

Exploring the Influence of Field-Based Learning Experiences on the Professional Development of Pre-Service Teachers

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Abstract. This study investigates the impact of field-based teaching experiences on the professional development of 110 randomly selected pre-service teachers at a Philippine State University in Binan City, Laguna, Philippines. Utilizing an inferential quantitative research design, the study employed a researchers-made survey questionnaire that was validated and tested for reliability ($\alpha = 0.92$), distributed via Google Forms, and analyzed through mean and Pearson “r” coefficient correlation. The findings revealed that field-based experiences were implemented very well ($M = 3.844$), with students generally rating their professional growth as very high ($M = 3.816$). Furthermore, calculated correlation analysis indicated a strong positive significant relationship [$r(108) = 0.891$, $p = 0.0000$] between field-based experiences and professional development. The study concluded that these field experiences significantly enhance students' practical understanding, confidence, instructional and assessment skills, and commitment to life-long learning. Recommendations include the strict implementation of practice teaching processes, the establishment of evaluation mechanisms for continuous improvement, and further research to investigate differences across fields of specialization and types of higher education institutions.

Keywords: Field-based learning; Influence, Pre-service teachers; Professional development.

1.0 Introduction

Teaching practice is vital to all teacher education programs, allowing graduates to earn a teaching credential. It allows student-teachers to apply the teaching methods they have learned during their studies. Through teaching practice, they gain real-world experience in the classroom before officially becoming teachers (Mahmood et al., 2023). This process helps develop essential skills such as communication, teaching techniques, and cultural understanding beyond just knowing what and how to teach (Garcia-Noblejas et al., 2023). The teaching practice program has three main goals: a) to let student-teachers apply their knowledge in natural settings, b) to assess their potential as teachers and offer feedback, and c) to provide practical experience in managing classrooms and adapting to new challenges. In the Philippines, student-teacher practice is a long-standing tradition in teacher education programs, where students typically spend four years in structured learning. However, practical teaching experience can sometimes be limited.

Professional growth is essential for every teacher, improving their knowledge, skills, and effectiveness. This includes workshops, conferences, advanced degrees, and online courses. Professional development is an ongoing process that helps teachers stay current with new teaching methods and strategies, directly impacting the quality of education (Taylor, 2020). By engaging in professional development, teachers can adapt to evolving educational practices and meet the diverse needs of their students. This enhances student learning outcomes and boosts teachers' confidence and expertise, making professional development a critical factor in educational success (Neyney et al., 2023).

While many student-teachers view teaching practice as an exciting opportunity to apply their knowledge, significant challenges often accompany it. Despite training in teaching techniques, many struggle to effectively apply theoretical knowledge in real classroom settings (Childhope Philippines, 2021; Yu, 2023). The Philippine education system faces broader issues, such as curriculum gaps, inadequate teacher training, resource shortages, and misalignments between teacher specializations and their assigned subjects (Educating Teacher Education, 2023; Hegwood, 2023; Jones, 2023). These issues impact student learning and teacher preparedness. Although previous research has highlighted challenges such as insufficient training, low compensation, and inadequate resources, the specific role of practice teaching in shaping the professional growth of education students has not been fully explored. The gap lies in understanding how practice teaching directly influences the development of essential teaching competencies and professional skills among student-teachers, which this study aims to address.

This study is based on Social Cognitive and Experiential Learning Theory (Kolb, 1984), which posits that learning is a cyclical process involving concrete experiences, reflective observation, abstract conceptualization, and active experimentation. It emphasizes observational learning, modeling, and imitation (Bandura, 1986; Kong, 2021), where students learn by observing and interacting with experienced educators (Hoose, 2020; May-Varas et al., 2023). Previous studies have used this framework to assess how field experiences contribute to skill development and professional growth in education students. During field experiences, education students actively participate in teaching, reflect on their actions, and derive general principles from these experiences. Observing experienced teachers allows students to internalize effective teaching practices and classroom management skills, which helps shape their professional identities. The continuous cycle of experiential learning, as students apply their new knowledge in real-world situations, is hypothesized to enhance their professional development significantly (Cherry, 2022).

This study holds significance for various stakeholders. University supervisors can gain valuable insights to improve field experience programs, ensuring they provide substantial learning opportunities for education students. Stakeholders, such as school administrators and policymakers, can use the findings to enhance teacher recruitment and policy implementation. Cooperating teachers will benefit from guidance on mentoring student teachers during their practicum. In contrast, pre-service teachers will gain a deeper understanding of how to apply theoretical knowledge in real-world settings. Additionally, researchers can use the study to assess their teaching readiness, and future researchers can build on the findings to explore further areas of professional development in education.

The main objective of this study is to explore the influence of field study and practice teaching on the professional development of graduating college education students. Specifically, the researcher aims to: a) determine the extent of the implementation of field-based teaching experiences; b) identify the perceived level of professional development attained by graduating students through their participation in field experiences; and c) investigate the significant relationship between the extent of field-based teaching implementation and the perceived level of professional development among graduating students.

2.0 Methodology

2.1 Research Design

This quantitative study used an inferential research design, which has helped to explore associations between two or more variables (Robinos et al. 2023). The researcher's purpose in using an inferential research design was to discover the relationship between field experience and professional development of education in a Philippine State University and to generalize findings from the sample to the larger population.

2.2 Research Locale

The study was conducted at the Polytechnic University of the Philippines – Binan Campus. The campus was created through a memorandum of agreement between the university and the city government of Biñan in 2010. The campus is located in Biñan, Laguna, Philippines, offering eight (8) undergraduate courses and two (2) diploma programs. Among these undergraduate programs are Bachelor of Elementary and Secondary Education majors in English and Social Studies.

2.3 Research Participants

The study focused on fourth-year college students pursuing an Education degree enrolled in the second semester of the school year 2023-2024, with a total population of 148 pre-service teachers. Considering the inferential statistics, the achieved power is 0.85 with the following assumptions: a) effect size = small (0.1) and) threshold of statistical significance of 0.05 or 5%, the qualified sample size of 110. The researchers employed a simple random selection technique to mitigate bias and provide each individual in the entire population with an equitable opportunity for selection (Mahmutovic, J. 2022) to investigate the influence of field experience on the professional growth of education students in a Philippine State University.

2.4 Research Instrument

A researcher-made survey questionnaire was used to determine the relationship between field experience and the professional development of pre-service teachers. The research instrument contains two parts, with the consent letter as the introductory portion. Part I is about implementing the field teaching experience, while Part II includes the extent of perceived professional development among student-teachers. The survey questionnaire utilized a 4-point Likert scale interpreted from very high to very low extent (Implementation) and levels of agreement (perception of professional growth). After the content validation among experts in the research and education field, a pilot test was conducted among 30 pre-service teachers not included in the sample size, and reliability was calculated, leading to a Cronbach alpha value of 0.92. Implementation of field-based learning was cross-checked using the Manual for Practice Teaching of the College of Education.

2.5 Data Gathering Procedure

Before distributing the survey questionnaire via Google Forms, the researchers requested authorization to conduct the study in the office of the head of the academic program and the campus director. Upon approval, the randomly chosen respondents via the Wheel of Names online application were given the online survey administered by the researchers. Once the survey questionnaire was returned, the researchers downloaded the Excel sheet and submitted the gathered data to a statistician for statistical analysis and interpretation to evaluate the collected data.

2.6 Data Analysis

To analyze the collected data, the researchers used the mean to measure the extent of implementation of field-based teaching experiences and the perceived professional development of pre-service teachers. To determine the association between the extent of implementation of practice teaching and the perceived professional growth of pre-service teachers, the Pearson r correlation coefficient was applied.

2.7 Ethical Considerations

Ethical standards were maintained throughout the course study by carefully paying attention to procuring the necessary data. The researchers personally asked for consent, explained the study rationale, and oriented the participants on their rights, including data destruction and the Data Privacy Act of 2021 observance.

3.0 Results and Discussion

3.1 Extent of Implementing the Field-Based Teaching Experience

Table 1 shows the weighted mean with the interpretation of the respondents' perceived extent of implementing field-based teaching experiences in a Philippine State University. The table reveals that field-based learning experiences are highly implemented ($\bar{x}=3.844$, very high extent).

Table 1. Extent of implementing the field-based teaching experiences

Indicators	Mean	Interpretation
<i>Establishing Partnerships</i> – the university partners with schools to provide student-teachers with practical teaching experiences. Cooperating teachers from partner schools are selected to mentor and supervise student-teachers.	3.87	Very High Extent
<i>Orientation and Preparation</i> – Student-teachers undergo orientation sessions to familiarize themselves with the school's policies, classroom environment, and expectations. Before entering the classroom, student-teachers work on lesson plans and teaching materials, often in consultation with their university supervisors or cooperating teachers.	3.92	Very High Extent
<i>Observation and Classroom Immersion</i> – Student-teachers first observe their cooperating teachers in action. Following observation, student-teachers may gradually take on minor roles, such as assisting with classroom management, preparing teaching materials, or conducting parts of lessons under the cooperating teacher's supervision.	3.62	Very High Extent
<i>Demo Teaching</i> – Student-teachers begin conducting complete lessons, known as demo teaching. After demo teaching sessions, student-teachers receive feedback from the cooperating teacher and their university supervisor.	4.00	Very High Extent
<i>Classroom Teaching Practice</i> – After successful demo lessons, student-teachers take on more responsibility by teaching lessons independently. Throughout the teaching practice, cooperating teachers and practice teaching supervisors continue to provide and offer guidance and assess the student-teacher's progress.	3.71	Very High Extent
<i>Evaluation and Assessment of Student-Teachers</i> – Student-teachers are regularly evaluated based on their teaching performance, classroom management, lesson planning, and adaptability. At the end of the teaching practice, student-teachers undergo a final evaluation.	3.81	Very High Extent
<i>Evaluation of Student Learning</i> – Student-teachers are also responsible for evaluating their students' learning progress. This includes administering assessments, providing feedback, and adjusting teaching strategies to meet student needs.	3.82	Very High Extent
<i>Final Reporting and Certification</i> – Student-teachers submit a narrative report or portfolio that includes their lesson plans, teaching reflections, and feedback from supervisors and cooperating teachers. Student-teachers are awarded a teaching credential upon successful completion, recognizing their preparedness to enter the teaching profession.	4.00	Very High Extent
Overall	3.844	Very High Extent

Interpretation Scale: 1.00 – 1.75 = Very Low; 1.76 – 2.50 = Low; 2.51 – 3.25 = High; and 3.26 – 4.00 Very High Extent

Findings revealed that the field-learning experiences given to pre-service teachers of the PUP-Binan campus are highly observed, starting from partnership up to certification. The implemented field-based learning ensures that student-teachers gain hands-on experience while supported by experienced educators, ultimately preparing them for their teaching careers. Today, higher education institutions utilize comprehensive education management solutions to streamline procedures and provide students with a quality field-based learning experience (Borkar, 2021). According to the study by Kaiser and König (2019), field-based experiences, such as student teaching practicums, are essential components of many teacher education programs. These experiences offer teacher candidates invaluable opportunities to acquire practical skills and knowledge in natural classroom settings. Educational policies may regulate various aspects of these field experiences, including stipulating the minimum duration of required student teaching, establishing partnerships and collaboration frameworks, defining expected levels of supervision and mentoring, and facilitating demo teaching, conferences, and academic merit assessments. Teacher education is a foundation for student teachers to gain the necessary knowledge, skills, and competencies while cultivating positive attitudes and values that empower them to apply the curriculum effectively (Chirwa et al., 2023). Pre-service teachers typically progress from observational experiences to more active and involved roles during their post-secondary studies. Additionally, student teaching is a practical learning opportunity in a real-world setting that lasts for an entire semester, usually in the last semester before graduation (OTE, 2021).

3.2 Professional Development among Pre-service Teachers

Table 2 reveals that the respondents' perceived overall professional development attained while taking field-based learning experience is very high ($x=3.816$ = strongly agree, which means very high level). Results validate the social cognitive and experiential learning theory, which posits that learning and progress occur in a cyclical process involving concrete experiences, reflective observation, abstract conceptualization, and active experimentation (Hoose, 2020).

Table 2. Extent of implementing the field-based teaching experiences

Indicators	Mean	Interpretation
Enhanced Teaching Skills: Pre-service teachers develop and refine their instructional strategies, classroom management techniques, resourcefulness and lesson planning skills through hands-on teaching experience.	3.89	Strongly Agree
Reflective Practice: Pre-service teachers enhance their ability to reflect on their teaching practices, evaluating what works well and identifying areas for improvement.	3.78	Strongly Agree
Improved Classroom Management: They learn effective classroom management techniques by engaging directly with students, including behavior management and creating a positive learning environment.	3.99	Strongly Agree
Application of Educational Theory: They learn to apply educational theories and concepts learned in their coursework to real-world classroom scenarios, bridging the gap between theory and practice.	3.56	Strongly Agree
Increased Confidence: Through practical experience and mentor feedback, pre-service teachers often gain confidence in their teaching abilities and decision-making skills.		Strongly Agree
Assessment and Evaluation Skills: They improve their skills in assessing student performance and understanding how to use data to inform instruction and provide constructive feedback	3.92	Strongly Agree
Development of Professional Relationships: They build relationships with cooperating teachers, school administrators, and peers, fostering a network of professional support that can aid their future careers	3.68	Strongly Agree
Commitment to Lifelong Learning: Exposure to professional development opportunities and mentoring encourages pre-service teachers to pursue continuous learning and growth in their teaching careers.	3.89	Strongly Agree
Overall	3.816	Strongly Agree (Very High)

Interpretation Scale: 1.00 – 1.75 = Strongly Disagree; 1.76 – 2.50 = Disagree; 2.51 – 3.25 = Agree; and 3.26 – 4.00 Strongly Agree
1.00 – 1.75 = Very Low; 1.76 – 2.50 = Low; 2.51 – 3.25 = High; and 3.26 – 4.00 Very High Level

Under the supervision of experienced teachers, pre-service teachers receive guidance on their roles, responsibilities, and how to conduct themselves professionally. Practice teaching ensures that student-teachers are prepared for their assignments and are familiar with the classroom setting, student behavior, and the teaching and assessment methods experienced educators use. The results implication highlights that pre-service teachers realize teaching competence, professionalism, and growth throughout the practicum period. The result provides a lens on how field experiences act as catalysts in the experiential learning process, thereby significantly contributing to the professional development of education students, which is already seen after the study to develop different field experiences of pre-service teachers (Vukelic, 2022 & Kim, 2017). In addition, according to Khajornsilp et al. (2021) and Cassidy et al. (2018), any students with a comprehensive training program achieve specific development, which is crucial to understanding the general scope of the education process. Field-based learning experiences expose students to the early life concept of education, the challenges, and societal demands, enhancing their growth and commitment to the teaching profession.

3.3 Relationship Between Extent of Implementation of Field-Based Learning Experience and the Perceived Level of Professional Development

Table 3 shows a very high, positive, significant relationship between the extent of implementing field-based learning experiences and the level of perceived professional growth attained by pre-service teachers in a Philippine State University, $r=0.891$, $n=110$, $p=.00000$.

Table 3. Result of Pearson “r” test of the relationship between the extent of the implementation of field-based learning experience and the perceived level of professional development

		Extent of Implementation	Level of Professional Development
Extent of Implementation	Pearson Correlation	1	0.891
	Sig. (2-tailed)		.0000
	N	110	110
Level of Professional Development	Pearson Correlation	0.891	1
	Sig. (2-tailed)	.0000	
	N	110	110

Note: The result is significant at $p<.05$

This finding aligns with the previous research conducted by Kulgemeyer et al. (2020), Bates & Burbank (2019), and Barnes (2020), which highlighted the positive impact of practical and field-based learning experience on enhancing professional expertise development. Properly structured field experiences facilitate the cultivation of content, practical abilities, and attitudes while enabling critical reflection on one's practice. Similarly, the findings

support Padillo et al.'s (2021) research, which emphasized the importance of practical experiences in shaping future educators' skills, confidence, and understanding of the teaching profession (Robinos et al., 2022).

4.0 Conclusion

Field-based teaching experiences at a Philippine State University are effectively implemented through comprehensive policies and processes. These include establishing linkages, conducting orientations, planning and final reporting and certification, and ensuring that pre-service teachers receive proper monitoring, supervision, and guidance. Graduating students who participated in these field-based experiences reported high professional development, resulting in enhanced confidence, improved classroom management, teaching and assessment skills, reflective practice, professional relationships, and a commitment to lifelong learning. Additionally, practice teaching experiences significantly contribute to the professional growth of pre-service teachers by providing practical insights, boosting their confidence, and preparing them for the complexities of the teaching profession, as evidenced by the calculated very high positive R-value. Based on these findings, the researchers recommend strictly implementing practice teaching processes and conducting evaluations for continuous improvement. Future research may explore the long-term impact of field-based teaching experiences on alumni and investigate specific elements of field-based programs that significantly contribute to professional growth. Furthermore, differences in implementation and professional growth outcomes should be examined across various fields of specialization and between public and private higher education institutions (HEIs).

5.0 Contributions of Authors

The corresponding authors had shared greater writing responsibilities. All the co-authors contributed equally to writing, data gathering, analyzing the study results, and finalizing the article.

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7.0 Conflict of Interests

No potential conflict of interest.

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