



Impact Assessment of the BOLDER OSY Program: Strengthening Leadership, Development, and Educational Readiness Among Out-of-School Youth in Quezon City, Philippines

Norilyn C. Sindanum

Quezon City University
Quezon City, Philippines
norilyn.sindanum@qcu.edu.ph
<https://orcid.org/0009-0005-0013-6551>

Lalaine Josefa L. Carrao

Quezon City University
Quezon City, Philippines
lalaine.josefa.carrao@qcu.edu.ph
<https://orcid.org/0009-0005-1057-4934>

Paula Joy L. Dela Cruz

Quezon City University
Quezon City, Philippines
Paula.
<https://orcid.org/0009-0003-2078-8202>

Abstract. This research examines the “Barangay Opportunity and Leadership for Development and Educational Readiness of the Out-of-School Youth” (BOLDER OSY) initiative in Barangay Gulod, Novaliches, Quezon City, Philippines by the Quezon City University. The study aims to assess its broader effects on the barangay's socio-economic structure by analyzing BOLDER OSY's impact on the educational, personal, and societal pathways of out-of-school youth. Specifically, the objectives include collecting demographic data such as age, gender, civil status, and religious affiliation to understand participant diversity; evaluating the effectiveness of the training in enhancing understanding of various Web development techniques, including HTML, CSS, JavaScript, PHP/MySQL, and web hosting; examining the significance of hands-on exercises, workshops, and take-home activities in the training; and identifying ways to improve future training programs based on participant feedback. Data from the training and post-training evaluations include both qualitative and quantitative insights. The results emphasize the program's positive influence on participants' quality of life, career opportunities, income potential, and web development skills. Participants report satisfaction with the hands-on exercises and workshops, which motivate their pursuit of education and careers in Information Technology. The study suggests adding longer discussion periods to future training sessions. Overall, BOLDER OSY functions as an effective community-driven model, offering valuable insights for similar initiatives in other communities.

Keywords: *Impact assessment, barangay, out-of-school youth, extension project, computer literacy, Quezon City*



Introduction

In an era where education is considered crucial for both individual and societal progress, the issue of out-of-school youth highlights missed opportunities and untapped societal roles. These youths, who for various reasons are outside the traditional education system, represent unrealized dreams and potential. Recognizing this urgent challenge, barangays in the Philippines, as key administrative units, have an important role in developing grassroots solutions tailored to their specific circumstances.

Community engagement involves collaborating with groups of people connected by geography, shared interests, or similar circumstances on issues that affect their well-being (Pennington et al., 2020). The community-based approach, especially at the barangay level, offers a specialized perspective, allowing for strategic interventions tailored to the specific needs of the area. It is within this context that the "Barangay Opportunity and Leadership for Development and Educational Readiness of the Out-of-School Youth" (BOLDER OSY) initiative emerges. BOLDER OSY is an educational pathway training program for the Out-of-School Youth of Barangay Gulod. The project targets twelve (12) Out-of-School Youth ages 18 to 24 who live in Barangay Gulod, Novaliches, Quezon City. BOLDER OSY emphasizes career training for OSYs interested in securing a decent job through certification programs. The program also helps participants transition back into formal schooling. Spinner et al. (2021) report that people found the training useful and relevant to their development, providing opportunities to learn and share ideas with colleagues. In education and development, training is a systematic process of learning and acquiring new knowledge, skills, or abilities. The impact of training on personal development and growth is significant, influencing professional skills, personal growth, and overall well-being. Malcolm Knowles, who extensively studied the effects of training on personal development, discusses this in *The Adult Learner: A Neglected Species* (O'Toole & Essex, 2012).

It focuses on the principles of adult learning and andragogy. It describes the methods and practices of teaching adult learners. The study emphasizes the autonomy of adult learners and the importance of training methods that respect and respond to individual needs and motivations. His theory highlights that practical training can contribute not only to the acquisition of specific skills but also to the overall development of an individual's confidence, autonomy, and problem-solving skills. It is important to note that the impact of training on personal development may vary depending on factors such as the quality of the training program, the relevance of the content, and the learner's motivation. Much research in education, psychology, and organizational development has examined the varied effects of training on individuals, and O'Toole & Essex's contribution to adult education is a valuable resource for understanding these dynamics.

BOLDER OSY is a program that specifically addresses the concerns of these youth in a targeted and comprehensive way, providing them with a path back into education and supporting their personal and community development. This impact assessment study aims to thoroughly examine the BOLDER OSY program, evaluating its effectiveness, scope, and importance. The study will also analyze

its operational methods, successes, and areas that may need further improvement. According to Young and Kallemeyn (2019), practitioners and evaluators face several challenges when conducting detailed evaluations to measure a program's impact. Therefore, through careful analysis and feedback collection, the researchers aim to identify the program's strengths and potential weaknesses, as well as its overall effect on participants.

This study aims to examine its broader effects on the barangay's socio-economic structure by assessing BOLDER OSY's influence on the educational, personal, and societal paths of out-of-school youth. Specifically, the study's objectives are to collect demographic information such as age, gender, civil status, and religious affiliation to understand participant diversity; to evaluate the effectiveness of the training in improving participants' understanding of various technical aspects of Web development, including HTML, CSS, JavaScript, PHP/MySQL, and web hosting; to assess the impact of hands-on exercises, workshops, and take-home activities within the training program; and to identify potential improvements for future training programs based on participants' experiences.

Furthermore, the goal is not only to highlight the program's value but also to establish a reproducible framework for similar initiatives across different areas. Essentially, this assessment aims to do more than just evaluate. The researchers want to emphasize the significance of these community-driven programs and demonstrate their potential to shape the futures of young individuals. Additionally, by providing insights into the program's role in helping these youths overcome challenges, the researchers intend to create a valuable resource. This resource could guide similar efforts in other barangays and communities, ensuring every young person has an equal opportunity to succeed in an increasingly competitive world.

Methodology

This study employed a mixed-methods impact assessment design, integrating quantitative and qualitative data to evaluate the effectiveness of the Barangay Opportunity and Leadership for Development and Educational Readiness (BOLDER OSY) program. The mixed-method approach was selected to capture both measurable changes in participants' competencies and the nuanced perceptions that emerged from their training experiences.

Participants and Sampling Procedure

A total of twelve (12) out-of-school youth aged 15 to 26 years old from Barangay Gulod and Barangay Greater Lagro, Novaliches, Quezon City, served as the study respondents. Participants were selected through purposive sampling, based on the inclusion criteria of (a) being currently out of school, (b) residing in the identified barangays, and (c) willingness to participate in the full duration of the training and assessment activities. This sampling approach ensured that the respondents directly represented the target beneficiaries of the BOLDER OSY program.

Program Implementation



The intervention consisted of a structured web development training program covering foundational and intermediate skills in HTML, CSS, JavaScript, and PHP/MySQL (via XAMPP). The training was delivered through a combination of lectures, guided hands-on activities, workshops, and take-home tasks. The program followed an adult-learning framework aligned with andragogical principles to ensure relevance, autonomy, and applied learning.

Instrumentation

Data were gathered using a researcher-developed, bilingual (English–Filipino) survey questionnaire specifically designed to assess the profile, training experience, and perceived impact of the BOLDER OSY web development program on participating out-of-school youth. The first part of the instrument elicited the respondents' demographic profile, including age (15–17, 18–20, 21–23, and 24–26 years old), gender (male, female, LGBTQIA++, prefer not to say), civil status (single, married, cohabiting, separated, widowed, prefer not to say), and religious affiliation (Catholic, Born Again Christian, Iglesia ni Cristo, Muslim, others, or prefer not to say). This section provided a basis for describing participant characteristics and for understanding the group's diversity.

The second part of the questionnaire consisted of closed-ended items measured using a five-point Likert scale (1 = lowest rating, 5 = highest rating) to capture participants' perceptions of the training's effectiveness and impact. These items asked respondents to rate the extent to which the program: (a) improved their quality of life in terms of career opportunities, income potential, and entrepreneurship; (b) influenced their decision to continue their studies and helped them apply learned knowledge to their current engagements; (c) enhanced their confidence in pursuing a career in Information Technology and increased their competitiveness in the job market; and (d) strengthened their understanding of key technical areas, namely JavaScript, HTML and CSS, PHP/MySQL (XAMPP), web hosting, and basic web development. Additional items assessed how helpful and valuable they found the hands-on exercises, workshops, take-home activities, and training materials, as well as the extent to which the training increased their awareness of IT and web development opportunities and trends.

The third part of the instrument comprised open-ended questions designed to elicit richer qualitative feedback on participants' experiences in the program. Respondents were asked to describe their most memorable experience in Project BOLDER OSY, the challenges they encountered during the training, and their recommendations for improving future training programs. They were also invited to share a message for the trainers and organizers, and to indicate whether they were interested in receiving additional IT-related training from Quezon City University's College of Computer Studies. These qualitative responses provided contextual insights that complemented the quantitative ratings and helped the researchers interpret the program's impact more deeply from the participants' own perspectives.

The instrument was administered digitally through Google Forms before and after the training. Quantitative data were analyzed with descriptive statistics such as frequency, percentage, and mean scores, while qualitative responses were reviewed using thematic analysis to identify common themes related to learning experiences and program effectiveness.

Ethical considerations were observed by ensuring voluntary participation, confidentiality, and informed consent, including parental consent for minors. This methodological approach enabled a comprehensive assessment of both measurable and experiential outcomes of the BOLDER OSY program.

Results

The results were collected from twelve participants who took part in both the training and survey. These findings offer valuable insights into their perspectives and experiences, providing initial answers to the research questions. The data gathered from all participants lay a foundation for identifying trends, patterns, and potential implications. Analyzing this group's responses reveals early outcomes of the research and sets the stage for further exploration and interpretation in later sections. Gathering a complete dataset is important, as their perspectives and input are crucial for gaining a thorough understanding of the topic. Efforts were made to include a diverse range of participant viewpoints, reflecting the researchers' commitment to capturing a broad spectrum of insights for the study's overall accuracy and validity.

The data presented in Table 1 shows the demographic profile within a specific context. Regarding age, most participants are between 21 and 23 years old, accounting for 41.7%, while 18-20-year-olds make up 33.3%. Notably, no individuals are in the 15-17 age group, whereas 25.0% fall into the 24-26 range. In terms of gender, females are the majority, representing 66.7%, with males constituting the remaining 33.3%. All participants are single (*Binata/Dalaga*), making up 91.7%, with no cases of marriage, cohabitation, separation, or widowhood, while 8.3% prefer not to disclose their status. Concerning religion, 50.0% identify as Catholic, 41.7% as Born Again Christian, and 8.3% choose not to share their religious affiliation. Importantly, there are no respondents from other religious groups like *Iglesia ni Cristo* or Muslim, nor do any choose to withhold their religious identity. This breakdown provides valuable insights into the group's composition, helping to understand its demographics.

Table 1.
Demographic Profile

Age	Percentage
15–17 years old	0%
18–20 years old	33.30%
21–23 years old	41.70%
24–26 years old	25.00%
Gender	
Male	33.30%
Female	66.70%
LGBTQIA++ (LGBTQIA++)	0%
Prefer not to Say	0%
Civil Status	
Single	91.70%
Married	0%



Cohabiting/Live-in	0%
Separated	0%
Widow/Widower	0%
Prefer not to say	8.30%

Religion

Catholic	50.00%
Born Again Christian	41.70%
Iglesia ni Cristo	0%
Muslim	0%
Others	0%
Prefer not to say	8.30%

The following figures show the results of gathered data, the impact of the Project BOLDER OSY training on participants' educational choices, course, career opportunities and preferences as well as the effectiveness of the training in enhancing participants' understanding of various technical aspects in Web development.

The training helped me improve my quality of life in terms of Career opportunities

Ang pagsasanay ay tumulong sa akin na mapabuti ang kalidad ng aking buhay sa aspeto ng pagkakataon sa karera

12 responses

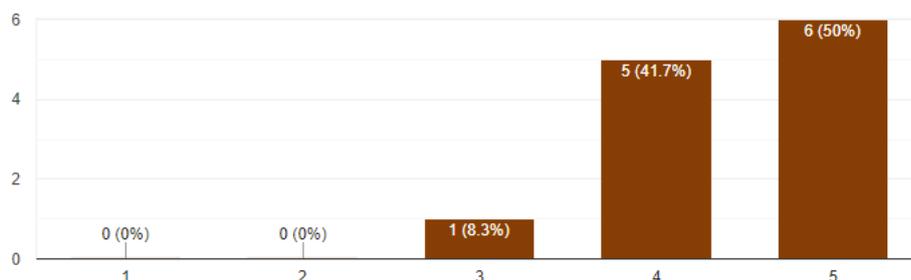


Figure 1.

Training Helped Participants Improve Their Quality of Life In Terms Of Career Opportunities

Figure 1 illustrates that 50% of participants who rated the training 5 out of 5, acknowledged its positive impact on their quality of life in terms of career opportunities. Moreover, 41.7% of respondents, who rated it 4 out of 5, while the remaining 8.3% rated it 3 out of 5, provided additional insights into their perspectives.

The training helped me improve my quality of life in terms of income potential.

Ang pagsasanay ay tumulong sa akin na mapabuti ang kalidad ng aking buhay sa aspeto ng potensyal sa kita.

12 responses

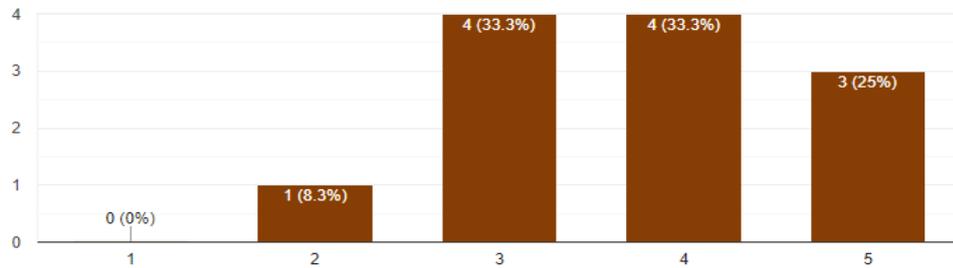


Figure 2.

Training Helped Participants Improve Their Quality of Life In Terms Of Income Potential

Figure 2 illustrates that 25% of participants who rated the training 5 out of 5 acknowledged its positive impact on their quality of life in terms of income potential. Moreover, 33.3% of respondents rated it 4 out of 5, and 33.3% rated it 3 out of 5, while 8.3% of participants rated 2 out of 5.

The training enhanced my understanding of JavaScript.

Ang pagsasanay ay nagpabuti ng aking pang-unawa sa JavaScript.

12 responses

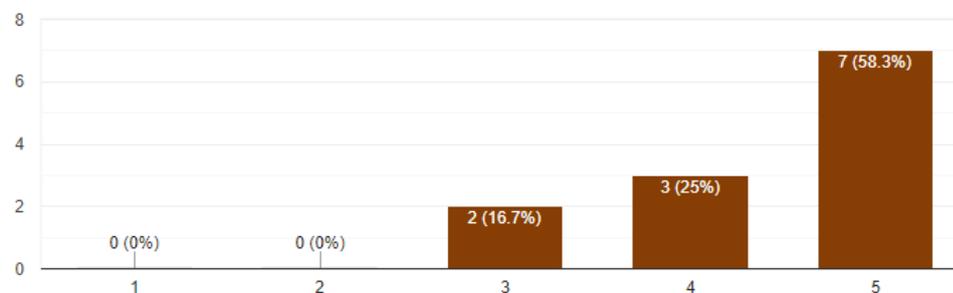


Figure 3.

Training Enhanced Their Understanding in JavaScript

Figure 3 shows that 58.3% of participants who rated the training 5 out of 5 acknowledged that it enhanced their understanding of JavaScript. Moreover, 25% of respondents rated it 4 out of 5, while 8.3% of participants rated it 3 out of 5.

The training helped me improve my quality of life in terms of entrepreneurship ventures.

Ang pagsasanay ay tumulong sa akin na mapabuti ang kalidad ng aking buhay sa aspeto ng entrepreneurship ventures.

12 responses

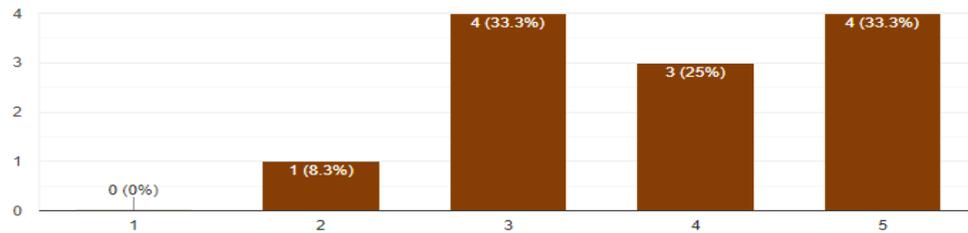


Figure 4.

Training Helped Participants Improve Their Quality Of Life In Terms Of Entrepreneurship

Figure 4 illustrates that 33.3% of participants who rated the training 5 out of 5 acknowledged its positive impact on their quality of life in terms of entrepreneurship, and 25% rated 4 out of 5. Also, 33.3% of participants rated it 3 out of 5, while 8.3% of participants rated it 2 out of 5.

The training influenced me to continue my studies.

Ang pagsasanay ay nag-udyok sa akin na magpatuloy sa aking pag-aaral.

12 responses

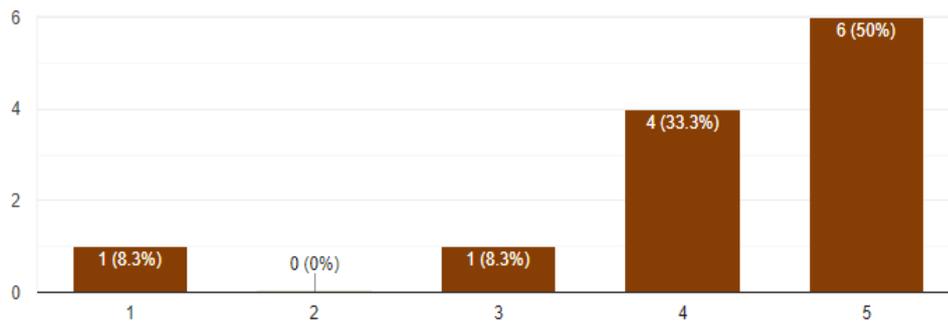


Figure 5.

Training Influenced Them to Continue Their Studies

Figure 5 shows that 50.0% of participants who rated the training 5 out of 5 acknowledged that the training influenced their decision to continue their studies, and 33.3% rated it 4 out of 5. However, 8.3% of participants rated it 1 out of 5.

The training helped me in applying the learned knowledge in my current engagement (education, employment, or entrepreneurship).

Ang pagsasanay ay tumulong sa akin na magamit ang natutuhan kong kaalaman sa aking kasalukuyang pagkaka-ugnay (edukasyon, trabaho, o negosyo).

12 responses

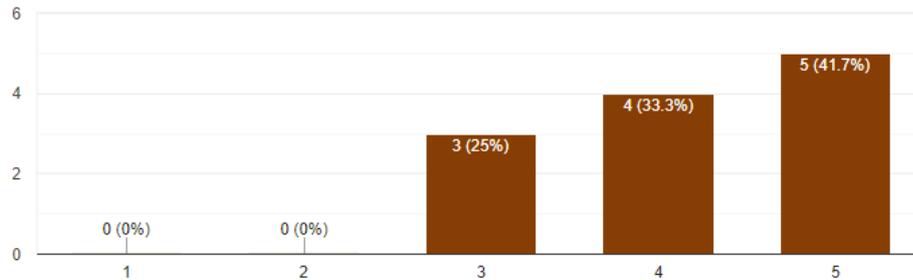


Figure 6.

Training Helped Them apply the Learned Knowledge in Their Current Engagement

Figure 6 illustrates that 41.7% of participants who rated the training 5 out of 5 acknowledged that the training influenced their decision to continue their studies; 33.3% rated it 4 out of 5. However, 25% of participants rated it 3 out of 5.

The training has positively influenced my confidence in pursuing a career in Information Technology.

Ang pagsasanay ay may positibong epekto sa aking kumpiyansa sa pagtahak ng karera sa Teknolohiyang Impormasyon.

12 responses

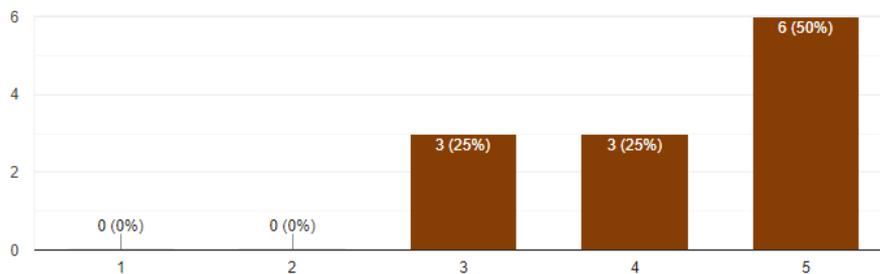


Figure 7.

Training Positively Influenced Their Confidence in Pursuing a Career in Information Technology

Figure 7 shows that 50.0% of participants who rated the training 5 out of 5 acknowledged that it positively influences their confidence in pursuing a career in Information Technology, and 25.0% rated it 4 out of 5. Also, 25% of participants rated it 3 out of 5.

The training has enhanced my competitiveness in the job market.

Ang pagsasanay ay nagpataas ng aking kakayahan sa pagtindig sa merkado ng trabaho.

12 responses

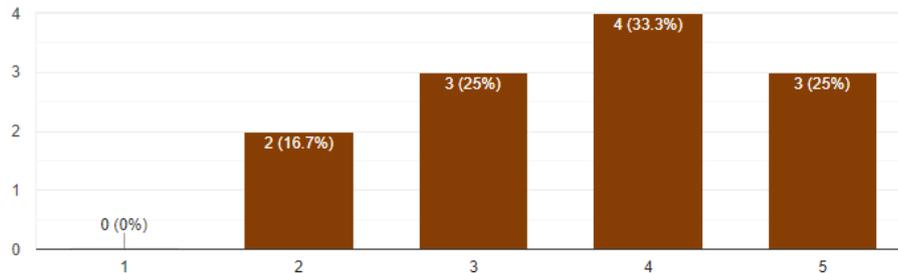


Figure 8.
Training Enhanced Their Competitiveness in the Job Market

Figure 8 illustrates that 25.0% of participants rated the training 5 out of 5, acknowledged that it enhanced their competitiveness in the job market, and 33.3% rated it 4 out of 5. Moreover, 25% of participants rated it 3 out of 5, and 16.7% of participants rated it 2 out of 5.

The training enhanced my understanding of HTML and CSS.

Ang pagsasanay ay nagpabuti ng aking pang-unawa sa HTML at CSS.

12 responses

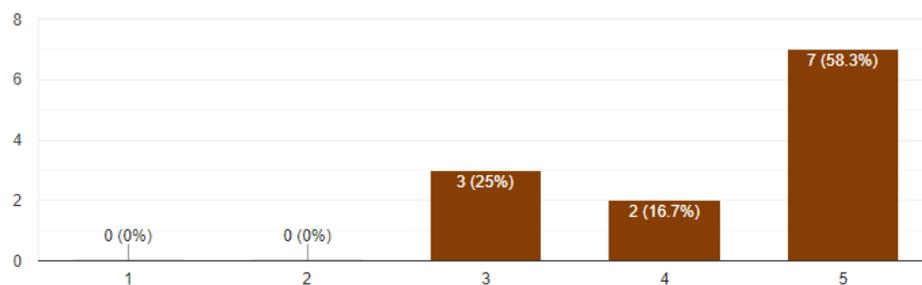


Figure 9.
Training Enhanced Their Understanding of HTML and CSS

Figure 9 illustrates that 58.3% of participants who rated the training 5 out of 5 acknowledged that the training enhances their understanding of HTML and CSS. Moreover, 16.7% of respondents rated it 4 out of 5, while 25.0% rated it 3 out of 5.

The training enhanced my understanding of PHP/MySQL (XAMPP).

Ang pagsasanay ay nagpabuti ng aking pang-unawa sa PHP/MySQL (XAMPP).

12 responses

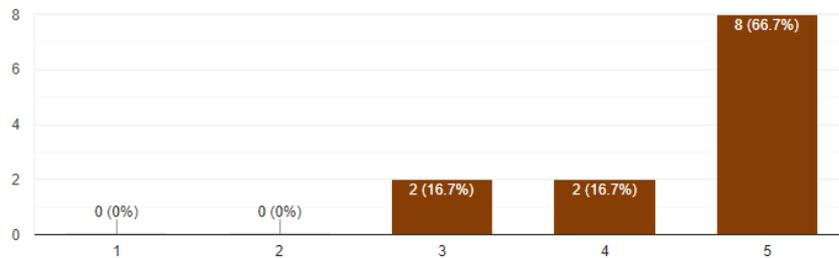


Figure 10.

Training Enhanced Their Understanding of PHP/MySQL(XAMPP)

Figure 10 illustrates that 66.7% of participants, who rated the training 5 out of 5, acknowledged that the training enhances their understanding of PHP/MySQL(XAMPP). Moreover, 16.7% of respondents rated it 4 out of 5, and 16.7% rated it 3 out of 5.

The training enhanced my understanding of Web Hosting.

Ang pagsasanay ay nagpabuti ng aking pang-unawa sa Web Hosting.

12 responses

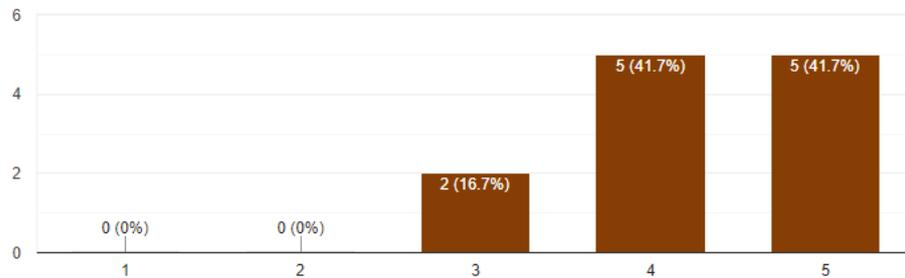


Figure 11. *Training Enhanced Their Understanding of Web Hosting*

Figure 11 shows that 41.7% of participants who rated the training 5 out of 5 acknowledged that it enhanced their understanding of Web Hosting. Also, 41.7% of respondents rated it 4 out of 5, and 16.7% rated it 3 out of 5.

The training enhanced my understanding of basic web development.

Ang pagsasanay ay nagpabuti ng aking pang-unawa sa web development.

12 responses

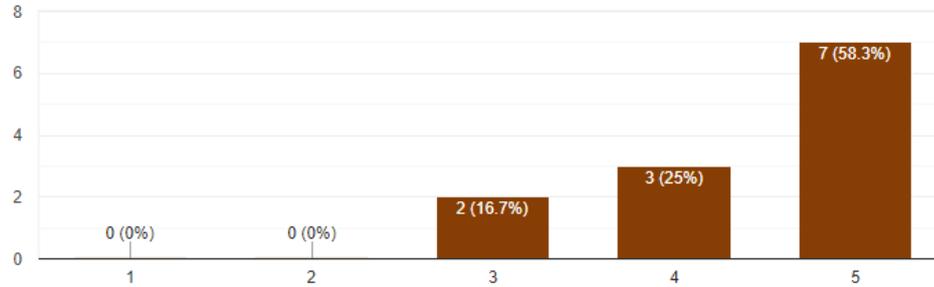


Figure 12.

Training Enhanced Their Understanding of Basic Web Development

Figure 12 shows that 58.3% of participants who rated the training 5 out of 5 acknowledged that it enhanced their understanding of basic web development. Also, 25% of respondents rated it 4 out of 5, and 16.7% rated it 3 out of 5.

The hands-on exercises and workshops during the training helpful and valuable to me today.

Ang mga aktuwal na gawain at mga workshop sa panahon ng pagsasanay ay kapaki-pakinabang at mahalaga sa akin ngayon.

12 responses

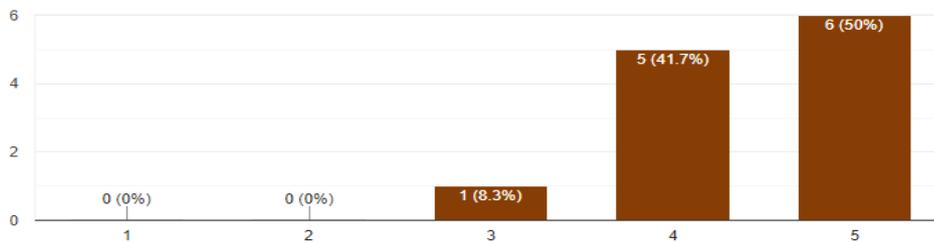


Figure 13.

Helpful and Valuable Hands-on Exercises and Workshops during Their Training

Figure 13 shows that 50.0% of participants who rated the training 5 out of 5 acknowledged that the hands-on exercises and workshops were helpful and valuable. Also, 41.7% of respondents rated it 4 out of 5, and 8.3% rated it 3 out of 5.

The take-home activities are helpful and valuable.

Ang mga gawain na maiuwi ay nakatutulong at may halaga.

12 responses

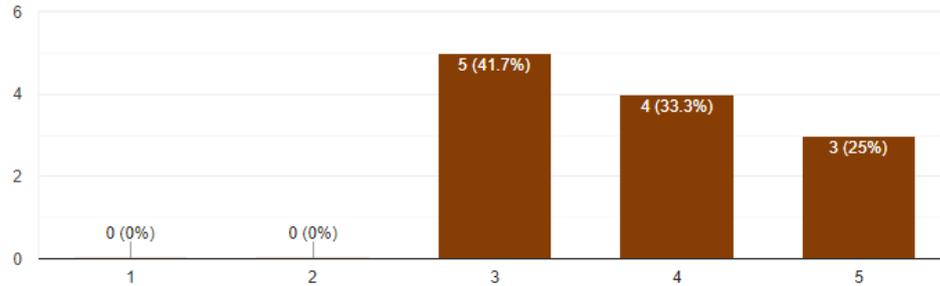


Figure 14.
Helpful and Valuable Take-Home Activities

Figure 14 illustrates that 50.0% of participants who rated the training 5 out of 5 acknowledged that the take-home activities are helpful and valuable. Also, 33.3% of respondents rated it 4 out of 5, and 41.7% rated it 3 out of 5.

The training helped me understand the latest trends in Information Technology and Web Development.

Ang pagsasanay ay tumulong sa akin na maunawaan ang pinakabagong mga uso sa Teknolohiyang Impormasyon at Pagpapaunlad ng Web.

12 responses

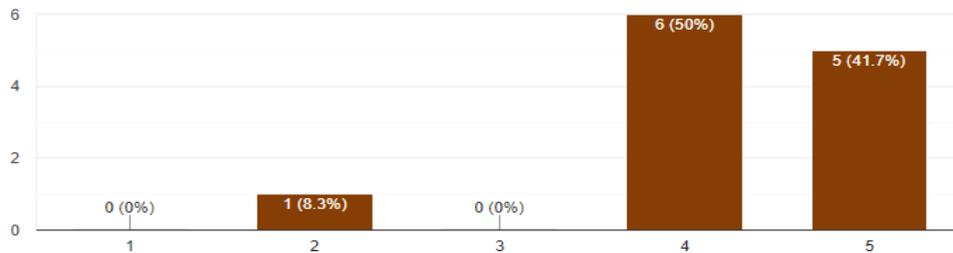


Figure 15.
Training Helped Their Understanding of the Latest Trends in Information Technology and Web Development

Figure 15 shows that 41.7% of participants who rated the training 5 out of 5 acknowledged that it helped them understand the latest trends in Information Technology and Web development. Moreover, 50.0% of respondents rated it 4 out of 5, and 8.3% of participants rated it 2 out of 5.

The training materials and resources were helpful for my learning.

Ang mga materyales at kagamitan sa pagsasanay ay naging kapaki-pakinabang sa aking pag-aaral.

12 responses

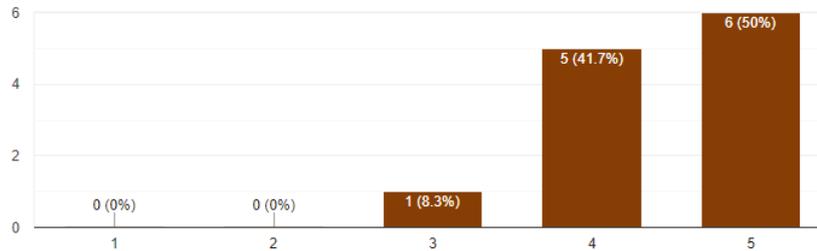


Figure 16.

Training Materials Helped Them for Their Training

Figure 16 illustrates that 50.0% of participants who rated the training 5 out of 5 acknowledged the helpfulness of the training materials and resources in their learning. Moreover, 41.7% of respondents rated it 4 out of 5, and 8.3% of participants rated it 3 out of 5, providing insights into their perspectives.

The training has increased my awareness of the opportunities related to web-development.

Ang pagsasanay ay nagpalawig ng aking kaalaman sa mga oportunidad kaugnay ng pagpapaunlad ng web.

12 responses

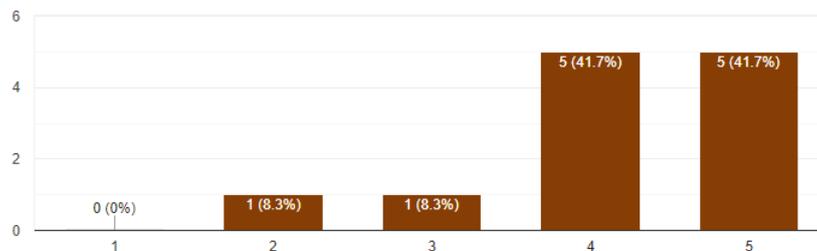


Figure 17.

Training Increased Their Awareness of the Opportunities Related to Web Development

Figure 17 shows that 41.7% of participants who rated the training 5 out of 5 acknowledged that it increased their awareness of opportunities in web development. Additionally, 41.7% of respondents who rated it 4 out of 5, 8.3% who rated it 3 out of 5, and 8.3% who rated it 2 out of 5 provided insights into their perspectives.

Qualitative Insights

Table 2 highlights valuable insights from respondents during the BOLDER OSY project, including their memorable experiences, challenges faced during training implementation, suggestions for future programs, and gratitude toward trainers and organizers. It also shows interest in additional IT-related training by the Faculty of College of Computer Studies, Quezon City University, Philippines. The diverse responses demonstrate the different effects the project has on participants. Sharing memorable experiences emphasizes the positive impact of training, while highlighting implementation challenges offers constructive feedback for improving future programs.

Expressions of gratitude to trainers and organizers illustrate the important role they played in shaping participants' experiences. Furthermore, the interest in additional IT training reflects enthusiasm for ongoing learning and underscores the program's success in creating lasting educational benefits. The comprehensive overview in Table 2 provides a deep understanding of participants' perspectives and aims to guide future efforts to better meet the needs and experiences of those involved in the BOLDER OSY project.

Table 2.
Thematic Summary of Respondents' Comments and Recommendations on Project BOLDER OSY

Question / Theme	Sample Responses
Most Memorable Experience	<ul style="list-style-type: none"> • “Paggawa namin ng website and pag-run kung gumagana o hindi.” (Creating our website and testing if it works or not.) • “Itinuro sa amin kung paano gumamit ng Web Hosting... makita online.” (Learning how to use web hosting and how to publish our website online.) • “Yung paggawa namin ng portfolio.” (Creating our portfolio.) • “Approachable ang people when I can't understand.” (People were approachable and helped when I did not understand.) • “Masaya ang klase at madaming natutunan.” (The class was enjoyable and we learned a lot.)
Challenges Encountered During Training	<ul style="list-style-type: none"> • “Yung ibang topic mahirap sundan pero nakukuha rin.” (Some topics were difficult to follow but I eventually understood them.) • “Paano ito maiapply sa pang-araw-araw.” (How to apply this in daily life.) • “Hindi ko maintindihan nung una yung portfolio.” (I did not understand the portfolio requirements at first.) • “Understanding unfamiliar lessons.” • “Kawalan ng device/laptop.” (Lack of a device/laptop.)
Recommendations for Future Training Programs	<ul style="list-style-type: none"> • “Mas mahaba pang oras para makapag-discuss.” (Longer time for discussions.) • “Dagdagan ang oras ng training programs.” (Extend the duration of training programs.) • “Maganda na ang set-up.” (The setup is already good.) • “None, all good for me.”
Message for Trainers and Organizers	<ul style="list-style-type: none"> • “Super thank you po sa pagtuturo.” (Super thank you for teaching us.)



	<ul style="list-style-type: none">• “Nagbukas kayo ng pinto para sa mga katulad kong OSY.” (You opened a door for OSY like me.)• “Continue to be a good trainer and be patient.”• “10/10 ang pagtuturo—step by step.” (Teaching was 10/10—step by step.)• “Good job! Magaling sila magturo.” (Good job! They teach very well.)
Interest in Additional IT Training	<ul style="list-style-type: none">• Yes – 75%• No – 25%

Conclusions

A thorough analysis of participants' responses to the training program reveals multiple effects across different areas. Notably, the survey data also show the training's success in improving participants' skills in specific programming languages, including JavaScript, HTML, CSS, and PHP/MySQL (XAMPP). Positive feedback on practical exercises, workshops, take-home activities, and training materials highlights the overall effectiveness of the training approach. Additionally, the results indicate significant effects on participants' educational activities and career choices, revealing the program's broader social impact.

These findings confirm the training's effectiveness in not only teaching technical skills but also shaping participants' careers and fostering a deeper understanding of the rapidly changing landscape of information technology and web development. The positive feedback across various areas suggests the program successfully meets the educational and career needs of participants.

Recommendations for improving future training include increasing discussion times, extending training hours, and maintaining the current effective setup. Participants' gratitude toward the trainers and organizers reflects the positive impact of their efforts in opening opportunities for Out-of-School Youth (OSY) and giving them renewed hope for education. Given the high interest (75%) in ongoing IT-related training from the Faculty of the College of Computer Studies, Quezon City University, Philippines, it is clear that participants are eager to continue learning. Therefore, future programs should capitalize on this interest by offering a variety of IT courses tailored to different skill levels and interests. The success of Project BOLDER OSY highlights its positive influence on participants' educational journeys.

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