The Impact of Extension Program on the Personal and Professional Development of Child Development Workers

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A B S T R A C T

One of the core functions of academic institutions is addressing the demand for societal change through extension programs. This study aimed to assess the impact of a three-year extension program on personal and professional development among Child Development Workers (CDWs) in San Luis, Batangas City. This study applied a sequential mixed method involving quantitative and qualitative data. Findings showed a significant improvement among the CDWs' knowledge, skills, as well as attitude and values. Further analysis showed that the majority of CDWs rated their highest acquisition in attitude and values. Knowledge and skills were less frequently deemed so, possibly due to challenges in applying the learnings from the extension program. Moreover, the following qualitative themes emerged: 1) Achieving personal growth through managing stress, maintaining positivity and faith; 2) Achieving professional growth through integrating technology and teaching instruction as well as fostering communication; 3) Teaching and Technology–Related challenges such as dealing with parents' attitudes and lack of budget and equipment, limited internet connection, and power interruptions. Therefore, it is recommended to allot additional budget to the CDWs from the local government and enhance the current policies to further support the implementation of the program in the partner community.

RESUMO

Uma das principais funções das instituições acadêmicas é atender à demanda por mudanças sociais por meio de programas de extensão. Este estudo teve como objetivo avaliar o impacto de um programa de extensão de três anos no desenvolvimento pessoal e profissional entre Trabalhadores de Desenvolvimento Infantil (TDIs) em San Luis, Cidade de Batangas. Este estudo aplicou um método misto sequencial envolvendo dados quantitativos e qualitativos. Os resultados mostraram uma melhora significativa entre o conhecimento, as habilidades, bem como a atitude e os valores dos TDIs. Uma análise mais aprofundada mostrou que a maioria dos TDIs classificou sua maior aquisição em atitude e valores. Conhecimento e habilidades foram menos frequentemente considerados assim, possivelmente devido a desafios na aplicação dos aprendizados do programa de extensão. Além disso, emergiram os seguintes temas qualitativos: 1) Alcançar o crescimento pessoal por meio do gerenciamento do estresse, mantendo a positividade e a fé; 2) Alcançar o crescimento profissional por meio da integração da tecnologia e do ensino, bem como do fomento à comunicação; 3) Desafios relacionados ao ensino e à tecnologia, como lidar com a atitude dos pais, a falta de orçamento e equipamentos, a conexão limitada à internet e as interrupções de energia. Portanto, recomenda-se a alocação de verba adicional do governo local para os CDWs e o aprimoramento das políticas atuais para apoiar ainda mais a implementação do programa na comunidade parceira.

Introduction

Higher Education Institutions (HEIs) play a vital role in developing communities, especially the underserved and depressed (Cruz et al., 2023). By virtue of Republic Act 7722, the Commission on Higher Education (CHED) requires State Universities and other higher education institutions to address the demand for societal change by extending their field of expertise in helping the communities. As a specialized state university for the advancement of the quality education and teacher education in the country, Philippine Normal University (PNU) contributes significantly to the call for societal transformation through established extension programs (PNU Community Partnership and Extension Office, 2016).

PNU as the National Center for Teacher Education (RA 9467), describes extension as the university's "arm in fulfilling its social responsibility by putting knowledge to work for various adopted communities in their pursuit of improving situations and lives" (PNU Community Partnership and Extension Office, 2016). The University's major extension program includes adopt-a-community through Literacy Initiatives for Empowerment (ACTLIFE), Adopt-a-School for Quality Education (ASQUE), Leadership Capability Building, and Disaster Emergency and Relief (DEAR), in which all university units, centers, and facilities should be part of. To actualize this objective, the PNU- College of Advanced Studies (CAS) was designated by the Community Partnership and Extension Office (CPEO) to spearhead programs for the community in San Luis, Batangas. CAS faculty, staff, and MA in Early Childhood Education students collaboratively worked together to provide assistance to the adopted community through various programs, specifically for ACTLIFE of Child Development Workers (CDWs) in San Luis, Batangas, owing to a consensus in literature regarding the central role played by the Child Development Teachers (CDTs) and Child Development Workers (CDWs) who serve young learners in local communities.

As teachers of young learners, CDWs encounter challenges in delivering instructional services as certain areas in the country still do not have access to quality education (Rahman, 2024). As presented in the State of Philippine Education Report 2023, even before the COVID-19 pandemic, the Philippines faced a significant learning crisis not isolated in higher education, but also prevalent in the Early Childhood Education (ECE).

The EDCOM II Year One Report by the Senate of the Philippines (2023) highlighted several issues and imperatives in the Early Childhood Care and Development (ECCD) sector, including the need for resources and tools for Early Childhood Education (ECE), as well as the production of high-quality Child Development Teachers. Moreover, the report pointed out that there are significant disparities in the educational qualifications of CDTs. Thus, there is an urgent need in upgrading and updating the capabilities of current child development service providers to comply with quality standards for various ECCD programs. Recently, the Senate Bill No. 2575, or the Early Childhood Care and Development Act was proposed, seeking the

professionalization of CDTs and the upskilling and reskilling of Child Development Workers (Second Congressional Commission on Education, 2024). Although the need for continuous professionalization of child development workers and teachers is supported by RA No. 10410 or the Early Years Act of 2013, there are still a lot of challenges to address on the ground level. In relation to this, graduate students pursuing Masters in Early Childhood Education at PNU-Manila collaborated with the community to promote high-quality and needs-specific teacher education.

The extension program, which was formally established by Memorandum of Agreement between PNU and Barangay Población, San Luis, Batangas, in March 2021, aimed to empower child development workers by offering seminar-workshops on digital literacy, instructional development, developmentally-appropriate activities, inclusive education and fostering home-school communication. In addition, the three-year extension program was implemented from March 2021 – March 2024. Since the extension program has been running for three years, the researchers thought it was crucial to evaluate its impact and effectiveness to use the results as a foundation for future extension programs and policy enhancement.

The purpose of this study is to evaluate the impact of the three-year extension program on the Child Development Workers' personal and professional development along with the acquired knowledge, skills, attitudes, and values of participants who attended the extension program facilitated by the college for the past 3 years.

This extension utilized the Theory of Change by Alfred Weiss (1995), a project-specific framework that is used for planning, implementing and assessing programs. Community-based programs, such as the extensions in San Luis, are often challenging due to vague goals and uncertain outcomes, but using the theory of change as a guideline helps bring cohesiveness to the set objectives, outline specific, measurable plans and outcomes and achieve them (Laing & Todd, 2015; Reinholz & Andrews, 2024).

Extension Program Description

This study is based on the three-year extension program facilitated by the College of Advanced Studies (CAS), specifically the MA in Early Childhood Education Program in the academic year 2021-2024. The content of the program is based on the results of the needs analysis conducted prior to the conduct of the extension program.

The extension program consists of the following topics: (1) "I'm a Techy CDW! For any challenge, I'm Ready!" The first topic highlighted the readiness of Child Development Workers to accept technology and overcome challenges of teaching during the COVID-19 pandemic. Likewise, it emphasized their adaptability, resiliency, and willingness to integrate digital tools to improve and facilitate developmentally appropriate teaching instruction, materials development, modern ways of communication with family, and managing oneself amidst

circumstances; (2) "A task may be Techy, but CDWs do it appropriately!" The second topic focused on the adaptability of CDWs' in utilizing technology effectively despite technical challenges.

Furthermore, it underscored their commitment in applying digital tools appropriately to enhance learning and child development. As early childhood educators, CDWs are expected to implement developmentally appropriate practices to ensure effectiveness in instruction, development of materials, communication, and managing oneself to overcome stress and become effective and efficient workers despite circumstances; (3) "For the Filipino Children, Let's Volt In!" This topic demonstrated collective action and collaboration in supporting the development and well-being of Filipino children.

It established that strengthening partnership among stakeholders is crucial to addressing the needs of young children during challenging times; and lastly, (4) "A Tech-Savvy CDW is an Advocate for Inclusivity." This topic examined the role of tech-savvy Child Development Workers (CDWs) in promoting inclusivity. It emphasized the importance of using technology to create an inclusive learning environment and ensure that all children, regardless of background or ability, have access to quality education and opportunities.

Methodology

This study used a mixed-method approach, specifically an explanatory concurrent mixed method, wherein the data flow involved both quantitative and qualitative data (Bell et al., 2022). This method was used to describe the impact of the three-year extension program facilitated by the college for CDW's in San Luis, Batangas City.

The participants of this study consisted of 19 female child development workers (CDWs) aged 25-45 years old. They are assigned to children aged 3-4 and have varying years of teaching experience. All 19 participants took part in the seminar workshop over the past three years. Data was collected through survey questionnaires and one-on-one interviews. The data was analyzed using the descriptive statistics of the participants' profiles and the survey results.

Table 1.

Mean Range and Interpretation of KSAV for Child Development Workers

Point	Mean Range	Interpretation
4	3.25 − 4.00	Highly Acquired
3	2.50 − 3.24	Acquired
2	1.75 − 2.49	Somewhat Acquired
1	1.00 − 1.74	Not Acquired

Table 1 shows the 4-point Likert Scale used in the survey questionnaire with the following descriptions: 4 -Highly Acquired; 3-Acquired; 2- Somewhat Acquired, 1- Not Acquired. A multinomial test was employed to assess whether the 19 participants' acquisition of KSAV was in line with the expectations, which helped evaluate the extension program's effectiveness.

Data Collection

The data collection procedure involved a researcher-made survey questionnaire validated by experts in the areas of Early Childhood Education (ECE), Curriculum Experts and Child-Development Center Teachers. It generated 30 items with 10 for each essential learning components such as knowledge (pertains to what the CDWs know or learned from the extension), skills (pertains to CDWs' application of what they have learned), attitude and values (pertains to what they felt as a change in behavior and principles).

A Cronbach alpha of 0.813 was obtained which indicated that the survey has good internal consistency and reliability. All nineteen (19) CDWs participated and accomplished the survey. Meanwhile, ten (10) out of nineteen (19) participants voluntarily participated in the interview based on the consent form. The interview guide questions were developed by the researchers who implemented the extension program. The questions were divided into three parts: The first part narrated how the extension program affected the CDWs personal development; second was the CDWs professional development; and third was the challenges and limitations in addressing the issues faced by the teachers.

Table 2.

Profile of Participants (n=19)

Age	Frequency	Percent
25 - 30	1	5.3
31 - 35	1	5.3
36 - 40	3	15.8
41 - 45	8	42.1
51 - 55	4	21.1
56 - 60	2	10.5
TOTAL	**19**	**100**
Mean Age = 44.5 Std Deviation 7.94		
Gender		
Female	19	100

Male	0	0
TOTAL	**19**	**100**
Highest Educational Attainment		
High School Graduate	0	0
College Level	5	26.3
College Graduate	14	73.7
TOTAL	**19**	**100**
Number of Years in Teaching		
1 - 5	3	15.8
6 - 10	9	47.4
11 - 15	1	5.3
16 - 20	4	21.1
21 - 25	2	10.5
TOTAL	19	100

Table 2 presents the participant profile. It shows that most of the participants (42.1%) belong to the age bracket 41-45 years with a mean age of 44.5 years and are tagged as middle aged. Also, all are female; 14 (73.7%) are college graduates, four in elementary education and 10 graduated in different fields, and five (26.3%) are college level. Thus, most of them have at least 6 years of experience in teaching early childhood prior to the COVID-19 pandemic. Therefore, the researcher used the appropriate term child development workers (CDWs), since most of the participants fall under the category of CDWs based on the set standards.

Results and Discussion

Table 3.

Impact of Extension in Terms of Acquired Knowledge

Acquired Knowledge Indicators	Mean	SD	Interpretation
1. I can name and select various applications and websites that can help me create instructional materials. (e.g., PowerPoint, Canva)	3.53	0.697	Highly Acquired
2. I can identify some basic principles of design when creating instructional materials with the aid of modern technology (e.g., PowerPoint, Canva).	3.47	0.612	Highly Acquired
3. I have gained knowledge on the importance of proper assessment for children.	3.11	1.197	Acquired
4. I can distinguish best practices on proper documentation and referrals when handling children with special needs.	3.11	0.937	Acquired
5. I can enumerate best practices on how to develop a strong positive home-school relationship.	3.53	0.697	Highly Acquired
6. I have awareness of the importance of SEL skills (resilience and flexibility) as a child development teacher.	2.84	1.259	Acquired
7. I know how to download free worksheets and templates from the internet.	2.74	1.046	Acquired
8. I can identify best practices on proper communications with various stakeholders and relate it to my experiences as a child development teacher.	3.47	0.697	Highly Acquired
9. I can identify some symptoms of learning disabilities.	3.21	0.631	Acquired
10. It occurred to me that identifying red flags in young children must be done through a series of observations.	3.53	0.697	Highly Acquired
	3.25	**3.627**	**Highly Acquired**

Table 3 highlights the resulting mean of 3.25, suggesting that the average score of the participants is equivalent to the "Highly Acquired" value interpretation. This means that the participants gained knowledge specifically on three items with the highest mean value: Item 1 (*I can name and select various applications and websites that can help me create instructional materials. [e.g., PowerPoint, Canva]*) with mean of 3.53; item 5 (*I can tell some best practices on how to develop a strong positive home-school relationship.*) with a mean of 3.53; and item 10 (*It occurred to me that identifying red flags in young children must be done through a series of observations.*) with a mean value of 3.53. Similar results were discussed in a study by Salazar (2020), which found that participants not only acquired relevant knowledge but also applied it within their families and shared it with others, demonstrating the broader impact of knowledge dissemination.

The findings indicated that the participation of the CDWs in the community extension program enabled them to gain high acquisition from different seminar-workshops from 2021 to 2024. This is in line with the community extension studies conducted by Lainez (2023) and Cristobal (2023).

Meanwhile, three items were identified to have low scores: Item 7 (I *know how to download free worksheets and templates from the internet.*) having a mean value of 2.74; item 6 (*I have awareness of the importance of SEL skills (resilience and flexibility) as a child development center worker.)* with mean of 2.84; and item 3 (*I have gained knowledge on the importance of proper assessment for children.)* with a mean of 3.11.

Table 4.

Impact of Extension in Terms of Acquired Skills

Acquired Skills Indicators	Mean	SD	Interpretation
1. I can compose a Teacher-Family Letter (TFL).	3.21	0.713	Acquired
2. I can conceptualize and organize developmentally appropriate culminating programs for young children incorporating the use of technology (e.g., PowerPoint, Canva).	3.16	0.898	Acquired
3. I can create presentations and animated videos in Canva.	2.74	1.046	Acquired
4. I can share the different developmentally appropriate practices that I learned from the PNU ECE extensions with my colleagues.	3.74	0.452	Highly Acquired
5. I can make clip arts and animations using tools in Microsoft PowerPoint.	3.05	1.026	Acquired
6. I can share the importance of providing positive guidance to early childhood learners and parents.	3.74	0.562	Highly Acquired
7. I can make lesson plans and visual aids using digital applications such as Canva & Microsoft PowerPoint.	3.05	0.848	Acquired
8. I can create postcards using Canva.	2.63	1.165	Acquired
9. I can create a digital storybook.	2.68	1.003	Acquired
10. I can produce modules and teaching-related materials using Microsoft PowerPoint.	3.11	1.049	Acquired
	3.11	**5.238**	**Acquired**

Table 4 underscores the overall mean of 3.11 interpreted as **Acquired**, specifically on three items with the highest value: Item 4 (*I can share the different developmentally appropriate practices that I learned from the PNU-MAECE extensions with my colleagues.)* obtained a mean of 3.74; followed by item 6 (*I can share the importance of providing positive guidance to early childhood learners and parents.)* having a mean of 3.74; and item 2 (*I can conceptualize and organize developmentally appropriately culminating programs for young children incorporating the use of technology [e.g., PowerPoint, Canva].)* with a mean value of 3.16. Similarly, in the study conducted by Rubi and Cepeda (2021), seminar-workshop played a significant role in enhancing teachers' competencies in the preparation of instructional materials, which contributes to the success of the flexible learning delivery during the COVID-19 pandemic. The crucial role of teachers in flexible learning amidst the ongoing crisis cannot be overlooked.

Additionally, skills transfer from the PNU-MAECE students to the CDW beneficiaries can be shared between members of the child development centers who still need assistance especially in the use of technology. This conforms to the study conducted by Lainez (2023).

Meanwhile, three items were identified having low scores: Item 8 (I can create postcards using canva.) having a mean value of 2.63, item 9 (*I can create a digital story book.)* with a mean of 2.68; and item 5 (*I can make cliparts and animation using tools in Microsoft powerpoint.)* with a mean of 3.05

Table 5.

Impact of Extension in Terms of Acquired Attitude and Values

Acquired Attitude and Values Indicators	Mean	SD	Interpretation
1. I realized that in order to help the children, I need to take care of my well-being.	3.89	0.315	Highly Acquired
2. I am aware of the importance of mental health and wellbeing for both teachers and learners.	3.84	0.375	Highly Acquired
3. I am inspired to be more open to new technologies that will be helpful for me as a Child Development teacher.	3.74	0.562	Highly Acquired
4. I realize the importance of strengthening home-school partnerships.	3.74	0.562	Highly Acquired
5. I advocate that a Child Development Worker should be resourceful, creative, and innovative.	3.84	0.375	Highly Acquired
6. I realized that being mindful and gritty will help me face any circumstance.	3.58	0.607	Highly Acquired
7. I recognized the importance of adapting to technological developments/advances.	3.58	0.607	Highly Acquired
8. I realized the importance of organizing outputs, modules, and pictures of children using online platforms (E.g. Google Drive).	3.42	0.769	Highly Acquired
9. I realized that Developmentally Appropriate Practices (DAP) in teaching young children has importance.	2.89	1.243	Acquired
10. I realized the importance of clarifying/debunking the different myths about special education.	3.47	0.612	Highly Acquired
	3.60	**3.249**	**Highly Acquired**

Table 5 underscores the overall mean of 3.60 interpreted as **Highly Acquired**. This suggests that the three-year extension program had a beneficial effect on the teachers' values and attitudes. Through the program, they acquired new information that influenced their understanding on which values they should embody as educators, as well as the attitudes necessary for effective teaching especially in a period like the pandemic.

The results on this indicate that the program equipped the participants with the knowledge that aided them to be highly adaptable and receptive to change. Specifically, three items with the highest values were: Item 1 (*I realized that in order to help the children, I need to take care of my well-being.*) which had a mean of 3.89; followed by item 2 (*I am aware of the importance of mental health and wellbeing for both teachers and learners.)* with a mean

of 3.84; and item 5 (*I advocate that a Child Development Worker should be resourceful, creative, and innovative.*) with a mean value of 3.84. These results emphasize the importance of mental health management, as well as their openness to integrating new technologies in their classes during the shift to virtual learning. Comparatively, this study aligns with the findings of Salazar (2020) and Corpuz et al. (2022) which highlights becoming more socially responsive and productive citizens and having improved confidence and self-esteem as a result of the skills they gained.

Meanwhile, three items were identified having low scores: Item 10 (*I realized the importance of clarifying/debunking the different myths about special education.)* having a mean value of 3.47; item 8 (*I realized the importance of organizing outputs, modules, and pictures of children using online platforms (E.g. Google Drive).* with a mean of 3.42; and item 9 (*I realized that Developmentally Appropriate Practices (DAP) in teaching young children has no importance.)* with a mean of 2.89.

Descriptive analysis of the survey shows that all three components of learning (KSAV) were acquired to highly acquired, indicating the effectiveness of the extension program in the CDWs personal and professional growth. To further assess the extent of this effectiveness, a multinomial test was also conducted under the assumption that all 19 participants acknowledged growth in terms of Knowledge, Skills, and Attitude and Values.

Table 6.

Multinomial Test Results for KSAV

	χ^2	df	p
$H_0(\alpha)$	14.000**	2	<.001

Notes: Critical Value at $\alpha = 0.05$ (7.378) and $\beta = 0.01$ (9.210)

Table 6 shows the chi-square value and its corresponding p-value from the multinomial test. The results show a chi-square value χ^2 of 14.000, with 2 degrees of freedome, and a p-value that is less than 0.001. Moreover, 7.378 and 9.210 are the critical values associated with the probability of a Type I error and a Type II error, respectively.

Since the computed chi-square value is greater than the critical values and the p-value is less than the significance level $\alpha = 0.05$, the null hypothesis is rejected. This indicates that there is a statistically significant difference between the observed and expected frequencies of assumed effectiveness across the program's three components of learning (KSAV). This entails that the extension program had different impacts on Knowledge, Skills, and Attitude and Values.

Table 7.

Descriptives of Highest Acquired Indicator

Indicators	Observed	Expected $H_0(\alpha)$
Knowledge	3	6.33
Skills	2	6.33
Attitude and Values	14	6.33
ChiSquare Obt = 14.00**		

Looking at Table 7, most of the participants rated the highest acquisition in Attitude and Values addressed by the extension program. This confirms that the observed and expected frequencies of the preferred effectiveness of the extension program across the three indicators (KSAV).

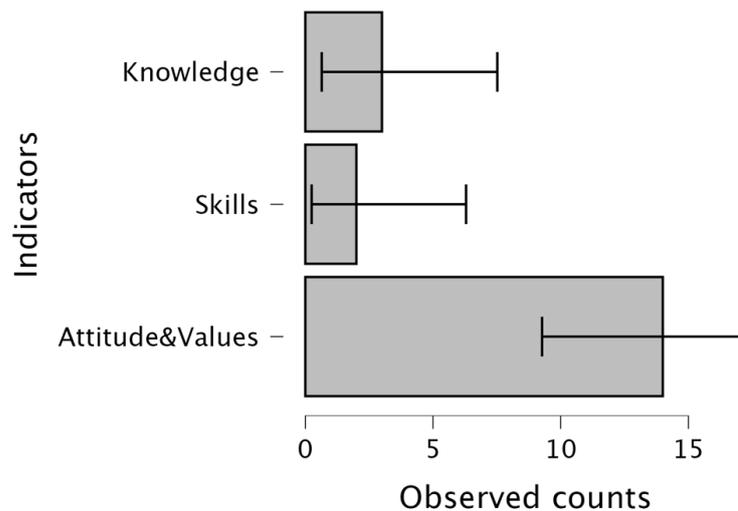**Figure 2.**

Bar Graph of Highest Acquired Indicator

Figure 2 visualizes the findings that most CDWs had the highest acquisition in Attitude and Values, with relatively few having Knowledge and Skills as their highest acquired indicator.

Overall, the statistical analysis shows that the CDWs were able to acquire the expected KSAV. Out of the three essential components of learning, Attitude and Values were shown to have the highest acquisition. Knowledge and Skills were shown to be acquired by the CDWs, however, there may have been external factors that hindered them from acquiring the intended Knowledge and Skills to a greater extent.

Over three years after the extension seminar-workshop, the 19 CDWs have confirmed that they have utilized their acquired knowledge, skills, attitude and Values in terms of personal and professional development. These results indicate that the objectives of the three-

year extension program were achieved. In addition, it showed that the program effectively provided the participants with the specific knowledge, skills, attitude and values for attaining personal development and achieving professional development.

For the qualitative portion of this study, responses were gathered through one-on-one interviews. The research employed thematic analysis by Tanaka et al. (2012). Interpretation of the qualitative statements were coded.

Table 8.

Experiences related to Delivery of Program Activities / Instruction

Themes	Sub-Themes
Attaining Personal Development	Stress Management
	Facing Adversity with Positivity
	Faith as a Source of Strength
Achieving Professional Development	Integrating Technology in Instruction
	Fostering Communication Through Modern Technology

Table 8 shows that the participants attained personal development and achieved professional development through the extension program for CD workers. In attaining personal development, they were able to engage in stress management, face adversity with positivity and anchor on faith as their source of strength. They were able to achieve professional development by integrating technology in instruction, foster communication using modern technology, and develop instructional materials using technology.

Attaining Personal Development

The participants valued what they learned from the extension program. They were able to attain personal development. Teachers consider personal development to be beneficial for the increase of their professional efficiency, improvement of their communication skills, and increase of their creativity. It also appreciated the usefulness of the efforts made for personal life optimization, for social life development, as well as for improving relations with close friends (Herman, 2020). The sub-themes are stress management, facing adversity with positivity, and faith as a source of strength.

Stress Management

During the Covid-19 pandemic, people were under stress particularly in carrying out their duties and responsibilities. It was also a period of helping each other to handle and manage stress accordingly. The participants shared that the extension program provided them assistance in handling stress. CDW 1 (57 years old, 8 years in service) shared that

> *"Stress is unavoidable. What is important is you continue to be strong for your students and co-teachers in the center."*

CDW 7(33 years old, 8 years in service) pointed out that:

> *"Even though there were many things to do, if you see the children happy though they are sometimes naughty, our stresses are relieved. We are still smiling."*

CDW 3 (46 years old, 11 years in service) said that:

> *"I learned that you just need to fight. It is just a challenge we need to face. We can just control our reaction to stress. There are many ways to relieve ourselves from being stressed out."*

Facing Adversity with Positivity

Teachers across the globe have been widely affected by the global pandemic. The CDWs from San Luis, Batangas were not exempt. Amid the rising cases of COVID-19 in early 2020, the Province of Batangas also experienced the volcanic ash fall caused by the Taal volcano eruption. Because of this, CDWs faced the same challenges that academic institutions battled during the pandemic—learning continuity. Banal and Ortega-Dela Cruz (2022) described teachers' resilience in their work as one of the driving factors on their ability on their jobs.

CDW 2 (40 years old, 19 years in service) shared that:

> *"It helped us to be more efficient and effective CDT/CDWs during the pandemic. Especially since we experienced disaster twice, with volcano eruption and COVID-19. We have done our job well and efficiently as CDW. I don't know how to use a computer either. That's my big thanks to the PNU extension program. Because I learned a lot and used it many times in my teaching."*

CDW 4 (51 yrs. old, 20 years in service) said that:

> *"I was motivated better as a daycare worker despite the pandemic and the lessons being modular."*

Faith as a Source of Strength

Teachers' resilience is improved by their personal faith. Teachers' personal faith plays a crucial role in the accomplishment of their job as teachers. Phillips (2021) suggested that personal faith influences the development of teachers' resilience. The CDWs recounted their experience during the pandemic as very challenging. Filipinos are known for their steadfast religiosity. The COVID-19 Pandemic isolation did not stop the Filipinos from expressing their

faith (Canete, 2021). The CDWs' personal faith has also contributed to their resilience to continue teaching and find alternative ways to assist their pupils and their families. Behind the resilience and coping strategies of the CDC teachers, Varela et al. (2023) explored the Filipino attitude of "bahala na" which Gripaldo (2005) etymologically derived from "Bathala na" that directly translates to "It is up to God").

CDW 5 (56 years old, 27 years in service) shared that:

> *"Don't forget to pray. And it's really needed to have positive thinking for a better future because the situation before is not as different from what we experience today. I am not exempt from the hardships in life. So in my teaching I try to be close to the children and be more positive. Everything that happens in my life should not be seen as negative even when it is not perfect. You need to pay attention to the positive things rather than highlighting the negative ones."*

Achieving Professional Growth

Muir et al. (2021) suggested that teachers' professional growth is likely to be more effective if it is practical and if it occurs close to the teachers' environment. In addition to that, professional growth is more evident if the teacher is fully committed and receives external feedback from experts in the field. It can be observed that teachers attained professional growth through integrating technology in instruction, fostering communication through modern technology, and developing technology-based instructional materials.

Integrating Technology in Instruction

Integrating technology in instruction is key in improving the quality of education and aiding teachers in delivering lessons during distance learning. Through the PNU extension program, CDWs have been introduced to the many ways that technology can be used. Among them was through effective communication with the parents and development of materials. Mdhlalose and Mlambo (2023) described that remote learning is possible because of the internet's accessibility.

CDW 6(46 years old, 11 years in service) said that:

> *"They taught us other ways, for example, the learning materials. Before we just write on the blackboard. We became more creative. Our knowledge was enriched. We can use Canva and powerpoint."*

CDW 8 (46 years old, 8 years in service) shared that:

"It is the use of Canva. It was pandemic and modular, and we needed to print out the activities for children's use. We were able to apply what they taught us in order for us to create beautiful modules."

The transition from onsite to online teaching is new to many. Like most education institutions, teachers from the Child Development Centers were also searching for ways to deliver education despite the sudden change. Adapting to technology integration perhaps is the most challenging. Training that supports technology integration such as programs for computer literacy is important for teachers so that their acquired knowledge can be translated to technology adaptation in the curriculum (Johnson et al. 2016).

Fostering Communication Through Modern Technology

Technology is certainly a game changer in the way people communicate. Today, there are more ways to communicate in real time. The CDWs have also learned to enhance their communication skills through the use of modern technology specifically through messaging applications like Facebook Messenger. When CDWs encounter challenges in terms of gadget and internet availability, they become flexible by doing home visitation and the traditional way of posting announcements in the center. Classroom specific announcements, concerns, activities, and students' progress reports are usually communicated in written and verbal form (Graham-Clay, 2024). The media and modern technology through which these communications were delivered changed when the pandemic broke out. Teachers and parents discovered that social media's function is not limited to personal usage. It can be an effective form of communication during a time of distance learning.

CDW 6 (33 years old, 7 years in service) said that:

"We were able to make announcements, letter. We post them and we no longer call for meetings because the details are all there. Before we text the parents, now it is through the group chat or Facebook. We post through our 'myday'. Before, I used the blackboard during orientations. Now, I use PowerPoint."

CDW 2 (40 years old, 11 years in service) said that:

"Because of the extension program, communication with the parents was strengthened through social media. Through your help, I was able to learn a lot like using Zoom. I was able to ask how the parents are even just through chatting online."

Table 9 describes the challenges and limitations encountered by CDWs in the implementation of their learning in classroom instruction and management.

Table 9.

Challenges Encountered by Child Development Workers

Themes	Sub-Themes
Teaching-Related Challenges	Parents' Attitude
	Inaccessibility to Resources
Technology-Related Challenges	Limited Internet connection and Power Interruption
	Limited Budget for Teaching Resources

Teaching-Related Challenges

Schools, like other organizations, encounter challenges that prevent them from becoming more effective, particularly, in teaching and learning. While Child Development Workers appreciated and were able to apply what they learned from the extension program, there were challenges that they encountered. Teaching and technology-related challenges were encountered like inaccessibility to teaching resources, communication with parents, limited internet connection and power interruptions, and limited budget.

Parents' Attitude

Parents have a big role to play in the education of their children. When they send their children to school, it is important that they communicate and relate accordingly with the teachers. However, there are parents who either show lack of involvement or too much involvement in the education of their children. Sometimes, it is all about their attitude.

CDW 1 (57 years old, 8 years in service) lamented that:

"Sometimes, it is difficult to deal with parents. They become a big challenge for us at the very beginning of school. Sometimes they even interfere with the running of the school. Everything we consider is the safety of the child."

In relation to the attitude of parents, CDW 7 (33 years old, 7 years in service) said that :

"There are parents that are hard to talk to. It's hard to change their mindset. For other parents, it is hard to deal with their attitude. I just try to understand. We shouldn't be unapproachable; we should be more welcoming to the parents. We should be more sympathetic. Not everyone has the same status. "

Inaccessibility to Resources

While CDWs want to apply what they learned particularly in the use of technology in teaching, they are hampered due to their inaccessibility to resources. In today's teaching and

learning, technology plays a significant role in engaging students in the learning process. However, CDWs said that they do not have any or enough technological equipment.

CDW 7 (33 years old, 7 years in service) sadly shared that:

"The challenge for me is that I do not have my own laptop. So, I just borrow. I also do not have my own printer. Somehow, at least I learned."

When holding classes onsite, the technological resources are unavailable. CDW 6(46 years old, 11years in service) shared that:

"For example, the topics you taught us, we don't have the gadgets or budget. There is also no source of internet. Another challenge is if we go to the center, there is no TV, the laptop screen is small, you need a big monitor"

Technology-Related Challenges

The use of technology in teaching and learning is inevitable today. Many classrooms have television and teachers use computers to prepare their instructional materials. Aside from the aforementioned equipment, the internet is also important in preparing their instructional materials and communicating with parents. For these to be provided, a budget must be allocated.

Limited Internet connection and Power Interruption

With the internet as the most accessible means for gathering information and learning materials, it should be available and stable. For it to function, there should be electricity.

CDW 5 (56 years old, 27 years in service) lamented that

"There is an internet connection in the city but none in the capital where the CDWs reside. Then there is also the occurrence of brownouts since this is a fourth-class municipality. There have been improvements, before there was only internet in the city but now there is internet in most barangays. The only problem is that the signal is weak."

CDW 3 shared the same concern. She pointed out that:

"The slow internet connection. Despite the hindrances I still tried to learn so that I can teach effectively. Because of the extension program, I was able to learn a lot. I solved these challenges by having resilience/ confidence. I tried to study the lessons better so that I can be successful in teaching."

Limited Budget for Teaching Resources

For a plan to be carried out, a budget should be appropriated. While Child Development Workers are provided with the needed training by the PNU extension program, the application of their learning still needs an allocated budget from their local government. They said that there is a lack of budget.

CDW 4 (51 years old, 20 years in service) mentioned that:

"The lack of budget and communication [is an issue], like sharing how we can resolve problems."

Corollary to this is how CDWs look for ways to be able to provide for their teaching needs. CDW 6 (33 years old, 7 years in service) shared that:

"We solicit for the materials that we need, I was able to have a printer and a TV in the daycare. Our other members were not given any."

The lack of budget leads to insufficient or no teaching resources. In a study by Kormos and Wisdom (2021) on technology in the learning experience and challenges to integration in rural public schools, participants considered financial cost as the most significant barrier. Many financially strapped rural schools may be incapable of providing teacher stipends for subscription-based technology. This further demonstrates the importance of collaboration among the local government and other stakeholders in financially supporting the teachers with needed equipment and resources to facilitate the implementation of technology integration.

The Child Development Workers valued the training provided through the extension programs. They were able to apply what they learned despite the challenges they experienced. While their motivation and commitment are high and their knowledge and skills are enhanced, a more effective teaching and learning may not take place if the technological and financial resources are insufficient or not provided. The impact of the extension program is evident and acknowledged by Child Development Workers in terms of their personal and professional development. The support of the local government is needed to bring to a higher level the impact of the extension program making it more sustainable.

Final considerations/ Conclusions (lowercase, bold, Georgia 11 font, left-aligned, unnumbered)

The study highlighted the impact of extension programs on child development workers' personal and professional development. Based on the results presented, it can be seen that the

extension program had a significant impact on the CDWs. The participants indicated high acquisition on the targeted Knowledge, and Attitude and Values. The CDWs also acquired the technical Skills highlighted in this study. These findings suggest that the goals of the three-year extension program were accomplished. Statistical analysis showed that most participants reported the highest acquisition in Attitude and Values, while the components Knowledge and Skills had a much lower count. These statistical findings are in line with one of the themes that emerged in the one-on-one interviews– the limited internet connection and allotted budget for resources. It is considered essential to have robust support in the form of resources like gadgets, printers, and internet connection allowances to effectively implement and sustain what they have learned. The interview sessions revealed that CDWs encountered challenges and limitations regarding the application of the Knowledge and Skills they acquired due to the lack of provision of these resources.

In general, the extension provided over the past three years has aided the CDWs in gaining knowledge that enhances their competence and confidence in self-management, utilizing technology for effective instruction, and fostering and maintaining communication with families. Notwithstanding, the modifications in the educational landscape prompted by the adversities associated with COVID-19, the stress in terms of teaching and handling the learners and parents experienced by the CDWs has been significantly mitigated by the insights acquired from the extension program. The themes of prayerfulness, reliance on divine providence, and maintaining a positive outlook in the face of life's adversities emerged prominently from the interviews conducted with the participants. The extension program has evolved into a formidable instrument enabling them to surmount challenges despite the constraints posed by the inadequacy of teaching resources.

Based on the results of the study, the researchers offer the following recommendations. First, in order to sustain the training provided and apply the learning from the extension programs, it is highly recommended that an additional budget allocation must be provided from the local government to support the needed resources. Second, it is recommended that efforts towards the professionalization of (CDTs) and (CDWs) be prioritized. To bring this to fruition, the university, together with other stakeholders, can assist the DCWs to enroll in the Expanded Tertiary Education Accreditation Program (ETEAP) offered by the university. This will help them to earn a bachelor's degree in education suited for young children. Hence, a plantilla position must be provided to ensure job security and long-term commitment to the care and education of young children. Lastly, policy enhancement is highly recommended, to ensure the sustainability and full implementation of the extension program in the partner community.

The results of this study illustrate the success of the extension program for Child Development Workers (CDWs). Nonetheless, certain limitations need to be recognized. First,

the sample for the study consisted of only 19 CDWs, all of whom were women, thus limiting the ability to generalize the results to a wider population of CDWs. Furthermore, data collection occurred within the limited timeframe of the COVID-19 pandemic, which could have impacted the results. Future studies would improve from having a larger and more varied sample to enhance the representativeness and applicability of the findings, thus allowing for a more thorough assessment of the program effectiveness.

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