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Participatory Action Research on a Remote Teaching Practicum

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Abstract

The pandemic has adversely affected teaching practicum as a culminating activity of pre-service teacher training. Teacher education institutions were forced to transform their programs into flexible modalities rapidly. In this participatory action research, the institutional remote practicum program was developed according to the preparation, actualization, mentoring, and evaluation phases. The researchers used qualitative and mixed-method strategies in certain research phases. The data gathered implied that the remote practicum program developed can be an example of how to implement the different guidelines and policies for flexible practice teaching. Pre-service teachers' experiences in the implementation of the research seem to indicate that the program is responsive to their preparations as beginning teachers. The results also imply that the program's performance is efficient and effective.

Keywords
action research, experiential learning, practice teaching, pre-service teachers, remote practicum

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Introduction

Teaching practicum or practice teaching is a significant phase of training pre-service teachers. Induced by the pandemic, Teacher Education Institutions (TEIs) were confronted with a dilemma on how to conduct the practicum program because of school closures since it requires participation and immersion of pre-service teachers in a natural classroom environment. In effect, TEIs are to rethink and redesign programs to cater to the needs of the stakeholders. However, only a few studies are available to help address the challenge of teaching practicum; thus, a gap in the knowledge in implementing teaching practicum programs, particularly in remote set-ups, exists.

In response, the TEI involved in this research explored the teaching practicum program implementation in a remote set-up. Through participatory action research, the researchers report the different activities conducted in this research and determine student perception of the program's implementation. Specifically, the researchers say the development of a remote practicum program can assist pre-service teachers in their professional preparations and attain the competencies expected of them as beginning teachers. This research also ascertains the different challenges encountered in the program and how they were addressed. Ultimately, this research aims to inform other TEIs in developing their remote practicum programs. *Teaching Practicum in the New Normal.*

Pre-service teachers are given various opportunities to test theories and apply pedagogies in formal and informal educational set-ups, making learning to teach a complex, ongoing process (Hallman & Rodriguez, 2015). Hence, practice teaching or teaching practicum is one of the significant phases of teacher preparation. In the practicum programs, pre-service teachers experience total immersion in the realities of becoming a teacher. In other words, teaching practicum enables pre-service teachers to realize how the theories they have learned in their professional education courses apply to classroom realities.

In the practicum, the student gets immersed in the academic or school organization and eventually becomes part of it. The practicum site provides a learning laboratory where students experience the working world. Through observation and reflection on what occurs in the organizational setting, the student may discover how academic interests relate to possible careers, gain meaningful on-the-job experience and training, and connect classroom theory to real-world practice. Students contribute to the organization by performing meaningful projects and assignments of continuing value to both parties. When pre-service teachers have opportunities to construct social and learning understandings of teaching through observation, they begin to develop clinical skills, including greater confidence, a deeper understanding of pedagogy and practice, and the automaticity of routines (Grossman et al., 2009). When engaging in approximations of practice, pre-service teachers have opportunities to move beyond the familiar and often comfortable role of the student to that of the teacher (Hamilton & Van Duinen, 2018). Indeed, practicum prepares pre-service teachers for professional practice.

Literature Review

Mentoring pre-service teachers

Tantamount to the success of a practicum program is the mentoring process. Hobson et al. (2012) stressed that mentoring ensures the replication of best practices in teaching and learning from expert to novice teachers. In mentoring, the mentors provided teachers with guidance and direction as they navigated the teaching-learning landscape Practicum programs provide students with supervised experiences and help the student teachers to understand the full scope of teachers' roles. Calamlam et al. (2016) described mentoring as a partnership between a novice and an expert. Many have also suggested that these partnerships are compelling in shaping pre-service teachers as they are confirmed in contrast to the artificial environment of the tertiary education courses (Tuli, 2009). The pre-service teacher, who may be called an apprentice or student teacher intern, walks through the whole teaching process with a mentor, also called the cooperating teacher. Here, the pre-service teacher puts into actual practice all that was learned in the content and theory courses, strategies, or teaching methods, and tests the pedagogical content knowledge acquired in related courses before practice teaching. Practice teaching is being held in the institution's different partner/cooperating schools in public and private standard education schools.

More importantly, mentoring in practicum programs also helps pre-service teachers attain the standard competencies of a teacher. According to the PPST, a beginning teacher is a novice educator whose qualities meet the indicators for entry into the teaching profession. To wit:

> "They have a strong understanding of the subjects/areas in which they are trained in terms of content knowledge and pedagogy. They possess the requisite knowledge, skills, and values to support teaching and learning. They manage to learn programs and have strategies that promote learning based on the learning needs of their students. They seek advice from experienced colleagues to consolidate their teaching practice." (DepEd Order 42 S. 2017)

Teacher standards are essential for improving education quality. Peña-López, (2018) reported that quality education results from the deliberate implementation of policies and guidelines and, in the case of teacher education, is its standards. Ingvarson (2019) corroborated that teaching standards can promote quality education because of their potential to promote widespread practice of effective and successful teaching practices. The current research also aims to respond to the challenges in preparing practicumers to meet the PPST. The activities in the remote practicum program were carefully planned to help pre-service teachers develop the competencies of beginning teachers.

Redesigning teaching practicum

Developing a remote practicum program is a relatively new endeavor for TEIs in the Country. With such novelty, implementing guidelines is necessary. Peña-López (2018)

stressed the importance of policies and guidelines for ensuring the effectiveness and efficiency of schools that can result in quality teaching and learning and, in effect, impact stakeholders. More importantly, teacher policies shape the development of teachers and what they do. However, even if policies and guidelines are in place, their implementation is also challenging. Cerna (2013) stressed that the success of policies relies on their implementation. Subsequently, the changes that specific policies aim to promote can only be realized with practical implementation.

However, it is ideal to understand the requirements of the students and the demands of the course curriculum and then adopt a suitable teaching methodology that is acceptable and understandable to most of the audience. In the end, the authors support the notion of Sharp and Marchetti (2020) who said that the natural way should be to choose the correct teaching practice in the *phygital* (physical plus digital) scenario of Covid-19.

Several researchers pointed out the relevance of preparing practice teachers for the new normal. Dreer (2020) posited that field experience is still vital for practice teachers even in this 'new normal' time. However, he cautioned that the program should be well planned for the set-up is a challenge for both the supervisors and the practice teachers. Gemmink et al. (2020) clarified that the stress in experiential learning may arise from the mismatch of practice teachers' and supervisors' skills to address the virtual classrooms' challenge. In this new normal, Simonsz et al. (2020) described those beginning teachers who may possess new ideas and philosophies on their students' interpersonal and societal development that can inform the teaching-learning practices. Therefore, with the 'new learning curve' in the current education scenario, Swennen (2020) encouraged TEIs to help practice teachers develop new technical skills to help them in their challenges in the new normal. She particularly called TEIs to support practice teachers with the experiences that they can practice new skills related to technology.

While the program design of a practicum program is vital, its implementation is equally important. Tantamount to the success of the program is its efficient and effective implementation. Tuli (2009) asserted that the quality implementation of a practicum program results in quality teaching practice. Goh et al. (2009) corroborated that successful practicum programs promote confidence among pre-service teachers. Therefore, this research asserts the remote practicum program's efficiency and effectiveness and infers its implementation quality.

Theoretical framework

The current research is primarily anchored on Kolb's experiential learning theory (2015), which strongly argues that learning occurs through experience transformation. The activities provide knowledge through concrete experience, abstract conceptualization, reflective observation, and active experimentation. Thus, experiential learning promotes activities that encourage students to participate actively in the process, engage in contextualized activities, build subjective evaluations and perceptions, and embark on the inductive and explorative learning experience.

In teacher preparation, experiential learning is also deemed necessary by other educators. Camburn and Han (2015) described that experiential learning promotes reflective

practice among teachers and thus improves their teaching. Girvan et al. (2016) posited that teacher professional development is both an intellectual and a personal endeavor, and experiential learning can help pre-service teachers. It requires a solid integration between engagement and experimentation. Swennen (2020) stressed that experiential learning is the new normal in teacher education with the pandemic set-up in mind. She elaborated that both the students acknowledge the importance of experiential learning and the learners, which incorporates teachers' basic and psychological needs.

The experiential learning theory underpins the development of this participatory action research. It aims to provide pre-service teachers with experiences that can prepare them for the realities of teaching and learning. With the advent of time and the challenges in classroom instruction, pre-service teachers must be provided with authentic experiences which can contribute to their deep understanding of the complexities of classroom dynamics and ultimately allow them to experiment with strategies to confront the challenges they will face.

Methodology

This participatory action research was conducted in a TEI in the Philippines. The data-gathering procedure occurred in the third term of the school year 2020-2021 and the first term of the school year 2021-2022. All teaching practicum programs for both terms were conducted remotely. This research asks the following research questions: What principles can guide the development of remote practicum programs? What activities can be designed to conduct a remote practicum program effectively? How do pre-service teachers perceive the implemented activities? What are the perceived effects on teacher preparation of pre-service teachers?

Participants

The primary participants of the research are the two cohorts of pre-service teachers taking their teaching practicum programs. Specifically, thirty-nine (39) pre-service teachers comprise the first cohort, while 90 participants answered the survey for the second cohort. For the first cohort, more than two-thirds of the participants were female (N = 28), and the rest (N = 11) were male. For the second cohort, approximately 96% (N = 86) of the participants were female, and the rest (N = 4) were male. Most participants were relatively young, as evidenced by the percentages of students between 19 to 25 years in the first (72%) and second (94%) cohorts.

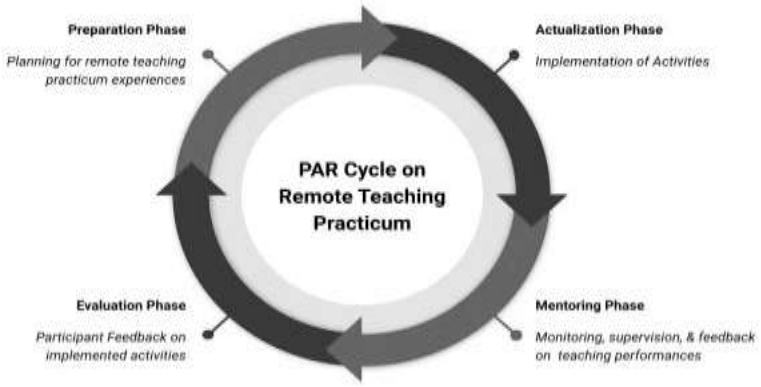
Most of the students in the first cohort major in math and science (91%), while the rest research early childhood (3%), English Language (3%), and social science (3%). On the other hand, all the participants in the second cohort were early childhood pre-service teachers. Thirty-nine percent (39%) of the students in the first cohort were deployed in the TEI's main campus laboratory, while the others were deployed in the University's campus laboratory schools. One student was specially deployed to a school for the blind. For the second cohort, the participants were deployed to the laboratory school of the TEI's main campus and various private, parochial schools (69%).

During their stay in the deployment sites, the students were tasked to handle different grade levels and subjects. The first cohort was relatively evenly distributed to elementary (49%) and high school levels (46%), and only two students handled both grade levels. Almost half of them taught Math subjects only (49%). For the second cohort, all students handled elementary grades, and they could teach various subjects. Most students said they could teach two or more subjects (44%) and were distributed across all basic education subjects.

Procedures

As mentioned, the conduct of the PAR involved two iterative cycles. Following the procedures of Brown et al. (2021), each iteration involved a series of phases: preparation, *actualization, mentoring,* and *evaluation*. Figure 1 below illustrates the steps followed in each cycle.

Figure 1. *PAR cycle on remote teaching practicum*



Initially, the PAR process in this research proceeds with the *preparation phase*, where faculty supervisors plan activities for the remote teaching practicum program. The planned activities were carefully designed following the implementing guidelines for teaching practicum. Upon approval of the activities, its implementation happened in the *actualization phase*. In the actualization phase, pre-service teachers are oriented about the program, are deployed to partner schools, and are immersed in classroom realities. Simultaneous with the actualization phase is the *mentoring phase*, in which the cooperating teachers and supervisors of the pre-service teachers constantly monitor, assess, and mentor the pre-service teachers. Finally, the PAR culminates with the *evaluation phase*, where pre-service teachers were asked about their perception of the different activities conducted and how they affected their professional preparations.

Data sources and analysis procedures

The researchers used several research methods to proceed with the different phases of the research. Primarily, the researchers used document analysis to determine design

principles for the activities in the research. According to Bowen (2009), document analysis is a systematic process of reviewing or evaluating documents to elicit meaning, gain understanding, and develop empirical knowledge. Frey (2018) corroborated that document analysis can be used in studies with mixed-method design for triangulation purposes. The documents reviewed in this research are the released policies and guidelines for conducting the online practicum teaching program from the different governing bodies of the Country and the University guideline for conducting flexible learning programs.

Strategically, the researchers used the exploratory design for mixed methods research in studying the effects of remote practice teaching in the two iterative cycles. Creswell and Plano Clark (2011) described the process of exploratory design to include collecting and analyzing the qualitative data to inform the development of the quantitative instrument to investigate further the topic of research. In this PAR, the researchers developed an open-ended questionnaire where participants of the first iteration were asked to describe their experiences on the remote practicum. After the collected data analysis, the researchers developed a survey instrument that also explored the cohort's experiences for the second iteration and determined to what extent they observed them. The data collection for the open-ended questionnaire and the survey instrument was done using a Google form.

In mixed methods studies, Creswell and Plano Clark (2011) stressed the importance of data integration. In this research, the data integration first happened at the methods level because, in the survey instrument development, the qualitative data from the open-ended questions were used as the statement for the instrument that gathered quantitative data from the participants. Also, data integration happens at the interpretation level when the data are presented through embedding. As the qualitative data from the first cohort are reported in themes, the quantitative data for the second cohort is supported.

For the qualitative analysis, the data were collected from the open-ended questionnaire. The researchers initially met and discussed the possible biases when they were in coding process. They then studied the data collected and determined valid transcripts that could answer the required question (N=236). Responses that were found irrelevant (N=46) were excluded. The researchers then independently coded the data and discussed the initial findings to develop the final coding guide. The final coding proceeded in inter-rater mechanisms to ensure the reliability and validity of the coding process. Using the formula of Miles and Huberman (1994), the inter-rater (IRR) value calculated for the level of agreements between coders is 0.68. According to Eagan et al. (2020), such IRR value is often considered reliable.

As described, the results from the qualitative data were used to develop a survey instrument for the second cohort. The instrument is divided into several parts--demographics, general experiences, preparatory activities, assistance to the program, supervision from the university supervisor, characteristics of mentor, challenges in the program, and the skills for teacher improvement. Each part, except demographics, includes statements or ideas derived from the responses of the first cohort. The survey instrument was subjected to a phase validation and garnered a mean rating of 2.70, describing it as having acceptable content, difficulty level, instructions, language, and ethics. In the reliability test, Cronbach's alpha coefficient obtained is 0.98, which implies that the survey instrument is reliable.

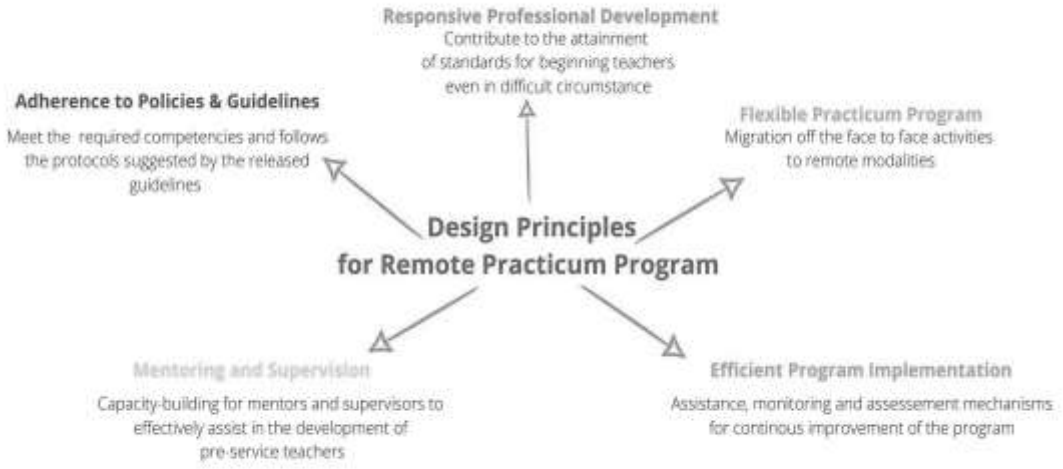
To observe ethical principles for conducting research, the Google Forms for the open-ended questions in the first cohort and the survey instrument for the second cohort include statements informing participants about the research and assuring them of their safety in the process. Lastly, their consent was obtained before the start of the survey.

Findings

This section presents the results of this research's different phases of the PAR.

Phase 1: Planning Phase, in the planning phase of this PAR, the researchers deemed it essential to identify design principles that will guide the conduct of this research. Figure 2 illustrates the said guiding principles.

Figure 2. *Design principles for a remote practicum program*



As shown in Figure 2, the program aims to adhere to policies and guidelines issued by the different governing bodies in the Country and the University. In this research, the researchers carefully considered and reviewed the policies and guidelines on how to conduct flexible learning programs in higher education institutions (DepEd Order No. 42 s 2017, CHED CMO No. s 2020, and the University guidelines for implementing remote learning PNU flexible learning delivery handbook. The said guidelines were to assist teacher education institutions (TEIs) to respond positively to the distinctive challenge and opportunity presented by the unusual circumstances surrounding AY 2020-2021 by delivering courses in innovative and flexible ways suitable to the context of educational institutions, teachers, and students. Specifically, the guidelines discuss that educational programs should be flexible and deliver only the most essential learning outcomes. More importantly, the guidelines stress the observation of health protocols in conducting classes during the pandemic.

In the Country, the standards for teacher quality are stated in the Philippine Professional Standards for Teachers or the PPST (DepEd Order No. 42, s 2017). The standards describe the expectations of teachers' increasing knowledge, practice, and professional engagement levels. At the same time, the standards allow for teachers' growing understanding, applied with increasing sophistication across a broader and more complex range of teaching/learning situations. The PPST shall be used as a basis for all learning and development programs for teachers to ensure that teachers are adequately equipped to implement the K-12 Program effectively. It can also be used for the selection and promotion of teachers. All performance appraisals for teachers shall be based on this set of standards.

That said, the practicum program in this research is to assist pre-service teachers in attaining the competencies of beginning teachers, as stated in the PPST. Hence, another design principle identified is to develop a responsive professional practicum program. The researchers agree that teacher professional development happens in a continuum from beginning to exemplary practice. As such, the researchers acknowledge the significance of a standards framework that articulates developmental progression as teachers develop, refine their practice, and respond to the complexities of educational reforms. In effect, the practicum program shall be responsive in providing pre-service teachers with opportunities to learn and practice becoming a teacher by providing them with experiences to engage in teaching strategies, assessment, classroom management, professional ethics and decorum, and other related areas.

While immersed in teaching practice, the documents reviewed stressed the importance of mentorship (TECPNRCTQ, 2019). Thus, another design principle identified is the guarantee of establishing a mentoring system**.** According to Calamlam et al. (2016), mentoring is a professional partnership process between a beginning teacher and an experienced one.

Meanwhile, the CHED Memorandum No. 4 s. 2020 mandates migrating face-to-face activities in higher education to remote teaching modalities. In other words, the CHED calls for academic programs to be transposed into flexible delivery, another design principle that the researchers consider. The pandemic scenario posed an urgent need to explore other innovative learning modalities to facilitate the transition from traditional to flexible teaching and learning options. Furthermore, the remote practicum program complements the outcomes-based education approach, allowing the HEIs to employ various means of delivery and assessment if they can show the achievement of the set learning outcomes for each course/subject for the program.

The last design principle identified by the researcher is to develop an efficient and well-implemented remote practicum program. With the other design principles in mind, the researchers also realized the importance of observing an efficient and effective process of implementing a remote practicum program. However, the primary consideration of the researchers, as inferred from the reviewed policies and guidelines, is to make sure that the program will ensure minimal health risks among stakeholders.

Phase 2: Actualization Phase, as a result of the document analysis conducted, Table 1 below shows the details of the activities for the remote teaching practicum in the research.

Table 1. *Activities for remote teaching practicum*

Remote Teaching Practicum Activities	Descriptions	Period
Orientation & Pinning Ceremony	Pre-service teachers undergo a series of orientation processes and enhancement programs. The preparation phase culminates with a commitment ceremony which includes receiving a pin that marks the beginning of the pre-service teachers' journey to the practicum program. Orientation of stakeholders in partner schools (principal, department heads, and critic teachers) was done. Done via online platforms	1 week
Deployment	By the end of the week, the pre-service teachers were deployed to the different partner schools.	1 day
Classroom Observations	The pre-service teachers observe and familiarize themselves with the school setting of the partner school, its processes, the conduct of classes, and the institutional culture.	1 week
Actual Teaching	The pre-service teachers are immersed in the teaching-learning processes, such as the preparation of lesson plans, development of instructional materials, facilitating classroom discussions, and conducting assessments. Critic teacher mentors the pre-service teachers on how to proceed with the different teaching-learning processes. The faculty supervisors from the TEI monitor the performance of pre-service teacher and gives a formative assessment. The pre-service teacher, the critic teacher, and the faculty supervisor agrees on the topic for classroom-based action research (CBAR)	8 weeks
Final Teaching Demonstration	The pre-service teachers showcase their teaching skills through an online synchronous class. The critic teacher and the faculty supervisor provide feedback on the teaching performance of the pre-service teacher	1 day
Development an electronic portfolio	The pre-service teachers submit a teaching portfolio that showcases their progress in the teaching profession and evidence of their attainment of standards	10 weeks
Conduct classroom-based action research (CBAR)	Pre-service teachers submit their output for the classroom-based action research they conducted	10 weeks

*some activities happened simultaneously

The implementation of the activities covered 12 weeks or one term for each cycle of the research. In the conduct of the activities, the pre-service teachers perceived that there was *necessary guidance and suppor*t from the Institute (M=4.5). For example, PT1 said, "[t]hey provide the necessary guidance." Examples of assistance are resources (M=4.43) and professional support (M=4.25). The pre-service teachers from the second cohort strongly agree with all first cohort's ideas regarding assistance.

In relation, the first cohort pointed out that another form of assistance they appreciate is the *ease of communication* with their cooperating teachers and supervisors. PT 11 said that "[m]y critic teachers and supervisors are easy to deal with." while PT3 relayed that "...they were very easy to approach when we needed help." Meanwhile, the pre-service teachers from the second cohort strongly agreed on the facility of communication (M=4.32). The final form of assistance identified is the *time to accomplish* the activities. Respondents from the first cohort recognized that they were given enough time to complete their activities, as PT12 indicated that "they gave ample time to us in preparing lessons before class activities...". Pre-service teachers of the second cohort strongly agreed with such statements (M=4.14). Interestingly, PT20 appreciated the extra time shared by their cooperating teachers in preparing for their teaching sessions. The second respondent also strongly agreed (M=4.14) that extra time for rehearsal to practice our presentations was provided.

For monitoring, the pre-service teachers signified that conferences are regularly conducted for checking and troubleshooting purposes (M=4.50). In the assessment, PT 7 said the process "helps me see my strength and weakness as a demonstration teacher." Survey responses on this statement corroborated with a strongly agreed mean rating (M=4.6). Lastly, the feedback process was also cited by pre-service teachers to aid in their improvement (M=4.64). To cite, respondent 36 said, "*Our supervisor and critic teacher give honest feedback. Their comments help me to be a better teacher and to strive more for excellence..."*

The research gathered the student's opinions about the best practices of ITL in the different phases of the development cycle. In the preparation phase, the pre-service teachers strongly agreed (M=4.59) that the deployment preparations and processes are among the best practices. Concerning this, PT 16 claimed that the orientation program called Patnuro *"...helped us, PT02 students, in conducting our Practice Teaching."*. The pre-service teachers also believe that the assistance in preparing and implementing classroom activities can be considered as ITL best practices (M = 4.82). It is evidenced by the responses of PT 40, who wrote that "implementation of different applications to use in teaching" is the best practice that they considered, and PT 8, who claimed that *"During our PT01, having mock demonstration teaching before the actual demonstration teaching of the practice teachers is what I believe to be the best practice in ITL."* The pre-service teachers also lauded the mentoring abilities of their critic teachers (M = 4.95). PT 21 shared, "*I think the best practice of ITL is the orientation and provision of supervisors from them. Having someone to advise us on doing all the required tasks greatly impacts us. It creates a strong foundation for us and helps us improve*.". Lastly, the supervision and feedback of their assigned professors made the pre-service teachers feel that these are the best practices. It is supported by the response of R76, who said that "*Last term, I love how ITL conducts post-conference every after class. I gained so much insight from my CT and co-PTs comments and suggestions on my performance.*

Phase 3: Mentoring Phase, the role of mentors is an essential part of teaching practicum programs. In this PAR, the mentoring phase happened simultaneously with the actualization phase. The faculty supervisors and the critic teachers worked closely to guide the pre-service teachers in their conduct of the different teaching-learning and research activities.

The exposure of the pre-service teachers in the mentoring phase seemed to show that they appreciated the process as they perceived their mentors to be effective by providing

professional guidance, extending instructional support, modeling good teacher qualities, and showing care and understanding towards them. The development of pre-service teachers needs *professional guidance* from mentors and, in this case, the cooperating teachers. Interestingly, the pre-service teachers from the two cohorts reported that their cooperating teachers guided them by giving sound advice (M=4.64), training them to improve their questioning skills (M=4.61), and extending time and effort for their concerns ((M=4.68). Moreover, pre-service teachers appreciated their open communication with their mentors (M=4.68), and their efforts were appreciated (M=4.71).

For *instructional support*, the pre-service teachers pointed out the generosity of their cooperating teachers in sharing resources with them. For instance, PT04 said, "They were very generous in their time and resources to share it with us," to which the pre-service from the second cohort strongly agreed (M=4.39). The pre-service teacher from the two cohorts also reported that their cooperating teachers allotted time to check their lesson plans (M=4.39) and give feedback on their outputs (M=4.61). As PT13 said, she appreciated her mentor for "Checking LPs even on weekends, observing mock demos, and correcting and giving feedback to my demo. "Consequently, the pre-service teachers felt their mentors supported them in developing their instructional skills for online classroom realities (M=4.61).

The pre-service teachers also valued how cooperating teachers *modeled the professional conduc*t of a teacher (M=4.61). Specifically, pre-service teachers strongly agreed that their mentors modeled excellence in teaching-learning situations (M=4.71). As PT 5 said, "My mentor is excellent. He is good at both content and pedagogy. Above all, he has a heart for the students." The pre-service teachers also strongly agreed that their mentors promoted collegiality (M=4.71) in dealing with them. As such, their mentors inspired them to become proficient teachers (M=4.68) as well.

The last perception of the students for mentoring is the positive human relationship promoted by their mentors. For instance, PT 7 described his mentor as " understanding " his personal circumstances. Other pre-service teachers strongly agreed that their mentors showed care and understanding of their difficulties (M=4.64). Moreover, the pre-service teachers pointed out that their mentors showed concern for their well-being by constantly checking their physical and mental health (M=4.43). A sample response by PT 33 is cited for such observation:"...they also keep our health and mental health in check, and that is what I am grateful to my CTs." Lastly, the pre-service teachers valued the presence of their mentors during their classroom demonstrations, for it somehow encouraged them to do better (M=4.57).

Phase 4: Evaluation Phase**,** the evaluation phase of the research describes the pre-service teachers' perception into three categories—program implementation, challenges encountered, and effects of professional development.

Perceived effects on professional preparations, the juxtaposed data from both iterations seem to reveal an alignment between the experiences of the two cohorts. While the data gathered from the first cohort described the different experiences of the pre-service teachers on the remote practicum, the data collected from the second cohort corroborates their agreement with them. Almost all data gathered from the survey revealed that

pre-service teachers strongly agree with the experiences described by the research's first cohort.

Fundamentally, several responses from the first cohort of pre-service teachers described that the program affected their *motivation* for teaching. Han and Yin (2016) defined *teacher motivation* as energy or drive that moves teachers to do something in their context. It is why teachers decide to act on something they encounter in their classrooms and determine the sustainability of such measures. Conversely, the pre-service teachers described the program as exciting and memorable. Such excitement may be due to the program's novelty, which other respondents pointed out. With such motivation, other respondents described the program as meaningful and fulfilling.

The data gathered from the survey on teacher motivation revealed general 'strongly agree' responses (M=4.19). Among the several statements on teacher motivation, the most strongly agreed response is the statement describing the program as meaningful (M=4.57). On the other hand, the statement with the lowest mean but still indicates an 'agree' response is the statement that the program is exciting (M=4.03). Another effect of the remote practicum program is on teacher *readiness*. Lynch et al. (2017) defined *teacher readiness* as a state of being that describes the ability of teachers to engage in different teaching and learning tasks. Teacher readiness is essential for the achievement of the goals and objectives of the schools.

With the current dilemma that schools are facing due to the pandemic, pre-service teachers be prepared for their tasks. Interestingly, a respondent (PT 18) in the first cohort relayed that the remote practicum exposed them to the realities of online teaching and learning that enabled them to *"...learn new things and new methods of teachings,"* which respondents from the second cohort strongly agreed (M=4.62). Perhaps with such exposure to online classes, the respondents from the two cohorts seem to perceive that the process allowed them to develop their creativity and resourcefulness. Also, the data from the two cohorts seem to agree that the remote practicum program allowed them to experience teaching students of varied cultural backgrounds. Lastly, one of the respondents (PT 21) from the first cohort said that her online classes made her realize that teachers should be ready to face the camera in their online classes. Thus, mindfulness in appearance, speech, and action is essential. The second cohort's data supports the observation of PT 21 (M=4.50).

Lastly, *teaching efficacy* is another area identified that remote teaching practices have an impact on. The current research adapts the definition of Seneviratne et al. (2019) defined teaching efficacy as the ability of teachers to organize and manage different teaching-learning tasks. Such ability influences their potential to execute teaching-learning activities that successfully guide students to achieve their learning goals.

Regarding teaching efficacy, the pre-service teachers described that their experience in remote practicum equipped them with pedagogical content knowledge for online teaching. For example, PT16 said, "*I was able to provide students the essential contents they need for the subject I taught, providing pedagogies that align the technological needs for online learning." The* respondents from the second cohort strongly agreed (M=4.38) on such observations. Also, pre-service teachers' responses reveal that they experienced the design and development process of instructional materials. For instance, PT27 said, "*I enjoyed the everyday teaching. It helped me develop*

myself as a teacher. It was tiring to prepare materials for everyday sessions, but it made me realize that "this is the world of teaching." Consequently, the survey results show that the average mean for this statement is also strongly agreed (M=4.50). Regarding online classes, some pre-service teachers shared that the remote practicum made them overcome challenging circumstances (f=1; M=4.31) and deal with difficult learning situations (f=1; M=4.37). The experiences shared by the pre-service on their remote practicum reveal that the program contributes to their teaching efficacy.

Challenges encountered, it was inevitable for the pre-service students to experience challenges throughout their practicum. The responses about what they consider challenging were obtained from the participants of the first and second cohorts. The biggest obstacle that the pre-service teachers experienced was internet connectivity. PT 26 from the first cohort shared, "*The most difficult challenge that I encountered in my remote practice teaching that I think should be addressed is the internet connection of the students.*". The same sentiment was shared by participants of the second cohort, as PT 51 wrote, "*So far, internet connection is my biggest challenge. It is so hard to attend class and not be able to hear my students nor see them because the internet connectivity is not good at all.*"

Another set of challenges was grouped under the teaching competence theme, including technological competence, professional competence, and personal competence. Under technological competence, pre-service teachers in the first and second cohorts shared challenges involving the technology and specific applications utilization. PT 16 from the first cohort personally believes that "...adaptability to technology is still one of the biggest challenges in being a remote practice teacher." They suggested that "...proper training, social and financial support can help future PTs address these challenges." In the second cohort, PT 42 expressed their frustration with using Google Meet, where they wrote, "*I find Google Meet challenging to manage the virtual class. It only shows a max of nine tiles of participants on your screen, so you cannot see all your students. It is hard to know who wants to recite.*"

Professional competence shows hardships experienced by the pre-service teachers in their virtual classroom teaching and learning environment. PT 36 of the second cohort pointed this out in general when they said, "*I think it would be knowing what strategies and methods you can use to deliver your demo effectively are two of the most challenging parts of the demo.*". Specific challenges and ways they were addressed were either shared or offered by pre-service teachers of the two cohorts. For instance, when the challenge was a language barrier or the differences in the native language of the teacher and its students, PT 11 of the first cohort turned to their critical teacher for help. "She assist(ed) me all the way.", she wrote. PT 19 of the first cohort recognized that student engagement during synchronous sessions is another challenge "Because of poor signal in some area(s), students were not able to join in some classes; also, they were not required to open their camera to save data. Some of them are not participating during class discussion." As an effort to address this, they said that "...we maximize the use of chat box for them to participate.". Assessment, may it be formative or summative, became another challenge for pre-service teachers in distance learning. PT 23 of the first cohort claimed "... identifying if the students really learned what we taught to them." is a hardship. They suggested that "*It could be addressed by giving them an appropriate approach and understand(ing) their needs in terms of their preferred way of learning*." Lastly, having a personal space where the pre-service teacher can deliver their lesson is essential. However, some do not

have this privilege. PT 25 from the first cohort shared that "*In my situation, I don't have any place that is good when doing online teaching because there are so much noise in our place such as the sound of tricycle, karaoke that is distracting.*" To teach the lesson, this student goes "to my classmate's house when I have demo teaching because he has a place that is quiet, and I think my demo teaching goes well."

The third set of challenges related to teaching competence is personal competence, which looks at the pre-service teachers as individuals. At times, pre-service teachers feel that they need to prepare. PT 10 from the first cohort revealed, "*There are times that I want to quit because I do not have the motivation to complete my lesson plans. It is because I was not that knowledgeable about the topic assigned to me, so I kept on writing and erasing my plan.*". There were also other pre-service teachers struggling because "... some are experiencing mental health issues." according to PT 33 of the second cohort.

The last theme is procedural, which includes challenges that result from the pre-service teaching process. PT 37 from the first cohort named two when asked about the challenges in the process. They shared that "... I was challenged in completing my demo presentation in exactly one hour. Lastly, speaking the English language ONLY in discussing my topic was also challenging." PT 2 from the same cohort shared sentiments about the instructions. They said, "I sometimes get confused with instructions because supervisors seem to not communicate with each other." PT 63 from the second cohort had stronger opinions about instructions, where they claim inequality. According to them, "*Inaccurate disseminated information/instructions. Workloads of PTs from different CTs vary, which is quite unfair since most of us handle 3-5 sections while some only handle 1 section. In that way, we do not experience equal training and exposure to the reality of the field.*"

Discussion

The discussion of the results in this research is primarily anchored on the different design principles identified. The researchers discuss in this section their insights and reflections on their observations on the research result and infer implications on the design principles identified.

On adhering to the policies and guidelines**,** consequently, the research's results suggest that the activities designed and implemented for remote practice shed light on how TEIs can observe the policies and guidelines. The development of the practicum program in this research primarily considered the policies and guidelines released by the country's different governing bodies. Specifically, the released joint memorandum from CHED and DepEd (2020) guided the activities for the enactment phase of the research, like classroom observations, demonstration teaching, portfolio development, conducting the assessment, and engaging in the conduct of actions of research. That said, implementing the activities from the released guideline somewhat validates its effectiveness.

The results suggest that the activities are feasible and positively impact pre-service teachers. Moreover, there were no reported cases of covid infection among pre-service teachers while on the remote practicum program. Nevertheless, while the results imply that the activities in the released CHED and DepEd (2020) guidelines are feasible, the researchers suggest that TEIs should contextualize the activities for their own experience.

For instance, the internet connection challenged the success of the remote practicum program; hence when thinking of flexible learning activities, the researchers suggest devising a mechanism that will still allow pre-service teachers to proceed with the activities while adjusting to their bandwidth problems. Perhaps, careful planning of synchronous and asynchronous activities so institutions can assist pre-service teachers in their practicum will help.

***On responsive, professional practicum program*,** reflecting on the research results, it seems that the remote practicum program responded to the needs of the pre-service teachers to be trained in the identified areas for improvement of a beginning teacher. As evidenced by the qualitative experiences of the first cohort and the strongly agreed responses of the 2nd cohort on the enactment phases, the remote practicum program implies preparing them to experience and possess requisites for teaching and learning processes. The positive findings for cohorts on mentoring reveal that also the program allowed the participants to establish a professional relationship with their cooperating teachers and supervisors.

On another note, the researchers believe in the importance for pre-service teachers to develop teacher identity, and in this case–becoming a beginning teacher. To realize one's teaching identity, Bosso (2017) pointed out two factors–motivation and efficacy. Incidentally, the research's results identified the said factors as effects of the remote practicum program on pre-service teachers. According to Bosso (2017), motivation and efficacy support teaching as an emotional and vocational endeavor; thus, these factors necessitate a teacher's success in the profession. While standards are crafted to better the profession, they can also challenge one's motivation and efficacy. Interestingly, the positive motivation and efficacy of pre-service teachers as they were exposed to the remote practicum program are hoped for their achievement of the PPST for beginning teachers.

The results revealed that the pre-service teachers desire to develop better content, knowledge, and pedagogy. Perhaps, the novelty of the context of online or remote learning challenged them since their professional preparations are for face-to-face classrooms. This observation seems to support the findings of several researchers (Kim, 2020; Özüdoğru, 2021) that remote teaching and learning are incredibly challenging during this pandemic. Nevertheless, the researchers acknowledge that pre-service realization to develop their PCKs for teaching and learning further signifies a positive attitude toward further professional development, which, according to Bosso (2017), is always beneficial for the school and the students.

***On the efficiency and effectiveness of the practicum program*,** in their research, Tuli (2009) identified the qualities of an effective and efficient practicum program. A quality practicum program allows the integration of theory and practice and provides diverse experiences for pre-service teachers. Accordingly, the results of the research show that pre-service teachers could realize how the theories they have learned in their professional education courses work in an actual classroom. As evidenced by their broad experience, the participants could assess their readiness for the different teaching-learning processes, such as navigating the relatively new online classrooms and even understanding student culture.

Another criterion by Tuli (2009) is articulating progressive development to attain the standards. As discussed in the previous section, the remote practicum program was designed

to help pre-service teachers develop beginning teacher competencies, and the results on general experiences support the researchers' claim. Additionally, a quality practicum program is flexible and encourages innovation. As to the program's design, it is evident that the remote practicum program in the research allowed pre-service teachers to innovate through their pedagogical practice and classroom-based action research.

Lastly, one of the characteristics of an effective practicum program by Tuli (2009) is establishing a partnership between the TEI and the partner school where practicum activities will be conducted. In this research, a memorandum of agreement was signed between the University and the school district where the partnership on practicum happened. By practice, establishing a Memorandum of Agreement (MOA) with a partner public school takes time. With the pandemic situation, time is of the essence to the program and other resources. Therefore, the Institute strategized to find other schools for deployment to have a more efficient process. Instead of deploying pre-service to public schools, the University decided to utilize its branches and partner with private schools with online modalities to quickly deploy pre-service teachers for practicum and ensure no face-to-face process will happen.

Adding to an efficient practice is the observation of constant communication with principals, cooperating teachers, and practice teachers by the supervisors, coordinator, and University administrators. Such practice is to monitor the performance of the practice teachers and address the emerging challenges within the term. The use of social media, Zoom, and Googleplatforms was maximized for communication-disseminate information, instructions, meetings, and classroom observations.

***On the flexibility of the program*,** this PAR also envisions developing a flexible remote practicum program. As the pandemic will not be permanent, the remote practicum program in the research also aimed to be implemented in different modalities. According to Ali (2020), a flexible remote program allows learners to move within and across education training and employment. Implementing a flexible program ensures that activities will not be repetitive and encourages learners to progress at a higher level and prepare for a long-term career. That said, the researchers reflect on the activities implemented for the research and determine its flexibility.

Consequently, the activities implemented were based on face-to-face activities for practicum. With the results of the program's enactment, it appears that the activities were flexible in content and implementation. However, the researchers acknowledged that there is still a need to further explore the flexibility of the project. For instance, it would be interesting to know how the preparatory activities are translated into asynchronous activities. It is to allow pre-service teachers to be trained at their own pace.

On mentoring and supervision, the research results imply that pre-service teachers acknowledge the importance of mentoring in their professional development. As evidenced by their responses in the mentoring phase, pre-service teachers realized the roles of their mentors in guiding them professionally, providing them with instructional support, and even modeling professional conduct. This observation agrees with the research of other researchers (Calamlam et al., 2016; Orland-Barack & Wang, 2021) that mentors possess different roles in the practicum program.

Meanwhile, the researchers identified mentoring and supervision as a design principle of the research to provide a model on how mentoring processes proceed effectively in preparing pre-service teachers. However, the researchers acknowledged that data collection had been research limitation. The data gathered from the pre-service teachers could be used to develop a generalized model for mentoring; hence the researchers recommend follow-up research on the said goal.

Conclusion

The research's primary goal is to develop a remote practicum program for pre-service teachers. Based on the results, the research's remote practicum program developed posed an example of how to implement the different guidelines and policies for flexible practice teaching. Also, pre-service teachers' experiences in the implementation of the research seem to indicate that the program is responsive to their preparations as beginning teachers. The program's implementation also gathered responses describing its efficiency and effectiveness. The results also indicate that the activities have the potential for flexibility. Lastly, the research's results determine the roles and responsibilities of cooperating teachers as mentors in the program.

On the other hand, the results for the refinement phases suggest areas for improvement in the subsequent iterations of the research. It has been evident that pre-service teachers need more training in facilitating teaching learning in online classes. As they venture into the relatively novel online teaching and learning, they indicate the need to be ready personally and professionally and stress the importance of improving their ICT competencies. As the program is an innovation and a novel endeavor for teaching practicum, the researchers acknowledge its potential limitations. Specifically, the program was implemented in a pure online modality; hence challenges in communication between parties are expected. Nevertheless, the researchers will study how to further improve the communication mechanism between and among the program's stakeholders.

Declaration of Conflicting Interests

The authors declared no potential conflicts of interest.

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