

A Service Learning Program Enhancing Learners' Early Literacy and Pre-Service Teachers' 21st-Century Skills

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Date received: August 29, 2024

Date revised: September 19, 2024

Date accepted: October 4, 2024

Originality: 93%

Grammarly Score: 99%

Similarity: 7%

Recommended citation:

Mateo, R., Monton, M.R., Quintos, L.R., Torres, A., Bangi, J. (2024). A service learning program enhancing learners' early literacy and pre-service teachers' 21st-century skills. *Journal of Interdisciplinary Perspectives*, 2(11), 196-207. <https://doi.org/10.69569/jip.2024.0452>

Abstract. Service Learning Program (SLP) is encouraged in all courses in the University of Saint Louis as a strategy in the teaching and learning process. In response to this, the Teacher-Education department developed a structured SLP named Project TEACHER (Tutorial for Engagement, Advancement, and Collaboration towards Holistic Educational Reform), which caters primarily to the needs of daycare learners. This study aimed to describe the effects of SLP on learners' early literacy. It focuses on the foundational skills of reading, writing, and phonemic awareness. Furthermore, the study also described the program's effect on the development of the 21st-century skills of the pre-service teachers. Coordinators of the program coordinated with the Early Child and Care and Development (ECCD) center at Linao East, and the Early Learning Observation and Rating Scale (ELORS) was used to identify learners needing additional early literacy assistance. It was the same tool used to monitor the progress of the learners. Data from 17 learners who completed the five tutorial sessions were included in this study. Using a paired-sample t-test, this study revealed that the project TEACHER significantly affects the learners' reading and phonemic awareness skills but not their writing skills. Meanwhile, the 26 pre-service teachers involved in the program were interviewed. Thematic analysis of their answers revealed that the program was effective for the following skills: communication, socio-emotional, collaboration, adaptability and flexibility, social responsibility, and classroom management. Hence, the project TEACHER is an effective SLP as it enhances the learners' early literacy skills and helps develop 21st-century skills among pre-service teachers. However, further planning must be done to make it effective for the learners' writing skills.

Keywords: 21st-century skills; Early literacy; Pre-service teachers; Service learning program.

1.0 Introduction

Children's formative years are crucial to their development in early childhood education. As this stage of a child's life plays an essential part in their development, Early Childhood Care and Development (ECCD) Centers were established. The Republic Act No. 6972, where ECCD Centers were established in each barangay, became an avenue for developing the learner's cognitive, emotional, social, and other domains as these are prerequisites for meeting the right to learn and develop. According to the Philippines Southeast Asia-Primary Learning Metrics (EA-PLM)(2019), early childhood education (ECE) provides a critical basis for lifelong learning by developing children's primary and transferable abilities, preparing them to participate in primary education and beyond while lowering the chance of school failure. As a result, investing in ECE provides long-term benefits for learner's

educational outcomes. Failure to provide adequate early childhood education may limit students' prospects by denying them the opportunity to realize their full potential. The early years of a child's life (3-6 years) are regarded as an essential stage in the process of the individual's lifetime of learning, as this period lays the groundwork for children to develop some of their abilities and professionals claim that if this opportunity is missed, it will be difficult to catch up (Wildová & Kropáková, 2015). This complies with the fourth UN Sustainable Development Goal (SDG) on education, which ensures that all children, regardless of gender, have access to high-quality early childhood development, care, and pre-primary education that prepares them for primary education.

Furthermore, early literacy is a critical building block for learners' academic progress and future opportunities. At its most fundamental, it refers to a talent and the ability to use it (for example, reading and writing—reading literacy; mathematical skills—mathematical literacy, and so on). Traditionally, literacy was referred to as an individual's capacity to read and write. However, in the present generation, it pertains to the knowledge and competence of a person in a particular discipline or area (Gatcho et al., 2020). Literacy is similar to a torchlight—the source of light that illuminates and brightens everything while improving visibility (Hunpegan, 2022).

Republic Act 101410, popularly known as the Early Years Act (EYA) of 2013, is the first essential stage of educational development between zero and eight. Children's literacy foundations begin in infancy and expand throughout early childhood when the brain is at its most malleable (Hutton et al., 2020). Literacy development is vital to a learner's overall development as it is the foundation for them to thrive in school and eventually become independent adults. A solid foundation in literacy skills can help children learn and prepare them for a brighter future (Luyee et al., 2015). If the learners have poor literacy skills, they might face future obstacles, both in and out of the classroom. Children who fall behind in these early years frequently do not catch up with their peers, sustaining a cycle of underachievement and high dropout rates that continue affecting vulnerable young people (UNICEF, 2019).

In the SEA-PLM for 2019, only 10% of children in the Philippines met the minimum reading standard, and 17% met the minimum math standard necessary at the end of primary school. According to Lina (2023), the UNICEF Philippines representative states that the findings of the first cycle of the SEA-PLM in the country indicate the presence of alarming patterns of low learning quality, as the Philippines' average scores in reading, math, and writing are all lower than the average scores of the other five participating countries. These findings should serve as a wake-up call to strengthen our early education system, emphasizing very young Filipino children ages three to five.

There are a lot of existing approaches that help improve learners' learning development. The Service-Learning Program, as one of these, defines a teaching approach that connects theory and practice by allowing students to participate in a service that meets community needs while also reflecting on the experience in class to gain a better understanding of course content, real-world issues, and a stronger sense of civic engagement. (Resch & Schrittmesser, 2023). Project TEACHER (Tutorial for Engagement, Advancement, and Collaboration towards Holistic Educational Reform), the official service-learning program designed for the teacher education students of the University of Saint Louis Tuguegarao, is a service-learning program that focuses more on transferring knowledge to learners through the process of tutorial and providing different activities aligned to the program learning outcomes of the teacher education program. The Project TEACHER allows fundamental educational development that is beneficial to the learners. The program also allows the pre-service teachers to widen and solidify their knowledge of subjects and pedagogy in the 21st-century classroom while providing learners with further opportunities for comprehensive development. Although there is existing literature on early childhood concerns, this study attempts to explore further the different activities that can be implemented through Project TEACHER to enhance the early literacy development of learners in Linao East and the pre-service teachers' 21st-century skills.

2.0 Methodology

2.1 Research Design

This study utilized a mixed-method research design, particularly the convergent parallel. The two sets of data were gathered concurrently. The data to describe the effects of the implemented activities on the early literacy development of the learners were gathered through a quasi-experimental research design from the learners. The

data to describe the effect of Project TEACHER in enhancing 21st-century skills were gathered through a basic qualitative research design from the pre-service teachers. The convergent parallel mixed method research design was used to describe the effects of Project TEACHER on the implementers and the recipients, particularly to triangulate the effect of Project TEACHER on different groups of participants.

2.2 Research Locale and Participants

This study was conducted at the Early Child Care and Development Center of Linao East Tuguegarao City. The participants consisted of 17 learners from Linao East. Using the purposive sampling technique, the participants were identified based on this criterion: The learner got a total mean score above 2 in the pre-test along the Early Literacy Domain using the Early Learning Observation & Rating Scale (ELORS) during the implementation of the pretest. Moreover, using the purposive sampling technique, 26 pre-service teachers were interviewed, as they were identified with the criterion that the pre-service teacher attended 5-6 sessions during the service-learning program.

2.3 Research Instrument

On the one hand, the Early Learning Observation & Rating Scale (ELORS), adapted from Coleman et al. (2010), measures the learners' early literacy skills before and after the implementation of the project TEACHER. It is divided into seven domains, but only the domain on Early Literacy consists of ten indicators, which is the focus of this study. This domain is further focusing on three skills-reading (items 1,3,4,7 and 9), writing (item 2), and phonemic awareness (items 1,4,5,6,7 and 8). The researchers developed learning materials and reading, writing, and phonemic awareness to address these foundational skills. These were validated by child development experts from the Teacher-Education department. On the other hand, an open-ended question about their learning from the SLP was asked from the pre-service teachers.

2.4 Data Gathering Procedure

This study underwent different phases of data collection. A pre-test was conducted among the learners using the Early Learning Observation & Rating Scale (ELORS), where the pre-service teachers evaluated the outputs of the learners. The results of the pre-test were used to identify the specific learning domain where the learners need additional focus and assistance (i.e., reading, writing, and phonemic awareness) and to identify the learners who need additional scaffolding in the said domain (i.e., with a total mean score of 2 and above).

A pre-service teacher mentored each identified learner throughout the implementation of the designed activities. The six sessions with the learners were coordinated with the barangay captain and the daycare center teachers. Furthermore, the USL teachers supervised and assisted the pre-service teachers in implementing the service-learning program.

The researchers administered a post-test after implementing the early literacy activities to determine whether there was a significant improvement in the learners' early literacy skills. Moreover, each pre-service teacher was asked an open-ended question about their significant learning in implementing the project.

2.5 Ethical Considerations

This research study followed ethical guidelines. Before performing the study, the parents or guardians of the participants were provided with an in-depth overview and crucial information regarding the study's objectives for ethical research considerations. They were given informed permission to notify them about the study's objectives, the nature of participation, confidentiality measures, and the right to withdraw at any time. The researchers also ensured that each participant's parents signed the consent form. Moreover, informed consent was also provided to the pre-service teachers before the interview so that they would be well-informed regarding participating in the study. In addition, all information gathered was kept and managed with strict confidentiality, ensuring anonymity and secrecy and avoiding potential harm.

3.0 Results and Discussion

3.1 Pre-test and Post-test Scores of Learners in the Early Literacy Domain

The Early Literacy domain was divided into three subdomains: Reading, Writing, and Phonemic Awareness, and was conducted through the service-learning program Project TEACHER. The Early Literacy activities prepared by the researchers were conducted for three sessions. Below are the mean scores of the pre-test and post-test.

Reading Skill

Table 1 shows the results of the learners' pre-test and post-test scores. Most of the learners were found to have a moderate concern about their reading skills, which resulted in creating activities that enhanced their reading skills.

Table 1. Pre-test and post-test scores of the participants in reading

Description	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Greatest Concern	3	23.50	2	11.80
Moderate Concern	10	58.50	3	17.60
Little Concern	4	17.60	11	64.70
No Concern	0	0	1	5.90
Mean Scores	3.02	Moderate Concern	2.17	Little Concern

The pre-test mean score of 3.02, indicating moderate concern, and the post-test mean score of 2.17, indicating little concern, implies that the early literacy interventions conducted through Project TEACHER affect the reading domain of the learners. This means that their reading skills - their interest in reading activities, identifying words, remembering letter names, determining whether two letters or words sound the same, clapping out the number of syllables in a word, demonstrating an understanding of which word rhymes, and reading from left to right - have all improved through the activities designed by the pre-service teachers. The activities implemented by the researchers made a significant difference, transforming the great concern of learners in the reading domain into little concern.

Even earlier, the Philippines had the lowest reading comprehension scores out of 79 nations (Juan, 2019). Based on their pre-K scores on the Developmental Indicators for the Assessment of Learning (DIAL-4), 22% of kindergarten-aged children in a local school district had a gap in their reading readiness skills (RRS). The average kindergarten beginning-year difference in Reading Baseline Inventory (RBI) scores between students with and without gaps was 15 out of 100 points (Wood, 2019). If learners' foundational reading skills are not honed in the early years, the Program for International Student Assessment (PISA) results will likely remain the same, and their reading development will not improve. Therefore, there is a need for early intervention to address this issue in learners' reading development.

It is important to customize activities based on the needs of the learners. It requires greater effort, especially for those who cannot read yet, emphasizing basic reading skills such as letter recognition, sound pronunciation, and phonemic awareness (Hamsah et al., 2023). The efforts of the researchers in coming up with customized activities were proven to have a positive effect on the early literacy skills of the learners. This is the result of assessing the needs of the learners, planning and designing activities for these needs, and implementing them.

Writing Skill

Table 2 shows the learners' writing domains' pre-test and post-test mean scores. The pretest mean score is 2.88, indicating moderate concern. The post-test mean score is 2.32, indicating little concern. These results suggest that the early literacy interventions in the writing domain conducted through Project TEACHER affect the learners' writing skills.

Table 2. Pre-test and post-test scores of the participants in writing

Description	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Greatest Concern	2	11.80	2	11.80
Moderate Concern	8	47.10	5	29.40
Little Concern	4	23.50	7	41.20
No Concern	3	17.60	3	17.60
Mean Scores	2.88	Moderate Concern	2.35	Little Concern

This can be because only a few writing activities were implemented, and additional practice and sessions should be made. Moreover, activities should be redesigned, and new activities should also be implemented. The following indicators were measured in the Writing domain: (E2) Interest in writing his or her name. The researchers implemented four activities under the writing domain, centered on writing their names, basic phrases, words, or letters, and tracing a word or letter.

Following Trasporte et al. (2023), subject instructors and school administrators worldwide share concerns about the interest of learners in and preparedness for writing. There have been recognized challenges when a youngster has difficulty with writing. One is how they behave; children refuse or will not do pencil work and other fine motor activities. Sometimes, rather than accomplishing fine motor skills, these learners who are not yet prepared to deal with writing would rather have others perform them under their supervision. Therefore, even when instructed by their teachers, Filipino kindergarten students in the identified environments needed help to write their given assignments. Regardless of the availability of required learning resource materials and regular monitoring of their work progress, some learners need more enthusiasm for participating in such scribbling drills in their respective classrooms.

Puranik et al.'s study (2018) states that service learning, peer assistance, or coaching effectively promote early writing skills, even among relatively young children. Service-learning programs are also an effective strategy for teaching writing, even for young beginning writers. Therefore, new and improved writing activities should be designed and implemented for the subsequent conduct of the service-learning program to ensure the improvements of learners in their writing domain.

Phonemic Awareness

Table 3 shows the mean scores for the pre-test and post-test in the Phonemic Awareness domain of the learners. The pretest mean score is 3.01, indicating moderate concern. The post-test mean scores are 2.17, indicating little concern. This implies that the early literacy interventions in the phonemic awareness domain conducted through Project TEACHER affect the learners' phonemic awareness.

Table 3. Pre-test and post-test scores of the participants in phonemic awareness

Description	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Greatest Concern	3	17.60	1	5.90
Moderate Concern	10	58.80	5	29.40
Little Concern	4	23.50	9	52.90
No Concern	0	0	2	11.80
Mean Scores	3.01	Moderate Concern	2.17	Little Concern

The following indicators were measured in this domain (E4). Remembering names of letters (E5). learning letter sounds; (E6). Determining if two letters or words sound the same (E7). Clapping out the number of syllables in a word; (E8) Showing an understanding of which word rhymes. The researchers implemented seven activities to enhance learners' phonemic awareness. This result further implies that learners' phonemic awareness improved due to the implementation of the early literacy activities made by the researchers. From a moderate concern, the learners' need for activities and phonemic awareness became their little concern with using the customized activities.

In Harris's (2016) study, consistent practice with the alphabet, pronunciation, and listening is necessary for this skill. Therefore, with the assistance of the pre-service teachers in improving this domain, the learners are likely to improve their phonemic awareness. Carruth and Bustos (2019) mentioned in their study that phonemic awareness is essential for reading and should be addressed. In addition, children must first understand how language works before moving to letter recognition and reading, and foundational skills are important for developing complex reading skills. Children with these basics are likelier to struggle with more advanced reading skills. The short-term reading abilities of at-risk learners, including poor performers, have been successfully improved by phonemic awareness and phonics interventions (Suggate, 2014). Phonemic awareness, as one of the basic literacy skills that every learner should develop, must be instilled in them at a young age as this is one of the contributing

factors in their reading development, which is also a basic skill they must develop. Failing to develop learners' phonemic awareness could impact their other literacy skills, as these skills are interconnected.

Early Literacy

Table 4 shows the Pre-test and Post-Test Scores of the learners in the Early Literacy Domain. In the pre-test, a frequency of 3 and a percentage of 17.60 were identified as the greatest concerns.

Table 4. Pre-test and post-test scores of the participants in early literacy

Description	Pre-test		Post-test	
	Frequency	Percentage	Frequency	Percentage
Greatest Concern	3	17.60	1	5.90
Moderate Concern	9	52.90	4	23.50
Little Concern	5	29.40	10	58.80
No Concern	0	0	2	11.80
Mean Scores	2.85	Moderate Concern	2.23	Little Concern

However, after the post-test, this concern decreased significantly, with a frequency of 1 and a percentage of 5.90%. While the pre-test revealed a moderate concern frequency of 9, accounting for 52.90% of the participants, the post-test decreased with a frequency of 4 and a percentage of 23.50%. In the little concern, the results showed a frequency of 5 and a percentage of 29.40 in the pre-test. However, after the post-test, the frequency changed to 10, with a percentage of 58.80%. While the pre-test showed no concern with a frequency of 0, accounting for .00% of the participants, the post-test showed changes in this concern, with a frequency of 2 and a percentage of 11.80%.

Overall, the 2.85 mean score on the pre-test, indicating a moderate concern among learners, had significant changes in the post-test, with a mean score of 2.23, indicating little concern. This suggests that the service-learning program implemented affected the learners, and the difference shows that the activities effectively enhanced learners' Early Literacy domain along with reading, Writing, and Phonemic Awareness.

3.2 Difference Between the Pre-test and Post-Test Scores of the Participants in Early Literacy

Table 5 shows significant differences in the pre-test and post-test scores in the reading and phonemic awareness domains of the Early Literacy Domain, which suggests that the prepared activities enhanced the learners' Early Literacy domain.

Table 5. T-test results for the difference between the pre-test and post-test scores of the participants in early literacy

Early Literacy	Test	Mean Scores	Df	t-value	p-value	Decision
Reading	Pre-Test	3.02	16	3.28	0.005	Significant
	Post-Test	2.17				
Writing	Pre-Test	2.88	16	-1.85	0.083	Not Significant
	Post-Test	2.35				
Phonemic Awareness	Pre-Test	3.01	16	-3.35	0.004	Significant
	Post-Test	2.17				
Overall Score	Pre-Test	2.85	16	-2.46	0.026	Significant
	Post-test	2.23				

On the other hand, it also shows no significant differences between the learners' mean scores in the pre-test and post-test administration in the writing domain; the pre-test and post-test means are almost equal, which means that the learners' performance and development in this domain are consistent. This result suggests that while the prepared activities were beneficial for reading and phonemic awareness, they did not have the same impact on writing skills. It could indicate that the learners need more sessions or practice in writing activities. It may be beneficial to introduce a variety of writing exercises and techniques to address different aspects of writing and enhance their writing skills.

In the study of Santi and Quemado (2017), they stated that parents and teachers must be patient, attentive, and nurturing of their children's literacy experiences because involving children in literacy through materials, activities, and interactions with knowledgeable individuals fosters the development of early literacy skills. Goodrich et al. (2017) described the Early Literacy Program as a well-established early literacy program and said that the assessment practice improves the child's literacy skills. This allows teachers in an early literacy program to monitor the teaching and learning process in a way consistent with the assessment intentions, ensuring that the

practices used match the expected outcome. Thus, teachers and other individuals can work together to ensure that the pedagogy used in early literacy education is consistent with the program's intentions and practices. According to Omar et al. (2022), service-learning allows students in educational institutions to have meaningful experiences that are thought to improve their overall learning experiences, encompassing academic performance, reading and writing skills, critical thinking abilities, values, self-efficacy, and leadership.

The essence of instruction, the integration of play and music, the significance of teaching phonemic awareness in preschool and how it influences a student's success in kindergarten, and the connection between phonemic awareness in early childhood classrooms and future success in reading and literacy are all examples of the importance of a program for young children prior kindergarten and the influence it has on behavior and relationships (Wehrhan, 2021). According to Brown (2014), preschool education is essential for raising literacy levels, lowering reading difficulties, and getting young pupils ready for kindergarten. Preschoolers go through several stages that involve basic ability development when it comes to the use of language, reading, and writing. As they age, their skills and behaviors become more sophisticated and proficient. Therefore, early literacy activities should be implemented, such as checking the alignment of the activities and execution, meeting the needs of the learners, and considering external factors that might affect the learners' early literacy development throughout the service-learning program, Project TEACHER.

3.3 21st-Century Skills Developed in Pre-Service Teachers

The project TEACHER, as an SLP, is also used as a strategy for the pre-service teachers to put into practice their theoretical learnings and further their learnings and skills. According to the participants, they develop a wide range of 21st-century skills during the service-learning program, which benefits their future profession. The following are the 21st-century skills developed in pre-service teachers on the Implementation of Project TEACHER: communication skills, socio-emotional skills, collaboration skills, adaptability and flexibility skills, social responsibility skills, and classroom management skills.

Communication Skills

Pre-service teachers consistently highlighted the role of the service-learning program in providing practical opportunities for pre-service teachers to develop effective communication skills essential for supporting learners in the 21st century to cultivate the communication proficiency necessary to the evolving needs of modern education to meet the evolving needs of modern education. Some pre-service teachers mentioned that their communication skills were developed when dealing with pupils.

P02: *"Service-learning program is effective for teacher training because it molded me and built my communication skills."*

P04: *"Like when we approach or talk to the pupils because that is where our communication skills are developed."*

Communication skills are necessary for pre-service teachers as they are expected to communicate much, whether written or oral. With this skill, they can organize their thoughts and decisions and effectively express ideas in speaking and writing. Practical communication skills are essential for teachers, especially when providing good classroom management and interacting with learners. During the teaching and learning process in the classroom, teachers and students should engage in two-way communication to exchange experiences and knowledge (Naibaho, 2022). Through these interactions, they can share their experiences and knowledge, which benefits them. Pre-service teachers and learners benefit from each other's experiences and knowledge during the service-learning program. They gain insight into the ideas of their learners and can adjust their teaching strategies as needed. At the same time, learners benefit from both the teacher's abilities and their peers' diverse perspectives.

Effective communication skills are critical, as specified by Khan et al. (2017). For a teacher to be able to transmit education, manage the classroom, and interact with students, the teacher must teach students diverse ways of thinking. Continuous communication with learners allows pre-service teachers to understand their unique needs and learning styles better, leading to enhanced instruction that can address specific challenges. Urbani et al. (2017) found that professional learning in communities is one common example of how communication skills are integrated into education. Other pre-service teachers usually share ideas and experiences throughout the program, as facilitated by a teacher-education supervisor. Pre-service teachers with strong communication skills are better

prepared to design successful classroom management strategies. Good oral communication skills are prerequisites for good teaching since they are the teacher's means of creating rapport with pupils, which serves various discipline-specific pedagogical purposes (Javines, 2020).

Socio-Emotional Skills

The program significantly contributed to pre-service teachers' personal and professional growth, shaping their socio-emotional skills and thus promoting empathy and patience as future educators. This growth will deepen their understanding of teaching and provide learners with a safe learning environment and experience. As mentioned by a pre-service teacher, the project TEACHER served as practical training for developing patience, which is a main ingredient in handling children of different personalities. Exposure to preschool learners is another factor in the readiness of the pre-service teacher to enter the real world of teaching. Some of the verbalizations are as follows:

P08: *"I believe that these experiences are effective because they will shape you as a person, teacher, and educator, and they will help you become better at handling kids and have more patience."*

P10: *"Being exposed to these pupils will test your patience and make you realize if you are already ready to teach."*

P18: *"As the dean has stated, this service-learning program is effective for training because it tests our patience – especially when dealing with very energetic children."*

According to Larvey and Sandri (2021), service-learning opportunities increased pre-service teachers' resilience, empathy, personal and professional qualities, and confidence in their abilities. This allows pre-service teachers to identify areas for improvement and try out and modify new strategies to meet their learners' diverse needs better. This dedication to lifelong learning and growth is essential for pre-service teachers to improve their learners' education and contribute to the continuous improvement of their professional growth.

Service-learning programs are particularly effective in shaping both personal and professional growth. Teacher empathy is necessary (Wilson, 2020), as it facilitates healthy relationships. It plays a large role in developing good classroom connections, including teacher-student and teacher-family relationships. It increases an educator's readiness to engage in learning experiences about people from diverse cultures. Teachers gain valuable insight into diverse learning environments and develop empathy, patience, and collaboration, which are crucial for effective teaching. Having patience enables pre-service teachers to give learners the time they need to grasp concepts and develop skills without feeling rushed or pressured. This creates a safe learning environment where learners can take risks and make mistakes.

Through service-learning programs, empathy increased pre-service teachers' willingness to deviate from societal norms to achieve better student outcomes (Wilson, 2020). Being able to see things from the perspective of a culturally diverse student allows teachers to understand their students better, which informs their teaching approaches. Empathy is important in whole-person development because it improves both the mind and the heart, suggesting holistic progress through experiences of self- and other-awareness. Effective service-learning programs frequently encourage pre-service teachers to think about each other and comprehend the context of caring for each other.

Collaboration Skills

As the participants mentioned, the service-learning program enables pre-service teachers to work efficiently and smoothly with others to achieve a common goal. Developing their collaboration skills encourages teamwork, improves problem-solving skills, and increases performance, benefiting them professionally and personally. By engaging them in realistic, community-based learning experiences, this program prepares them as future educators to teach effectively in diverse, collaborative classrooms that ultimately contribute to their success in teaching.

P05: *"Teachers gain valuable insight into diverse learning environments and develop empathy, patience, and collaboration, which are crucial when you are a teacher."*

P17: *"Service-learning experiences are highly effective for teacher training because they help future educators with their practical skills, encourage empathy, and foster collaboration with the community through engaging in real-world settings."*

Collaboration with the community through engagement in real-world settings is important, especially for the learner. Since the learner's activities are not confined to the four walls of the classroom, there is a need to collaborate with the other members of the learner's community for a more solid learning environment. On the part of the pre-service teacher, collaboration helps prepare their teacher personality (Somosot, 2020). They collaborate by sharing their ideas with their peers to learn from each other's experiences. This makes SLP a significant strategy for boosting classroom learning. The learnings from the community can even contribute to how schools should do things. Wallace et al. (2021) stated that service-learning programs and classroom teachers contribute diverse but beneficial skills to schools.

Based on the study of Häkkinen et al. (2016), to succeed in the knowledge society, learners and knowledge people must regularly and effectively combine their expertise and ideas in various kinds of collaborative situations to solve problems and provide new information and knowledge. The learning to collaborate aspect is emphasized as critical for pre-service teachers in developing collaboration skills and the ability to collaborate with their learners' learning community in the classroom.

Adaptability and Flexibility Skills

The project TEACHER provided the pre-service teachers the experience of interacting with people from different cultures, enabling them to see culturally diverse students from different cultural backgrounds and values. Regardless of the learners' different learning styles, abilities, and backgrounds, they should receive appropriate and effective educational instruction to address their needs. Thus, it required the skills of adaptability and flexibility from them. Their exposure to diverse learners helped them understand the importance of differentiated instruction and how to cater to various learning needs, making pre-service teachers adaptive and responsive. This skill is crucial in becoming an effective educator and providing an inclusive classroom atmosphere, as this skill allows pre-service teachers to modify their teaching pedagogies to meet the varying needs of the learners.

P07: *"The service learning program is effective for teachers since it is from here that we will know the diverse needs of your learners and how to cater to them."*

P09: *"This service-learning program allows us to experience the things that we need to prepare ourselves for in our teaching demo because it comprises various types of learners, including diverse learners, especially those who are still in daycare, which requires you to teach them in a way that will learn because it is harder to teach young learners than older students."*

P20: *"The activities during the SLP made me understand the children in the early stages of cognitive and social development, making me apply the lessons on how to handle children."*

Understanding the diverse needs of learners is crucial for effective teaching as this enables teachers to recognize and address the varied needs of their learners, thereby enhancing their teaching effectiveness. The service-learning program develops pre-service teachers' adaptability skills, making them skilled in assessing how the learners learn in various ways and adjusting instruction accordingly, ensuring that all learners are given sufficient opportunities and support. Pre-service teachers' involvement in service-learning programs with their young learners improved their capacity, as Arrington (2023) stated, to develop their teaching techniques that address the literacy needs of different learners. One classroom consisting of diverse learners with unique needs requires flexibility and even creativity on the part of the teacher to cater to each need.

It sounds inherent in teachers to find ways to adapt their teaching styles to fit their students' needs (Parrish, 2019). The SLP becomes a ground for the pre-service teachers to practice the necessary skills of adapting to the needs of the learners, starting with designing instructional materials applicable to the identified needs of the learners. Side by side with the needs of the learners is also their characteristics, which is part of the adjustment that the pre-service teacher must make. They are also willing to modify instruction based on what worked and what did not. Pre-service teachers could use service learning experiences to their advantage and to shape a more inclusive

approach to teaching (Carrington et al., 2014). Indeed, theoretical knowledge on teaching and learning styles, classroom management, and child development are important weapons in meeting the learner in the flesh, but more important is adapting to real situations.

Social Responsibility skills

The service-learning program developed the leadership skills of pre-service teachers, fostering a sense of social responsibility and community engagement among them. This involvement strengthened the connection and relationship between schools and communities, promoting a collaborative and inclusive learning environment.

P17: *"Service-learning experiences promote a sense of social responsibility by strengthening the connection between schools and communities and creating a practical learning environment."*

P22: *"Service-learning programs benefit teacher training, including developing and fostering a sense of social responsibility."*

As stated by Coelho and Menezes (2021), the successful implementation of service-learning at the University can help students achieve personal and interpersonal goals such as understanding and applying knowledge, engagement, curiosity, reflective practice, perspective transformation, citizenship, and social responsibility. They added that the goal was to develop students' personal, civic, and political competencies as critical agents of social responsibility, involving them in a more committed and profound way with their universities and, more broadly, with higher education, hoping that this experience may translate into an increase in their employability and commitment to service-learning, but also of the quality of the University experience itself.

Service-learning programs enhance the leadership skills of pre-service teachers and highlight the importance of community engagement in teaching as they are exposed to meeting the community's needs. People with individual social responsibilities prioritize the benefit of society over their interests (Körükçü & Tangülü, 2021). Socially responsible pre-service teachers recognize the value of connecting the classroom to the larger community. They seek to form meaningful partnerships with community organizations and other stakeholders to enrich their learners' learning experiences and foster a sense of civic engagement. Socially responsible pre-service teachers promote initiatives and programs that ensure equitable access to high-quality education for all learners, especially those in need or overlooked communities, as they address educational disparities and build more equitable and inclusive educational systems.

Classroom Management

Pre-service teachers consistently highlight the development of their classroom management skills during the service-learning program, which allows them to practice their strategies and skills in managing classrooms. Service-learning programs develop pre-service teachers' practical skills, confidence, and knowledge to manage the classroom successfully, including maintaining discipline, increasing student engagement, ensuring smooth transitions between activities, and promptly responding to behavioral issues.

P13: *".. because it is not only the classroom management (skills) that you will get from it, instead the general management in any activities like the initiatives you can develop in those kinds of activities..."*

P21: *".. it encourages us to have a wider perspective of what is happening inside the classroom.."*

P24: *"...to understand how to manage a class and handle different student behaviors.."*

Zulkifli et al. (2019) stated that classroom management is one of the most important aspects influencing the educational processes in the classroom. Pre-service teachers with strong classroom management skills can deal with difficult behavioral issues positively. Therefore, it is pivotal that pre-service teachers have a solid understanding of classroom management before beginning their careers in school. Thus, the service-learning provides an avenue for pre-service teachers to hone and develop their classroom management skills to prepare them for their future profession.

Teachers have a variety of responsibilities to create a proper classroom environment in which instructional goals can be effectively met, and achieving a comfortable and well-organized classroom environment is an important goal for teachers (Sivri & Balci, 2015). Additionally, teachers who possess the necessary understanding and competencies to oversee the processes of learning and instruction are less likely to encounter difficulties while creating educational opportunities that cater to the interests, requirements, and abilities of their students and by using appropriate methods related to the target behaviors and skills that they need to achieve. Therefore, pre-service teachers must be creative and innovative to create a conducive learning environment that encourages learners to learn. They must be prepared to face all possibilities with patience, efficiency, and optimism in dealing with uncertainties that may arise in the classroom. As suggested by Naibaho (2022), educators must take action to acquire, hone, develop, and master these talents to ensure that educational experiences are effective.

4.0 Conclusion

Project TEACHER is an effective strategy for developing the 21st-century skills of pre-service teachers. It is a means for them to practice what they have learned from the classroom discussions. It also means that they can develop the necessary soft skills for future classroom teaching – from planning for learning to assessing learning, including managerial and administrative tasks. While they are learning from their exposure, they have also caused the learnings of the early literacy learners. The project TEACHER also leads to a symbiotic relationship between the community and the school, that while the community benefits from the service that the school offers, the school also benefits from the actual situations, which could serve as a basis for a review of curriculum and pedagogies. Pre-service teachers may not only practice their intended profession upon reaching their senior years because the project TEACHER provides a real-life experience for their personal and professional development.

5.0 Contributions of Authors

The authors contributed significantly to the research study. Jeira Rose Mateo led the group in formulating the initial ideas, ensuring the incorporation of all suggestions from other researchers, and spearheaded the overall writing and revision process. Lorrea Rubi Quintos and Ronarine Monton provided additional insights to expand the concepts, formulated ideas in each section of the paper, and assisted in writing and revising the manuscript. Alvic Torres, MST, reviewed and enhanced the overall structure and content of the paper, offering guidance on the manuscript's organization and final revisions. Jennifer Bangi, MARS, evaluated the paper and suggested improvements throughout the process, ensuring alignment with the study's objectives. Each author played a critical role in the study's conception, design, analysis, writing, and revision stages, contributing to the overall quality and coherence of the research.

6.0 Funding

This work received no specific grant from any funding agency.

7.0 Conflict of Interests

The authors declare no conflicts of interest about the publication of this paper.

8.0 Acknowledgment

The researchers would like to acknowledge the parents of the learners for granting the request to have their children under the care of the pre-service teachers; the pre-service teachers for the inputs they shared on the effect of SLP on them; the Early Child Care and Development (ECCD) personnel, Child Development Workers (CDW) and City Social Welfare and Development Office (CSWDO) for allowing the researchers to implement the project. Furthermore, the University of Saint Louis Tuguegarao is also acknowledged for the publication support granted to this research paper.

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