

Research Engagement: A Participatory Approach Of Learning For Public School Teachers

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Abstract.

Teacher research participation in pedagogy advancement, personal growth, and professional development provides a wide range of benefits. This paper aims to assess the teacher research engagement and learning based on the extended intervention program conducted by Occidental Mindoro State College – Graduate Scholl Unit by determining its relevance, planning, implementation, resources, monitoring, and evaluation. The analysis presented the strategies, intervention, effectiveness and challenges, lessons learned, and contributory factors gained by the participants as part of the training program of the Department of Education - Calintaan district. Results revealed that the concluded intervention program in research capability was very effective, indicating that it helped teachers enhance their research engagement.

Keywords: *capability building, engagement, participatory approach, public school teachers, research.*

I. INTRODUCTION

The Philippine higher education institutions experience challenges at various stages of the research, which include improving the research capabilities of faculty and graduate students. The institutions have a role in developing research capacity through essential skills engagement and reflexive learning initiatives [1]. There is a need to instill a research culture research vocation, upgrade physical resources and research infrastructure, build-up, retrain, and retain a sustainable stream of a new generation of researchers to increase research productivity and raise research quality and impact. For complicated problem-solving, research engagement is critical for generating knowledge and innovations in practice [2]. Research is investigating the body of knowledge. Developing a solid evidence foundation to support decision-making in practice requires increased involvement in the research process, which leads to improved skills and the ability to conduct valuable research [3]. Therefore, teachers are encouraged to research to systematically assess the problems to identify solutions and interventions appropriate to the situation. However, the institutional research culture signaled the discrepancy between the predicted research productivity and the support they received from their university [4].

The Commission on Higher Education (CHED) is mandated to do faculty research activities, while the Department of Education (DepEd) provides funding assistance to eligible proponents based on its priority areas. The goal is to conduct

research and create policies and programs based on evidence [5]. In the case of teachers' professional development and competence, it is essential to have research engagement [6]. The role of research awareness needs to be emphasized [7]. The international top-down, regulatory approaches to teacher professionalism promote a conservative and risk-averse profession [8]. Today, writing a research paper is very challenging because it involves writing and undertaking several methods like reviewing, re-submission, and publishing. Research interest was often higher than their level of confidence and competence, with many of them having little or no experience with most research tasks and satisfying organizational research engagement goals research capacity development initiatives to improve their research skills [9].

Commonly teachers take part in research for their academic and professional advancement. For instructors, participating in research can be a gratifying experience. It improves their working lives, broadens their horizons, and makes them more attentive to students' classroom experiences [10]. Teachers' research engagement can be influenced by various factors, including professional growth, institutional expectations, and pedagogical concerns. The main motives for teachers to participate in research are still their professional development and pedagogical concerns [11]. Continuing professional development for teachers can be quite valuable [12]. Teacher research has been found to have a wide range of advantages in teachers' personal growth and professional development and participation in pedagogical advancement [13]. Thus, they are now eager to learn ways to write a good research paper. They know that it is not easy to construct scientific papers that are logically organized, concisely written, and meet the reader's and reviewers' expectations without proper training. Apart from learning research writing techniques is an excellent beginning to come up with a good research paper. Most people undertake research to answer questions, share findings, understand a specific topic, and strengthen research writing and analytical skills. Therefore, extension programs in higher education institutions provide the space to discover practical, evidence, and science-based answers to address partner citizens and communities' real-world social, economic, and environmental challenges.

In addition, extension is one of the three primary functions of higher education, in line with the present Administration's thrust to mobilize knowledge and technology towards enhancing productivity, generating employment, and reducing poverty. Therefore, higher education institutions have been actively conducting research and extension programs/projects, including transferring and applying technology/knowledge that contributes to attaining the country's development goals [14]. The graduate school provided advancement of knowledge and learnings to the DepED teachers through an extension service program. The program aims to provide information and supplementary materials to improve teachers' engagement in research. As a result, the program extended knowledge to the participants to organize a scientific research paper, emphasizing preparing, writing, and knowing strategies in publishing

articles in reputable journals. With this, it is also essential for the researcher/attendees to see the publication process from a science journal editor's perspective to arrive at an accurate science journal for their paper and know the peer review process. This paper aims to help the school and community attain its objectives: to develop new ideas, concepts, and strategies for learning. This paper presents the extension approaches and techniques used to improve Basic Education Teachers' research capabilities in Calintaan, Occidental Mindoro. Specifically, this intends to:

1. describe the strategies employed in the conduct of extension activities;
2. enumerate the interventions conducted to address the needs of teachers;
3. evaluate the effectiveness of the program undertaken;
4. list the challenges encountered in the conduct of the extension program;
5. enumerate the lessons learned to sustain the program; and
6. present the contributory factors to the success of the program.

II. METHODS

The Occidental Mindoro State College- Graduate School initiated activities for DepED teachers of Calintaan Central School under the community-based extension programs. The program started with a meeting with the school head and faculty. Then, the unit conducted participatory rural appraisal (PRA) with the teachers to assess their needs through the help of their principal. Next, a series of consultative meetings were conducted with authority to discuss the details of the program proposal. Finally, after a series of meetings, a final copy of the program has accomplished the Research Capability Building for teachers and Research Publication and Writing. The process undertook a collaborative effort with concerned officials and employees from DepED Central School to launch the program. As a result, the head and faculty appreciated the conduct of the program because it opened a great opportunity for them to understand the importance of research.

The graduate school extension coordinator proposed a training design incorporating the rationale, objectives, budget allocation for both parties and sought the help of the institution thru the Research, Development, and Extension Office for the approval of the training design. For validation and verification, the principal of Calintaan Central School was given an approved copy. After the consent of their head, the MOA signing followed and was held at the Calintaan Central School. Thus, the program development, IEC materials development, and the implementation proper were adequately implemented. The study was conducted in Calintaan Central School teachers with 85 participants. Initial community meeting to introduce the extension objectives. The extended webinar was through zoom and provided a copy of the recordings to the teachers. The activities serve as a great help in achieving the program's success.

III. RESULT AND DISCUSSION

Strategies Employed in the Implementation of the Program

Figure 1 shows the strategies employed in the different phases: planning, development, dissemination, and program evaluation. This strategy is a helpful tool in implementation before and after the conduct of the extension program.



Fig 1. Strategies Employed

In the implementation of the extension program for the teachers of Calintaan Central School, the following was accomplished:

Planning

PRA results served as the baseline data in conducting thorough planning. Primarily, a plan of action was made to attain the goals of the Extension Program. Specific objectives were answered through the different activities. During this stage, participants were identified, resources were listed, and set the time frame. The Memorandum of Agreement (MOA) signing was done to further facilitate the implementation of the activities and for both parties to be guided on their responsibilities and roles during the conduct and accomplishment of the program.

Development

The program development was done through a consultation with the school principal, graduate school head, coordinators, and participants. This paved way to establishing a linkage partnership had tried their very best to strictly follow the time frame based on the action plan, although being constrained by some unforeseen situations that occurred beyond the control of the implementers.

Dissemination

The implementation of the program is properly coordinated and organized. The identification of resource speakers was properly coordinated with the Extension Unit of the institution. The invitation letter was sent to the faculty expert who will extend their expertise. The conduct of a series of webinars to reach out to the participants was done properly.

Evaluation

The monitoring and evaluation of the project were conducted with the help of the school principal. Before the start of another engagement, there was an assessment

of the prior learning achieved by the participants. Therefore, their engagement and participation only signify their learning engagement. The program development cycle was utilized to understand the process and engagement implemented in completing the extension program. Figure 2 shows eight different parameters used in the implementation of the extension program of the graduate school. The process utilized involves the review of the situation, stakeholder consultation, and resource mobilization that leads to the first process of learning, modification, and improvement. The stakeholder's engagement is beneficial in the planning process because of their opinions, suggestions, and recommendations.

The situation analysis provides a deeper understanding of the needs and issues faced by the stakeholders. The consultation process with the heads and teachers is a great help in identifying their needs because their inputs and feedback are all necessary and valuable. The identification of goals and objectives serves as a guide in implementing the program. The training design and necessary resources identification of tasks are vital. The essential method suitable in today's setup is identified. Materials needed for the activities were classified and assigned to individuals who will play a significant role in its implementation through proper coordination, communication channel, and proper dissemination of information to all the concerned people identified. The evaluation of the extension program is done right after each activity. The preparation of reports and analysis of the results help improve the extension program.

Interventions conducted

The extension program is a continuous process for teachers. A series of intervention activities were introduced and is still in progress. However, the programs and projects were primarily addressed and identified the most pressing issues in the PRA. Providing an intervention program helps the teachers appreciate the importance of research writing and publication because of the detailed discussions offered by the experts in the field of research.

Furthermore, the conducted intervention was online due to the guidelines imposed following health and safety protocols implemented in the province. Figure 3 shows the different interventions introduced to the teachers of Calintaan Central School that they can utilize to understand themselves and relate these topics to how they improved their research capabilities. The identified topics are based on their needs and abilities, and the experts provide helpful information and examples for the participants to understand and appreciate the training engagement.



Fig 3. Extension Intervention Conducted

Extension Tool Rendered

Extension promotes knowledge, and communication is an essential competency for the proper implementation of extension tools. Therefore, it is necessary to identify the information or idea coming from, the main idea or message being communicated, how the information is being distributed, and who will receive the information. Broadcast and digital media can reach millions of people. The media tools are used to store and deliver information.

Digital media such as the internet and mobile communication require computers and mobile phones. This includes social media sites such as Facebook, Youtube, and others that can spread information. The extension program was extended by using zoom as a conferencing platform. The participants join through their mobile phones, tablet, laptop, and personal computer. In addition, a recorded video was provided for participants who experienced power interruption and intermittent internet connectivity, which serves as a great help to meet the challenges of spreading information to teachers.

Effectiveness of the Program

Table 1 presented the result of the respondents' assessment, and data shows the level of effectiveness on the conduct of the program as evaluated by the participants as indicated by the overall mean of 4.91, which is considered very high. Moreover, the participants who evaluated the training as timely and relevant obtained the highest mean of 4.98. All the participants were satisfied with the training and service program provided by the unit (4.93). This includes the trainer's expertise, strategies, and methodologies. At the same time, the provided information on research capability building achieved a high level of evaluation (4.92) based on the program's identified objectives and the participants' priority needs. Participants also had a high level of assessment of the program content due to its organization, and they were able to follow the program flow.

Although it's quite different from a face-to-face engagement still, the participants appreciated the process, which gained a mean of 4.89. The two other factors, such as the program being interesting and engaging and the lecturer demonstrating knowledge in the subject matter, had obtained the same mean of 4.86. Overall, the majority of the participants had a very high level of assessment of the

implementation of the extension program. The participant's feedback is helpful in the program's sustainability and in evaluating how to improve the program implementation. Therefore, the extension program is necessary, timely, helpful, and valuable because the trainer met the training objectives. In addition, the participants appreciated the inputs provided by the speakers in their initial engagement with research writing, which is a manifestation of the importance of the program extended to them.

Table 1. Assessment of the Effectiveness of the Program

Criteria	Mean	Interpretation
1. The program is interesting and engaging.	4.86	Very High
2. The program content was organized and easy to follow.	4.89	Very High
3. The program provided information on the Core Components in Research Writing and The Trends in Educational Research.	4.92	Very High
4. The program provided information on the Core Components in Research Methods and the Process and Strategies for Research Paper Publication	4.90	Very High
5. The lecturer demonstrated knowledge of the subject matter.	4.86	Very High
6. The training was very timely and relevant.	4.98	Very High
7. I am satisfied with the Training/Service Program availed.	4.93	Very High
Overall Mean	4.91	Very High

Challenges encountered by Teachers in doing Research

In the course of the program implementation, the following challenges were met, and made corresponding solutions were:

The reality in the teacher's research engagement is that teachers are qualified to conduct research, but things need to be considered, such as time and money. In addition, the pressure in school work causes a struggle for teachers to engage in additional research tasks. Teachers also have limited access to a research journal, and there are no library facilities. The support of the school in teacher's research engagement opens an opportunity for teachers to learn and recognize their capabilities. In addition, the technological developments help facilitate collaboration and grow teachers' research professionalism. The intermittent internet connectivity significantly affects the participation of the participants because some participants experience low bandwidth in their place because of their location.

Therefore, the principal of Calntaan Central School was given a copy of the video recording. In addition, she facilitated the recording distribution to the teachers who experienced a loss of connection. The availability of speakers is also a struggle due to the conflict on the schedule of activities and the commitment of the resource speakers identified in the online training series. The extension coordinator conducted a meeting with the graduate school head to determine the availability of resource

speakers capable of extending research expertise. As a result, proper coordination with the recognized resource speakers was accomplished. Power interrupt is another issue because, during the conduct of the extension program, there were scheduled brownouts within the area, and coordination with the planning office was done through a request of power assistance in case of brownout.

Lessons Learned

The following were the lessons learned from this project;

1. Teachers need to be empowered in research engagement to sustain the program extended by the Extension Unit.
2. Implementation of the program is challenging because of the utilization of technology in its execution.
3. Establishing linkages with the other DepED schools and Higher Education Institutions (HEIs) in the program's delivery, implementation, and sustainability can help mobilize resources.
4. The teacher's awareness and appreciation of the research writing process provide them an excellent experience for the wide dissemination of the program.
5. Teachers are interested in writing research papers. However, they need time, effort, and proper guidance from experts in the field.
6. They provided strategies and appropriate methodologies for teachers to appreciate their research writing capabilities.

Contributory Factors concerning the success of the Program

The following are the factors perceived that contributed to the attainment of the goals and objectives of the program.

1. The willingness and support of the principal and teachers in implementing the program.
2. Support of the RDE unit of OMSC in providing funds can impart technologies and services.
3. Built linkages with other agencies and organizations.
4. Active participation of the teachers in different activities.
5. Dedicated faculty and experts in the implementation of the plans.

IV. CONCLUSION

The strategies employed in the program's implementation provide a guiding tool to its success. The intervention approaches introduced to the DepED teachers of Calintaan Central School, such as discussion, lectures, question, and answer, and video presentations were responsive to their needs. The effectiveness of the extension program was "Very High," which showed that the program's objective was achieved and attained. The challenges in the conduct and implementation of the extension program were identified and addressed. The lessons learned and feedback provided by the participants in the performance of the extension program were identified.

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