demeanor of the CLEP training. The CLEP training was beneficial to the respondents in making teaching-learning materials, reports and computing grades.

INTRODUCTION

The concept of Civic Engagement has long been a focus of importance for State Universities in the Philippines. Civic engagement involves "working to make a difference in the civic life of one's community and developing the combination of knowledge, skills, values, and motivation to make that difference. It means promoting the quality of life in a community, through both political and non-political processes" (Erlich, 2000). In the country, it is one of the ways to measure Higher Academic Institutions (HEI) adherence to the thrust of the government to alleviate if not help in the upliftment of poor and marginalized communities. Moreover, (Bringle, Hatcher, and Holland, 2007); suggests that Civic engagement also can be teaching, research, and/or service that is both in and with the community; while (Bringle, Games, and Malloy, 1999) agrees that civic engagement should be service learning and participatory action research. These views on civic engagement are synonymous with the current practice of State Universities in offering what is known as Community Extension Services to their partner communities. Community service or extension services has been described as "services which are identified by an institution of higher education, through formal or

*Corresponding author: **Jeffrey C. Cinco,**
Leyte Normal University, Philippines.

informal consultation with local nonprofit, governmental, and community based organizations designed to improve the quality of life for community residents and low-income individuals, or to solve particular problems related to their needs, including such fields as education and literacy training (Lim, 2011). It is intended to bring individual and social transformation, professional growth and development to the partner communities as well as impart to them new knowledge and technologies through collaboration, cooperation, and networking. It is the mission of every HEI to promote the welfare of those communities that require assistance. Developing campus-community partnerships is a core element of well-designed and effective civic engagement, service learning and participatory action research. Most often it is organized by school administrators, faculty, and students, which seeks to transform the community into organizational staff and residents (or clients, consumers, advocates). The quality of these dual relationships is assessed in terms of the degree to which communications possess closeness, equity, and integrity, and the degree to which the outcomes of those interactions are exploitive, transactional, or transformational. After the community engagement, Implications are then offered for how this analysis can improve practice and research. Similarly, mutually-beneficial collaboration is expected, while all persons contribute knowledge, skills, and

experience in determining the issues to be addressed, the questions to be asked, the problems to be resolved, the strategies to be used, the outcomes that are considered desirable, and the indicators of success (Bringle *et al.*, 2012). The San Jose Central School (SJCS), an Elementary school in Tacloban City, Philippines and the Leyte Normal University (LNU), is one example of an effective Community Extension services Partnership. The LNU is a State University located within Tacloban City whose mandate among others is to provide community extension Services to its partner communities. The SJCS is composed of a workforce of 90 Elementary Teachers catering to a population of approximately 3,000 elementary students. The primary thrust of this educational institution is to be a learner centered institution, which aims to provide learners with quality, equitable, culture-based, and complete basic education where students learn in a child-friendly, gender-sensitive, safe, and motivating environment. In line with their mission, the SJCS teachers were expected to be at par with other educational institutions most especially with Information and Communications Technology or ICT, as it supports improved student learning and better teaching methods. However, based on the Needs Assessment survey conducted by the Leyte Normal University IT and Computer Education Unit last February 3, 2016, it was discovered that the majority of the competency levels of the Teachers at SJCS with regards to knowledge in computer hardware, software, multimedia and Internet applications was Basic. Furthermore, in terms of the Pedagogical application of the technical operations and concepts of ICT for planning, designing, and teaching, results suggest that majority of the teachers at SJCS were digitally illiterate. Hence, the conduct of the *Computer Literacy and Enhancement Program (CLEP)* Community Extension services for the SJCS teachers was implemented.

The CLEP Training supervised by the Information Technology Unit of the Leyte Normal University was an instructor lead four (4) day training designed to provide intensive curricular and classroom training in the areas of Computer Operations and Concepts, Template development using MS Office productivity tools, Information and data processing and the proficiency in Internet applications for Data Mining. The training was expected to bring individual and social transformation, professional growth and development to the Teachers of San Jose Central School as well as impart to them new knowledge and technologies through collaboration, cooperation, and networking. Given this logic, it is but necessary to determine the impact of the CLEP training on the Elementary teachers of SJCS. As a partner Institution, it is the responsibility of the Leyte Normal University to make sure that the pedagogical and methodological aspects of the training are meet so that it can strengthen the knowledge and proficiency of the teachers in the delivery of IT based services or instructions at SJCS.

Statement of the Problem

This study assessed the impact of the CLEP training program of the LNU IT and Comp. Ed Unit to its partner community, the San Jose Central School.

Specifically, it seeks answers to the following

- AS perceived by the respondents, what is the level of ICT Competency relative to technology operations and concept?

- As perceived by the respondents after the training, what is the level of extent of use of the following topics in their school related activities?
    - Microsoft Word;
    - Microsoft Excel;
    - Microsoft PowerPoint; and
    - Internet.
- What is the level of satisfaction in the implementation of the ICT literacy program of the university?
- What is the opinion of the participants on the implementation of the ICT literacy program of the University?
- What are the emerging issues on the views of the respondents relative to the implementation of the ICT literacy program?
- What are other activities, projects, and programs have the participants suggested for future training?
- What extension programs can be derived based on the result of this study?

Theoretical Framework

The Community Extension Program works through self-support, self-reliance and self-sustaining principles. There should be intended efforts to plan programs and services that are community-based through people's participation, taking into consideration the changing needs of the society and the individual. The IT and Computer Education Unit Community Extension Program of the Leyte Normal University, Tacloban City, continues its mission, to lend a hand to the needy and to make a change in their lives. Helping the people who are most in need and being a part of the mission is the best feeling an extension can have. This study is anchored on "social integration theory" which refers to a situation where minority groups come together or are incorporated into mainstream society (Cummins, E., nd). This also refers to an individual's social connection, typically measured by the number of social roles that an individual has, can provide meaning and purpose to his or her life, while protecting him or her from isolation in difficult periods. Hence, the theory is adopted as it relates to the subject of the study, which are the elementary teachers whom to be considered as a less privilege in the access of information and communication technology, which is to be considered as tools for the teaching and learning of the 21st century. As a response to this premise, the extension program of the IT and Computer Education is characterized by a focus on the needs of the target audience, the intent to affect participant learning and behavior outcomes, multiple activities that are comprehensive in nature, and the presence of a formal evaluation. Further, it was designed for computer literacy training for the Department of Education teachers of the San Jose Central School, Tacloban City whom the adopted school of the IT and Computer Education Unit. The use of Microsoft Word, Microsoft Excel, Microsoft PowerPoint, OneNote, Sway, Internet Surfing and Windows 10 Features were among the topics of the said training. Further, this extension program enhances the academic community to deepen their concern and strong desire to commit themselves to uplift the quality of life in the field of information and communication technology.

MATERIALS AND METHODS

Research Design: This study utilized descriptive research design to describe the phenomenon quantitatively. ADescriptive Design seeks to describe the current status of a

variable or event. The researcher does not begin with a hypothesis, but typically develops one after the collected data. Data collection is mostly observational. Descriptive studies are aimed at finding out "what is," so observational, and survey methods are frequently used to collect descriptive data (Borg and Gall, 1989).

Research Method

The IT and Computer Education Unit of Leyte Normal University conducted an impact of the ICT Literacy Community Extension Program which focuses on the topics like word processing using Microsoft Word, Excel, PowerPoint, and the Internet. The researchers seek approval through a formal letter to the Principal of San Jose Central Elementary School, Tacloban City, Philippines. After the approval, the researchers distribute and collect the survey questionnaires from the teachers who attended the training as respondents of this impact study. Unanswered or blank questions were filled-up through aninformal interview in order to have more credible and reliable results. The total respondents of this study were 192. Furthermore, the survey questionnaire was composed of General Information about the respondent, such as Name (optional), age, gender (sex); A. Higher education qualification, B. Level of Computing, C. Length of Service (in years), D. Seminars/Trainings attended in ICT, educational technology, instructional development and the like, E. Access to the Internet, and F. Technology Resources.

Treatment of Data

In data processing using descriptive statistics, the researchers utilized frequency count, mean, and mean percentages as a statistical tool in order to provide a more justifiable and clear interpretation of the result.

RESULT AND DISCUSSION

AS perceived by the respondents, what is the level of ICT Competency relative to technology operations and concept?

Table 1. Technology operations and concepts indicators

Technology Operation and Concepts Indicator		
Standards	Mean	Qualitative Description
S1	2.76	Proficient
S2	2.61	Proficient
S3	2.57	Basic

Table 1 illustrates the three different indicators on Technology Operations and Concepts. It shows that Standard 1 refers to the use of appropriate office and teaching productivity tools were the respondents placed themselves as proficient (mean = 2.76). This implies that the respondents are competent in creating business letter, preparing presentations and tabulating information. While standard 2 refers to understanding and effectively utilize the net and network applications and resources, the respondents assessed themselves as proficient (mean = 2.61), this implies that the respondents are knowledgeable in connecting and accessing data on the WWW. Lastly, standard 3 Demonstrate knowledge and skills in information and data management. It indicates that the respondents have assessed themselves as basic (mean = 2.57). This implies that they have limited knowledge on how to look

and collect textual and non-textual information from online sources.

Table 2. Software application tools used in school related activities

Application used in school related activities		
Application	Mean	Qualitative Description
MS Word	2.89	Moderately Used
MS Excel	2.53	Moderately Used
MS PowerPoint	2.19	Seldomly Used
Internet	2.61	Moderately Used
Grand Mean	2.51	Moderately Used

Table 2 refers to the application tools that are employed by the respondents in their school related activities. Grounded on the above table which the respondents show competent skills in utilizing productivity tools. Among the productivity tools that the respondents utilized are MS Word (mean = 2.89) or moderately used, MS Excel (mean = 2.53) or moderately used same as the Internet (mean = 2.51) or moderately used. Respondents utilized MS PowerPoint (mean = 2.19) or seldom used. ICT role in teaching includes preparation of bills, teaching-learning materials, examinations and sourcing materials with students such uses helped to elucidate difficult concepts, save time, make learners active, and simplify teachers' work. ICT was used for preparing lessons, letters, timetables, and schemes of work, and for students' registration (Mwalongo, 2011).

Table 3. Application of the skills learned

Application of Skills Learned in the CLEP training		
Learned Skills	Frequency	Percentage
Comp. Grades	53	28%
Instructional templates	46	24%
Teaching	49	26%
Research	23	12%
Report Generation	17	9%
Others	4	2%
Total	192	100%

Table 3 shows the application of the skills learned during the conduct of the Computer Literacy Enhancement Program (CLEP). Nearly 192 respondents were able to utilize the computer training in different classroom activities. Which fifty-three or (28%) respondents used the skills in computing, grades, forty-nine or (26%) respondents applied computer training in their instruction. Other respondents used the training in making instructional templates (24%), research (23%), report generation (17%).The elements which were found to be most important to these teachers in their teaching were: making the lessons more interesting, easier, more fun for them and their pupils, more various, more motivating for the schoolchildren and more pleasurable. Additional more personal factors were improving the presentation of textiles, allowing greater access to computers for personal usage, granting more power to the teacher in the school, making the teacher more prestige, making the teachers' administration more efficient and providing professional support through the Internet. These findings hold implications for coaching other teachers to get regular users since as was discussed in section 2, many of the professional development courses focus on teachers acquiring basic IT skills. Our research has indicated that the perceived usefulness factors are probably every bit important to teachers, therefore professional courses should increase the preparation of teachers in the pedagogical issues if

teachers are to be convinced of the value of applying ICT in their instruction.

Table 4. Implementation of the Computer Literacy Enhancement Program Activities

Level of Satisfaction on the Implementation of the ICT Extension Program	
Mean	Qualitative Description
2.53	Satisfied

Table 4 presents the overall opinion of the respondents on the extension activities conducted by the IT/Comp Ed unit. It indicates that the respondents were satisfied (mean = 2.53) in the implementation of the Computer Literacy Enhancement Program, which instructed the teachers how to integrate technology into their instruction. In increase to developing basic digital competence, the training helps expand and reinforce their social networks while imparting confidence in their ability to proceed on to study.ICT training can also help overcome language barriers, a significant element in finding employment (Garrido *et al.*, 2010).

Table 5. Future IT Training

Recommended IT Training or Seminars		
Training/Seminars	Frequency	Percentage
Graphics Design	34	38%
Webpage Design	18	20%
ICT Based research	13	14%
Website Design using CMS	10	11%
Computer Hardware Servicing	11	12%
Others	4	4%
Total	90	100%

Table 5 shows the recommended IT training that the respondents would like to avail.
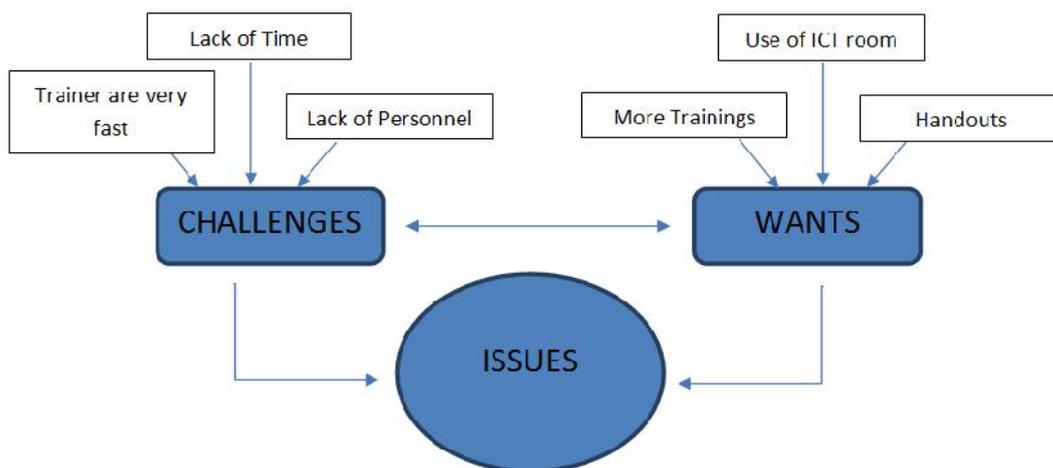
ICT Literacy Program Emerging Issues

Figure 1. Emerging issues relative to the implementation of the ICT literacy training

The suggested IT training is as follows Graphics Design (38%), Webpage Design (20%), ICT Based research (11%), Computer Hardware Servicing (12%). Other recommended training suggested by the respondents is making video clips with special effects, using an internet connection and apps for educational development using ICT, Movie maker, Microsoft Excel in Computation of grades. Benefits of ICT skills training do not limit to improve computer skills. Training often draws users into an environment where they develop nontechnical workplace skills (Sullivan *et al.*, 2008).

Views on Activities, Projects, and Programs for the Future

The IT/CompEd unit for several years has been conducting community extension program activities for the different adopted community to impart new knowledge and technologies through ICT collaboration, cooperation, and networking. And integrate technology into the teaching process to empower the learning environment of the students. The factors which were found to be most important to these teachers in their teaching were: making the lessons more interesting, easier, more fun for them and their pupils, more diverse, more motivating for the school children and more enjoyable (Cox, Cox, and Preston, 2000).

Respondents view on the implementation of the ICT literacy program

Respondent 1: *The Computer Literacy Enhancement Program of the Leyte Normal University has been very helpful to teachers, especially those who have no Basic Computer Literacy Training since the advent of the K to 12 curricula. So much change came along with it. Using multimedia technologies in teaching became a trend, and teachers work became so much computer-dependent. Hence, the skills taught in the CLEP training have been very helpful to us.*

Respondent 2: *Computer Literacy Enhancement Program of the University is very helpful to us teachers who have poor knowledge in computer.*

Respondent 3: *It is a big help to all the teachers. We gain knowledge and skills even for a short period of time. But there is learning for us.*

Respondent 4: *The CLEP of the university is very much helpful for us. It makes our work easier, and we are exposed to the digital facilities.*

Respondent 5: *The implementation of the Computer Literacy Enhancement Program of the university is of great help to mentors like us in such a way that we can apply the skills and competencies learned in the different area of instruction in the school particularly our pupils as well as the community.*

Figure 1 shows the issues encountered during the conduct of the ICT literacy training. First, The timing issue appeared to be of significance to the teachers. Understandably, doing training for 3-days is not enough to cover all the topics in computer application software. The timing of training was problematic because of the training schedule that it should cover the topics in MS Word, MS Excel, S PowerPoint, and the Internet. Consequently, the planning and design of courses should bring into account such element to ascertain the positive impact of these courses on teaching practices and eventually on students' achievements (Abuhmaid, 2011). One respondent commented:

"The facilitators are knowledgeable about the topic discussed. Time in delivering the topic is the only problem. It is given more time to discuss each topic."

The second challenge was that the trainers are very fast and lack of personnel in the delivery of the ICT Literacy training. The problem was on timing that it affects the process of how the trainer delivers the topics and with less personnel who will assist during the conduct of training, there are instances that the trainer will also assist the respondents when they were not able to follow the instructions. One respondent mentioned

"Sometimes the trainer is very fast and their lack of personnel who can assist us."

The third issue raised by the respondents is the availability of the handouts from the start of the training until the end. One of the respondents commented on this

"We would appreciate so much if we were given handouts of the topics discerned."

Fourth, the availability of computer laboratory where they can practice their learned skills.

"There should also be a time allotted for teachers only to use the ICT room for practicing their newly learned skills in computer."

Lastly, it was recommended by one of the respondents that more training should be conducted to help the teachers enhance their skills in computer.

"More hands-on training for teachers for us to be equipped in using computers, laptops, etc."

Conclusion

Based on the result of the study on the Computer Literacy Enhancement Program an extension activity of Information Technology / Computer Education Faculty. The respondent expresses a satisfactory impression for the overall conduct of the CLEP training. The training was beneficial for the teachers that they were able to apply the skills learned from the training. However, There are several issues in formulating CLEP training has tobe considered. First, computer handout should be made available in all CLEP training to guide the respondents during and after the conduct of the ICT literacy training. Second, there must be a good training design that will give enough time for the respondents to practice their newly learned skills and to tackle the necessary topics during the training.

Third, there should be enough personnel who will assist in the conduct of the ICT literacy trainingwhich will help the trainer if there are participants who are not familiar with the use of computers. Fourth, availability of computer laboratory that the participants will be given 1-day to practice their learned skills free from computer discussion and hands-on activities.

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