

# EFFECTIVENESS OF A SEMINAR-WORKSHOP ON INTERNET APPLICATIONS: A COMMUNITY EXTENSION

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**ABSTRACT:** *This study evaluates the effectiveness of a seminar-workshop on internet applications, conducted as a community extension program in the barangays of Bonifacio, Quezon, and Trinidad in Surigao City, Philippines. The research aimed to enhance digital literacy among community members by introducing essential internet tools and applications. A mixed-methods approach was employed, utilizing both quantitative and qualitative data from post-activity evaluations to assess the program's effectiveness and identify common themes in participant feedback. The findings indicate a high level of effectiveness, with positive ratings across key evaluation criteria, including Goals and Objectives, Activities/Projects, Teaching Skills, Training Duration, and Venue and Facilities. Participants expressed a strong interest in acquiring practical digital skills, particularly in mobile banking applications, multimedia production, internet security, and basic computer usage. Based on these findings, the study presents several recommendations for future community-based information and communications technology (ICT) training programs. These recommendations aim to enhance digital literacy further and address the specific needs of the community.*

**Keywords:** Effectiveness, Community Extension, Internet Applications

## 1. INTRODUCTION

The rapid advancement of information and communication technology (ICT) has fundamentally transformed the landscape of global communication, business practices, and access to services [1-4]. However, a substantial number of low-income and rural communities continue to experience significant barriers to digital access, which exacerbates the existing digital divide. This divide delineates those who can effectively leverage technology from those who are unable to do so. Consequently, individuals in these underserved populations face significant challenges in accessing vital public services, securing stable employment, pursuing educational opportunities, and achieving social inclusion. Addressing this digital divide is critical not only for promoting social equity but also for fostering a more inclusive and sustainable society.

The Commission of Higher Education (CHED) in the Philippines requires higher education institutions (HEIs) to collaborate with businesses, industries, and communities to facilitate the transfer of technology and knowledge in specific developmental areas that directly impact the lives of individuals, families, and communities [5]. The Research, Development, and Extension Manual outlines that the goal of Surigao del Norte State University (SNSU) is to provide instruction, research, production, and extension programs and services that are relevant, high-quality, and sustainable, all within a framework of credible and responsive institutional governance. This goal was formally approved by the Board of Trustees through Resolution No. 64, Series of 2016, during its 70th Board Meeting held at the CHED Central Office in Quezon City in September 2016 [6].

The Seminar-Workshop on Internet Applications was launched as an essential extension project to address the urgent need for digital literacy. This initiative specifically focused on three local government units (LGUs): Barangay Trinidad, Barangay Bonifacio, and Barangay Quezon. The primary goal of the program was to equip participants with fundamental digital literacy skills, emphasizing practical internet applications such as social media, online banking, GCash, video editing, and virus protection. By providing

these critical skills, the researchers aimed to empower individuals to navigate and fully leverage the opportunities available in the digital landscape.

## 2. RELATED LITERATURE

Digital literacy, as articulated by the European Commission, encompasses the skills required to access, manage, understand, and evaluate information utilizing digital technologies [7]. Digital inclusion, as defined by Warschauer, extends beyond mere physical access to computers and the internet; it involves fostering meaningful engagement and the development of essential digital competencies [8].

A study conducted by De Guzman and Pascual demonstrates that community-based Information and Communication Technology (ICT) initiatives significantly enhanced the adoption of digital financial instruments and internet services among rural populations in the Philippines [9].

The COVID-19 pandemic has further underscored the critical importance of digital inclusion, particularly concerning sectors such as e-commerce, education, and healthcare [10]. Nevertheless, without structured training programs, marginalized populations may continue to experience disengagement from these vital resources. [11-12]. To mitigate these disparities, local initiatives, such as the seminar-workshop in question, are indispensable.

These interventions—rooted in contextualized and participatory learning—have been demonstrated to empower community members at the local level effectively [13-14].

## 3. RESEARCH DESIGN AND METHODS

The present study utilized qualitative and quantitative research methodologies. Researchers employed an adapted instrument derived from the Research, Innovation, and Extension division of Surigao del Norte State University to evaluate the effectiveness of extension projects. Data collection took place across three barangays in Surigao City: Barangay Bonifacio, Barangay Quezon, and Barangay Trinidad, with each barangay contributing 20 participants, resulting in a total of 60 respondents. The sample consisted of adult community members, a significant number of whom possessed limited formal training in digital technologies.

The assessment instrument underwent revisions based on expert critiques during a preliminary dry run, and reliability was established through a re-run method utilizing the Pearson

Product-Moment Correlation coefficient.

To gauge participants' perceptions of the workshop's effectiveness, the researchers distributed a post-activity evaluation form to all attendees. This form comprised five Likert-scale questions (ranging from 4.49 to 5.00: Outstanding, 3.40 to 4.48: Very Effective, 2.60 to 3.39: Effective, 1.80 to 2.59: Need Improvement, and 1.00 to 1.79: No Improvement) in addition to three open-ended questions designed to elicit feedback regarding the content, delivery, and relevance of the workshop.

The qualitative data were analyzed through thematic coding, with categories developed based on recurring keywords and phrases. Furthermore, it utilized frequency tables and visual charts to summarize the thematic findings effectively.

#### 4. RESULTS AND DISCUSSIONS

**Table 1: Effectiveness of the Seminar-Workshop in Barangay Bonifacio**

Variables	Mean	Rank	Verbal Interpretation
Goals and Objectives	5.00	1	Outstanding
Activities/Projects	4.80	4	Outstanding
Teaching Skills	4.90	3	Outstanding
Training Duration	4.95	2	Outstanding
Venue and Facilities	5.00	1	Outstanding
Grand Mean	4.93		Outstanding

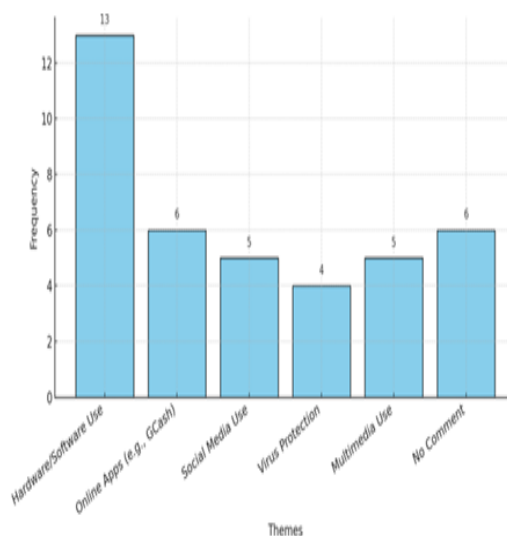
Table 1 reveals an overall rating of Outstanding, with a grand mean score of 4.93. The components related to Goals and Objectives and Venue and Facilities each achieved a perfect score of 5.00, indicating exceptional alignment and suitability for the workshop's aims. Following closely, the Training Duration garnered a score of 4.95, while the areas assessing Teaching Skills and Activities/Projects received outstanding evaluations at 4.90 and 4.80, respectively. These findings reflect the high quality and relevance of the seminar-workshop across all assessed dimensions.

**Table 2 Effectiveness of the Seminar-Workshop in Barangay Quezon**

Variables	Mean	Rank	Verbal Interpretation
Goals and Objectives	5.00	1	Outstanding
Activities/Projects	4.98	3	Outstanding
Teaching Skills	4.90	2	Outstanding
Training Duration	4.70	4	Outstanding
Venue and Facilities	4.90	2	Outstanding
Grand Mean	4.89		Outstanding

In Table 2, the data indicate that participants from Barangay Quezon rated all evaluated variables as Outstanding, resulting in an overall mean score of 4.89. The category of Goals and Objectives attained the highest mean score of 5.00, signifying complete alignment with participant expectations. Following closely, Teaching Skills and Venue and Facilities both received a score of 4.90, ranking second. The Activities/Projects category scored 4.98, while Training Duration received the lowest mean score at 4.70; nonetheless, this score still falls within the Outstanding range. These

findings suggest a consistently high level of effectiveness and participant satisfaction across all key domains evaluated.



**Figure 1: Frequency of Common Themes in Participant Feedback**

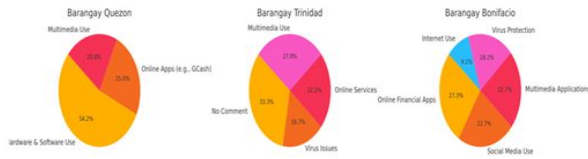
**Table 3: Effectiveness of the Seminar-Workshop in Barangay Trinidad**

Variables	Mean	Rank	Verbal Interpretation
Goals and Objectives	4.85	2	Outstanding
Activities/Projects	4.85	2	Outstanding
Teaching Skills	4.90	1	Outstanding
Training Duration	4.90	1	Outstanding
Venue and Facilities	4.90	1	Outstanding
Grand Mean	4.88		Outstanding

Table 3 presents the evaluation outcomes for Barangay Trinidad, which was classified as "Outstanding" across all assessed dimensions, resulting in a grand mean score of 4.88. Notably, the criteria of Teaching Skills, Training Duration, and Venue and Facilities received the highest ratings, each attaining a score of 4.90 and thus sharing the top rank. In contrast, the dimensions of Goals and Objectives and Activities/Projects garnered scores of 4.85, securing the second rank. These findings reflect a uniformly high level of participant satisfaction and underscore the effectiveness of the program's implementation within the barangay context.

Figure 1 presents a detailed distribution of common themes derived from participant feedback during the seminar-workshop. The most frequently cited theme was Hardware/Software Use, mentioned 13 times, underscoring a significant interest or concern in this domain. Following this, Online Applications (e.g., GCash) and the category labelled "No Comment" were each referenced six times, while Social Media Use garnered five mentions. Additionally, Multimedia Use and Virus Protection received 5 and 4 mentions, respectively. These findings indicate that participants demonstrated a pronounced focus on foundational digital skills and practical tools, whereas fewer comments addressed concerns related to security or content

creation.



**Figure 2: Distribution of Themes in Participant Feedback by Barangay**

Based on the results shown in Figure 2, the findings indicate that participants in Barangay Quezon exhibit a strong interest in both hardware and software. Results also suggest that they are in the early stages of developing digital literacy, which includes basic skills in using devices and troubleshooting. Their significant focus on online applications reflects an increasing familiarity with practical tools like GCash, while their interest in multimedia reveals a budding curiosity about content creation.

In Barangay Trinidad, among the respondents who did provide input, multimedia usage and online services were prominent interests, highlighting a desire to engage with platforms such as YouTube and Facebook. Additionally, concerns about viruses highlight apprehensions regarding cybersecurity, underscoring the urgent need for foundational education in digital safety.

In Barangay Bonifacio, the interest in online financial applications and social media suggests that participants have some familiarity with digital tools, yet they wish to improve their proficiency. Their intense focus on multimedia applications indicates a growing interest in creating and editing videos for social interaction or promoting small businesses. Ongoing concerns about viruses further emphasize the need for localized training in digital safety. Overall, the recurring theme of internet use highlights the importance of foundational skills for effectively navigating online environments.

## 5. CONCLUSIONS

The study derives several significant conclusions regarding the effectiveness of the seminar-workshop on Internet Applications for three Local Government Units (LGUs) in Surigao City: Barangay Bonifacio, Barangay Quezon, and Barangay Trinidad. The feedback from these LGUs reflected an outstanding rating for the extension program, assessed across key criteria such as Goals and Objectives, Activities/Projects, Teaching Skills, Training Duration, and Venue and Facilities.

Qualitative data revealed a pronounced interest in acquiring applied digital skills, specifically in areas such as mobile banking applications, multimedia production, internet security, and fundamental computer usage. This study underscores the pressing need for localized and readily accessible Information and Communication Technology (ICT) training, particularly in economically disadvantaged regions. Furthermore, the study identifies specific training objectives that warrant further exploration in subsequent

initiatives.

To promote sustained digital empowerment, the researchers recommend that future extension programs be inclusive of individuals from diverse age groups and that regional digital support groups be established within each barangay to provide ongoing support for participants after instruction.

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