

ICT-Based Needs Assessment Analysis in Partner Community



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ABSTRACT: Determining the needs of the participants in a community extension program prioritizes the topics that they will be interested to attend. It is critical to identify interconnected needs and their underlying causes in order to design empowering and long-term programs and projects to assist people in improving their quality of life. Thus, using consultative meetings and focus group discussions, this qualitative study determined the community problems of Barangay Tanza, Estancia, Iloilo, on the ICT related program. Participants included 50 residents from the sectors of fisherfolks, farmers, women, youth, barangay officials, and 4Ps beneficiaries. This ensures that participants are interested in various topics presented in the program. The findings of the study were the basis for a proposed annual extension program plan for June 2021 to October 2025.

I. INTRODUCTION

The academe is one of the most important actors in society, with the ability to affect change by empowering members of the community. Community extension services address not only the needs of the community, but also the University's Vision and Mission. Community development is the process of assisting a community in strengthening and developing to its full potential (Adedokon, Adeyemo & Olorunsola, 2010). One of the most difficult challenges faced by members of the community, as well as many others, is a sense of isolation, and ICTs can provide access to knowledge in ways that were unimaginable not long ago.

ICTs force that has changed many aspects of the way we live. If one was to compare such fields as medicine, tourism, travel business, business, law, banking, engineering and architecture, the impact of ICT across the past two or three decades has been enormous. The way these fields operate today is vastly different from the ways they operated in the past.

In addition to curiosity, a person will recognize that it will not be easy to get through the rest of life without knowing about computers. As one studies about computers, the person becomes aware of the importance, versatility and its pervasiveness in the society. The person will also learn what computers are and how they work. This requires learning some technical jargon. And there is no better way to understand computers than through interacting with one. So being computer literate also means being able to use a computer for some simple applications (Capron & Johnson, 2004).

E-learning is another term for learning through new ICTs. Information and communication technology (ICT) is an essential component of today's world. It is a force that influences many aspects of our lives, as well as an electronic means of capturing, processing, storing, and communicating information.

According to UNESCO: ICT is a scientific technological and engineering discipline and management technique used in handling information in application and association with social, economic and cultural aspects. Appropriate use of ICT can transform the whole teaching-learning processes leading to paradigm shift in both content and teaching methodology (Anu Sharma et al., 2011).

Through its adopt-a-barangay program, the Northern Iloilo Polytechnic State College (NIPSC), has been charged with performing extension functions. In accordance with its mission and vision, the college generates data to support and sustain critical decisions, implements corresponding mechanisms, and transfers results in the design of relevant community extension services. As a result, this study was conducted to assess the needs of Barangay Tanza, Estancia, Iloilo in order to develop an extension program that will provide opportunities to its residents while also empowering the community.

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II. METHODOLOGY

A. Study Area

Tanza is located in the municipality of Estancia, province of Iloilo (11° 25' 44" N, 123° 8' 18" E). It is situated at approximately 11.4375, 123.1363, in the island of Panay. The elevation is estimated to be 24.5 meters or 59.4 feet above mean sea level. According to the 2020 Census, its population was 1,413. This represented 2.66% of the total population of Estancia.



Figure 1. Map of Tanza, Carles, Iloilo

B. Participants

The participants in this study were 50 randomly selected residents of Barangay Tanzai, Estancia, Iloilo. They represented a variety of sectors, including fisherfolks, farmers, women, youth, barangay officials, and 4Ps beneficiaries. Prior to the start of the process, they were oriented and informed of the objectives of the program.

C. Procedure

Consultative meetings and focus group discussions were used in this qualitative study to identify gaps, map out issues, and determine key training priorities in order to design a sustainable extension program.

Participants were asked to write down the needs of their respective sectors intended for computer skills, as well as the contributing factors and potential solutions. Each group presented its findings, and then there was deliberation.



Figure 2. shows the active participation of various stakeholders in the needs assessment activity.

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III. RESULTS AND DISCUSSION

Needs of the Partner Community

During the consultative meeting and focus group discussion, a number of issues and needs arose. The interconnectedness of all issues from different sectors was observed during the presentation of participants' output.

The needs of the participants for the ICT program reveals that the top nine necessities were: Computer Literacy Program, Barangay Information System, SK Information System, Vaccination System, computer assembly, computer troubleshooting, Photoshop, Awareness on Social Media, and Netiquette.

- a. Computer literacy, also known as digital literacy, involves having a current knowledge and understanding of computers and their uses. Because the requirements that determine computer literacy changes as technology changes, you must keep up with these changes to remain computer literate (Shelly & Vermaat, 2011).

Thus, the training program under the computer literacy will be the Training on Microsoft Word and Microsoft Powerpoint. Trainees who successfully complete the Microsoft Word training course will be able to learn the latest features of Word, create, edit, and save documents, format text and paragraphs, work with tables, columns, and other formatting features, and work with graphics, WordArt, charts, and text flow.

Microsoft PowerPoint, on the other hand, will teach participants how to create presentations with PowerPoint, format and organize PowerPoint slides, work with graphics, tables, and charts, add multimedia and SmartArt presentations, and integrate Microsoft office files.

- b. Barangay Information System

Technology had proven its capacity on how a business, organization and government keep the productivity and to be competitive. In giving quality service for its people to satisfy their needs.

Keeping Barangay records is a one way to easily track resident's information. BIS is capable in recording this bulk information and can be stored in a long period of time. This system can meet strategic objectives for reducing paper consumption and reducing time consuming file retrieval from bulky documents. BIS can track residents record such as personal to family information, complaints to amicable settlement information and can create daily reports for the Barangay.

- c. SK Information System

SK Information System is designed to manage all the records of SK officials and it is an information system intended to the youth of Brgy. Tanza. SKIS is capable of recording large amounts of data and storing it for an extended period of time. It creates monthly reports and send notification for all the registered kabataan members.

This system is capable of storing and retrieving information of individuals inoculated with COVID -19. A tool to display information and generate reports of the individual and its vaccination details Also, for reliable and rapid data collection.

- e. Computer Assembly is a training course that teaches participants how to disassemble a computer system, identify computer components and accessories, assemble and test the computer system.
- f. Computer Troubleshooting will teach trainees how to identify common computer system problems, identify basic troubleshooting procedures and tools, describe safety hazards associated with working with electronic equipment, and demonstrate the ability to install and effectively use command-line functions and utilities to manage the operating system.
- g. Graphics Design is a training course that will teach basic graphics to the trainees to understand and work with layers; enhance images with paint and filters; perform color adjustments; work with vector paths; and automate task. Adobe Photoshop is the software program used in the training.



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Figure 4. Presentation of Output



Figure 5. Presentation of Output

IV. CONCLUSIONS

It is concluded that, under certain conditions, information and communication technologies (ICTs) can significantly improve poor people's human and social capabilities and have a positive impact on their well-being. ICTs have the potential to increase the individual and collective agency of poor people, as well as to strengthen their existing individual or community assets and informational capabilities. ICTs gain meaning only when people use and enact ICTs for specific purposes. The most immediate and direct impact of ICT programs on people's well-being, according to the study, is personal empowerment of the most marginalized groups, where newly acquired ICT capabilities provide a sense of accomplishment significantly strengthening their self-esteem. As a result, an ICT program is deemed essential. Eventually, the use of ICT will improve people's learning experiences in the community. It also aids in the development of a successful career in a technologically advanced world.

V. RECOMMENDATIONS

Training programs and activities should be carefully planned to meet the needs of the community, and a long-term extension program should be established. Continuous monitoring and evaluation should be carried out to assess the program's impact on the community. More extension programs should be offered in order to further empower the partner communities.

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