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TERMINAL REPORT

Type in **N/A** if not applicable

Proposal Type (Select one)	☐ Research	■ Extension	☐ Production	
Project Title	**NAME OF PROJECT / PROGRAM:** Implementing ICT Solutions to Communities and Capability Building for Out-Of-School Youth (OSY), Alternative Learning System (ALS), Educators and LGU Personnel through Relevant ICT Trainings **COMPONENT OF PROJECT / PROGRAM:** Capacitating the Out-of-School Youth (OSY) from the BLGU Through Relevant Trainings in Information and Communication Technologies (ICT) **TITLE OF TRAINING / ACTIVITY:** Training 1: Seminar Workshop on Basic Computer Literacy Training 2: Seminar Workshop for Collaborative Creation of Graphic Design and Layout			
Project Leader	**JOVANNE C. ALEJANDRINO**			
Project Duration	**January 2024- December 2024**			
Project Cost	**27, 625.62**			
Budget Source	**DNSC**			
Site of Implementation	**Davao del Norte State College**			
Alignment				
a. DNSC R&D Agenda and Priority	**Development of Human Capital through Inclusive and Industry-based Education**			
b. Program Anchor *(select one program across all DNSC Offerings)*	*Program: (do not abbreviate)*	**Bachelor of Science in Information Systems**	*Major: (if any)*	
c. REP Center Anchor *(select one)*	☐ Halal Industry Research and Training Center			
	☐ Marine Biodiversity Research and Conservation Center			
	☐ Mindanao Food Innovation Center			
	☐ Social Development and Human Security Studies Center			
	■ Gender Equality, Disability, and Social Inclusion (GEDSI) Center			
	☐ Geographic Information System (GIS) and Analytics Center			
	☐ Disaster Risk Reduction and Management Center			
Abstract (300 words max)	Information and Communication Technology (ICT) is an integral part of modern life, yet digital illiteracy remains a pressing issue, particularly among out-of-school youth in the Philippines, which has one of the highest rates of digital illiteracy globally. To address this challenge, the Department of Information and Communication Technology (DICT) and the Department of Education (DepEd) have implemented capacity-building initiatives and			

	policies targeting marginalized groups, such as out-of-school youth, to foster ICT literacy and bridge the digital divide. Building on these efforts, the Institute of Computing (IC) has launched an extension program aimed at equipping out-of-school youth with essential ICT skills. The program featured a series of training workshops, including basic computer literacy and collaborative graphic design, delivered through hands-on exercises and face-to-face lectures. Scheduled last October 19 and 26, 2024, the workshops accommodated a total of 25 participants for Training 1 and 22 participants for Training 2. The training series were also supported by the Institute of Computing Students Association (ICSA). The Pre-test and Post-test results demonstrated substantial learning gains among the participants, indicating a 25.2% improvement in Basic Computer Literacy and a 21.5% increase in Graphic Design and Layout Skills. This initiative not only addresses the immediate ICT training needs of participants but also strengthens partnerships within the academic community, contributing to a more inclusive and digitally empowered society.
Keywords	Out-of-School Youth, DNSC, Extension, DNSC-IC, ICT Literacy, Graphic Design Skills
Introduction	Information and Communication Technology (ICT) has become an essential part of daily life. Its significance is growing, and it is anticipated that ICT literacy will soon be a fundamental requirement for professional, social, and personal activities. Despite its pervasive influence, many individuals, particularly out-of-school youth, remain unaware of its proper use. According to United Nations report on ICT Literacy Skills, the Philippines has been recognized as having the highest rate of digital illiteracy globally (Billones, G., Jr., 2024). The Department of Information and Communication Technology implements capacity-building programs to consistently develop ICT competencies and promote ICT awareness and appreciation across various sectors of society. Moreover, the government is rolling out policies to boost educational success by focusing on those who struggle the most and have the fewest qualifications. These policies are crucial for two groups outside the traditional education system: young people who left school without finishing and low-skilled adults (Wagner, D. A. & Sweet, R., 2006). The former Secretary of the Department of Education emphasized that DepEd's broader mission is to support those who cannot attend school, those who have dropped out, and those who never dared to dream of going to school (Mateo, J., 2015). The Department of Education (DepEd) has started to equip the out-of-school youth through the ICT on Alternative Learning System (ALS) program (DepED ICT4E Strategic Plan, 2015). ICT literacy helps bridge the digital divide, ensuring that everyone has the opportunity to participate fully in the digital world, fostering more inclusive and equitable societies (UNESCO, 2018). Consequently, as technology advances, ICT literacy enables individuals

	to adapt to new tools and platforms, ensuring they stay relevant and competent in a fast-changing world. To address societal needs and support the government's ICT literacy advocacy, the Institute of Computing (IC) has launched this extension program. This initiative provided a variety of ICT-related trainings and activities tailored to out-of-school youth. Furthermore, it will foster partnerships with IC students and collaborate with other institutes' extension programs to advance the College's research and extension agenda. The proposed training series took place on last October 19, 26, 2024. It included a training workshop on basic computer literacy and collaborative creation of graphic design and layout, conducted through face-to-face lecture and hands-on exercises. The Institute of Computing hosted the training, accommodating approximately 25 and 21 participants for each training respectively, with support from up to two officers or members of the Institute of Computing Students Association (ICSA).
Objectives	This training series aimed to capacitate the Out-of-School Youth (OSY) from the Panabo City through relevant trainings in Information and Communication Technologies (ICT). Specifically, this training series aims to 1. Equip participants with fundamental computer skills necessary for personal and professional use. 2. Equip participants' with collaborative graphic design skills, enabling them to create cohesive and visually appealing designs through teamwork.
Methodology	**Complementation and Collaboration** This project established a partnership between the Institute of Computing (IC) and the identified BLGU. The IC Students took part of this endeavor through the Institute of Computing Student Association (ICSA). These students served as the training arm in the implementation of the project as documenter and laboratory assistant of the said training. The team made make sure to seek full commitments from the target beneficiaries through a signed Memorandum of Agreement (MOA) with the partner BLGU. The target beneficiaries will have their mandates to participate in the conduct of the training to be imposed by BLGU. **Conduct of Needs Assessment** The partnering agency evaluated the training needs of participants related to Information and Communication Technologies (ICT) before the scheduled training. The outcomes of this assessment served as the foundation for determining the training topics, subsequently influencing the design of the training activities. The planning process involved coordination meetings with the partner agency to ensure alignment and adequate preparation. **Skills Assessment** The project used the experimental design by deploying Pre-Test and Post-Test. These assessments will be conducted at two points to measure changes or differences in a particular outcome. The pre-test established the participants' baseline status or starting point before exposure to the gamified applications as interventions to the Domains of Literacy, including spelling, vocabulary, grammar, and reading comprehension.

A post-test, on the other hand, is conducted after the intervention has been implemented. It measures the outcome or changes that occurred due to the intervention. By comparing post-test results with pre-test scores, researchers can assess the effectiveness of the intervention and determine whether there have been significant changes in the variables under investigation.

Moreover, a t-test is a statistical method used to determine if there is a significant difference between the pre-test and post-test results.

Continuous Feedback and Improvement

Following each training course, the program will be evaluated through established mechanisms allowing participants to offer feedback. This valuable feedback will serve as the foundation for ongoing enhancements to the curriculum, delivery methods, and the overall participant experience. This iterative process ensures that the training program remains dynamic, responsive, and consistently aligned with the evolving needs and expectations of the participants. Utilize evaluation results to refine program elements continuously, ensuring the training remains relevant, effective, and aligned with the changing needs of participants and the ICT industry.

Community Engagement and Social Responsibility

Cultivate a sense of social responsibility among participants by motivating them to apply their acquired skills to improve the community. Highlight the importance of the ethical use of ICT skills and technology in addressing social challenges, aiming to contribute to positive societal outcomes. Encourage participants to leverage their capabilities for the greater good and make a meaningful impact on the well-being of the broader community.

Ethical Considerations

The project proponents are committed to ensuring that ICT training opportunities are accessible to individuals from diverse backgrounds, irrespective of gender, age, socio-economic status, or other factors. The aim is to cultivate an inclusive environment that caters to various learning styles and abilities, promoting an equitable learning experience. Training programs will be implemented without discrimination, emphasizing fair treatment and unbiased approaches to all participants. Efforts will be made to avoid reinforcing stereotypes or biases in the ICT field, thus fostering an inclusive and just learning environment for everyone involved.

Furthermore, the project will actively seek informed consent from participants regarding collecting, using, and storing personal data during the training. Privacy concerns will be paramount, and secure practices for handling sensitive information will be adopted to safeguard the confidentiality and rights of the participants. The training content will be diligently curated to ensure accuracy, currency, and alignment with industry standards. Additionally, a commitment to providing equal access to necessary resources, including hardware, software, and learning materials, will be upheld without discrimination among participants. This comprehensive approach reflects the project's dedication to ethical principles and the creation of a fair, accessible, and secure learning environment for all.

Sustainability Plan

The college has allocated a yearly budget for extension projects. Thus, sustaining this project in terms of funding and support is evident. Furthermore, the project team will also

	facilitate collaborations with funding agencies, industry associations, and technology companies to secure support and resources. Foster partnerships with leaders in the ICT industry, encouraging mentorship, guest lectures, and potential job placement opportunities for participants. The project team will also establish a signed Memorandum of Agreement to ensure that both parties understand the obligations and commitments for sustaining the project. The project team will also conduct periodic meetings with the stakeholders and evaluate the progress of the project and assessing the progress through the use of monitoring tool.
Results and Discussion	The training sessions titled " Seminar Workshop on Basic Computer Literacy " on October 19, 2024 (Day 1) and " Seminar Workshop for Collaborative Creation of Graphic Design and Layout" on October 26, 2024 (Day 2) were successfully conducted with the aim to capacitate the Out-of-School Youth (OSY) from the Panabo City through relevant trainings in Information and Communication Technologies (ICT). On the first day, 25 Out-of-School Youths (OSY) participated in the training, which received an impressive overall weighted rating of 97.78% across nine evaluated areas. The second day, which also saw the participation of 22 participants, focused on Canva for collaborative Creation of Graphic Design and Layout and received a relevance rating of 96.77% and a high overall weighted rating. To measure the effectiveness of the training, the project team conducted pre-test and post-test evaluations for the two trainings. Figure 1 below shows the result from the Training 1 while Figure 2 shows the result from Training 2.

Metric	Value	Interpretation
Number of Participants	25	Total number of participants in the study.
Average Pre-Test Score	6.80	The mean score of participants before the intervention.
Average Post-Test Score	11.84	The mean score of participants after the intervention.
Average Gain	5.04	The average improvement in scores from pre-test to post-test.
Highest Pre-Test Score	13.00	The highest score achieved in the pre-test.
Lowest Pre-Test Score	1.00	The lowest score achieved in the pre-test.
Most Common Pre-Test Score	9.00	The score that appeared most frequently in the pre-test.
Highest Post-Test Score	18.00	The highest score achieved in the post-test.
Lowest Post-Test Score	4.00	The lowest score achieved in the post-test.
Most Common Post-Test Score	7.00	The score that appeared most frequently in the post-test.
Highest Gain	12.00	The maximum improvement in scores from pre-test to post-test.
Lowest Gain	1.00	The minimum improvement in scores from pre-test to post-test.
Most Common Gain	7.00	The most frequently observed improvement in scores from pre-test to post-test.

The data indicates a positive trend in learning outcomes, with all participants improving their scores in the post-test. The average gain of 5.04 points suggests that the training provided between the pre-test and post-test was effective.

Metric	Value	Interpretation
Number of Students	22	Total number of students who took both the pre-test and post-test.
Pre-Test Mean	9.1	Average score of students in the pre-test, indicating their initial performance.
Pre-Test Median	9	Middle score of the pre-test data, showing the central tendency.
Pre-Test Std. Dev.	1.2	Variation in pre-test scores, indicating consistency among students' initial performance.
Post-Test Mean	13.4	Average score of students in the post-test, indicating their performance after the intervention.
Post-Test Median	13	Middle score of the post-test data, showing the central tendency.
Post-Test Std. Dev.	1.9	Variation in post-test scores, indicating consistency among students' performance after the intervention.
Gain Mean	4.3	Average improvement in scores from pre-test to post-test.
Gain Median	4	Middle value of the gain scores, showing the central tendency of improvement.
Gain Std. Dev.	1.5	Variation in gain scores, indicating consistency in the improvement among students.
Highest Gain	9	Maximum improvement observed, achieved by Jhon Lord E. Abapo.
Lowest Gain	3	Minimum improvement observed, indicating that all students showed some level of improvement.

The data shows a positive trend in learning outcomes, with every participant improving their scores in the post-test. An average gain of 4.3 points indicates that the training conducted between the pre-test and post-test was effective.

Conclusion

The successful implementation of the ICT training series demonstrates the effectiveness of targeted capacity-building initiatives in empowering out-of-school youth (OSY) with essential digital skills. The program addressed critical gaps in ICT literacy, equipping participants with fundamental computer skills and collaborative graphic design abilities, as reflected in the high evaluation ratings and significant post-test improvements. With participation from 25 and 22 OSYs on the first and second days, respectively, the initiative highlighted the relevance and value of hands-on, practical training tailored to real-world applications. The measured gains in participants' competencies further underscore the potential of such programs to bridge the digital divide and foster greater inclusivity in the digital era.

Beyond the individual impact, this training series exemplifies the role of academic institutions like the Institute of Computing in supporting national efforts to combat digital illiteracy. By fostering partnerships with student associations and aligning with government programs such as the DepEd ALS ICT initiative, the Institute has strengthened its research and extension agenda while contributing to societal development. Moving forward, similar

	programs should be expanded and refined to reach more underserved populations, ensuring that no one is left behind in the rapidly advancing digital landscape.	
Limitations of the Project	The project participants is only limited to the OSY endorsed by the BLGU staff in-charged. Moreover, the training series are limited to in case of virtual trainings hosted live in social media and video streaming channels.	
Literature Cited (APA style)	IT and Development Paper. https://www.devpolicy.org/Events/2015/2015-PNG-Update/Presentations/Day-2/IT-anddevelopment_paper_Madhav.pdf. Retrieved: August 26, 2022. Wagner, D. A. & Sweet, R. (2006, January 1). ICT and Learning: Supporting Out-of-School Youth and Adults. Literacy Promotion and Soul Welfare Organization. Department of Education: About the Program. https://www.deped.gov.ph/about-als/. Retrieved September 20, 2023	
Target Beneficiaries	Educators of DepEd – Panabo City Division with 30 participants	
Actual Return of Investment (If Production Proposal)		
Expected Outputs	**Description** (from REP form 1)	**Actual Accomplishment Date** (provide attachments)
(a) Publications		
(b) Patents/IP		
(c)Products		
(d) People Services	1. Equip participants with fundamental computer skills necessary for personal and professional use. 2. Equip participants' with collaborative graphic design skills, enabling them to create cohesive and visually appealing designs through teamwork	https://drive.google.com/drive/folders/19oDmyseA0EBpsIfpJNLFEksDnSfTmp6G?usp=drive_link
(e)Places/Partnerships	This extension project will establish a partnership with the selected BLGU through a Memorandum of Agreement (MOA). The DNSC will lead the conduct of the training via limited face-to-face. The BLGU will select trainees/participants of the extension program of activities.	DNSC and BLGU MOA
(f) Policy		
(g) Social Impact		
(h) Economic Impact		

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(i) Environmental Impact			
Problems in the Implementation of the Project:		**Solutions to Problems**	
1. Some participants were not present during the second day.		1. It is recommended that the project team and the concerned BLGU staff can implement enhanced communication strategies, such as sending reminders and providing a clear agenda that emphasizes the importance of attending all sessions.	
2. Locating the venue was hard for some participants.		2. It is recommended to provide navigational arrows from the entrance to the venue room.	
3.		3.	
4.		4.	
Submitted by:	**Recommended by:**	**Recommended by:**	**Received by:**
JOVANNE C. ALEJANDRINO, MIS Lead Proponent Date: 01/04/25	MARK VAN. M BULADACO, DBMIS Head of Unit / Dean Date: 01/07/25	SADIE B. LAW-AY REP Center Deputy Director Date: 01/07/25	MARIANNIE A. REBORTERA, DIT REP Director Date: 1/8/2025