



VALIDATION OF EXPERIENTIAL LEARNING PATHWAYS FOR PRE-SERVICE TEACHERS

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Abstract

This study aims to validate an experiential learning pathway specifically designed for pre-service teachers, focusing on its impact on learning outcomes and professional development. Utilizing a descriptive-survey methodology, the study involved 170 fourth-year students from the College of Education at Jose Rizal Memorial State University – Siocon Campus. Data collection was facilitated through a structured questionnaire and analyzed using frequency counts, percentages, Likert scale, weighted mean, Slovin's formula, and chi-square tests. The findings revealed that the majority of respondents were female (73.53%), and the assessment methods used in the experiential learning pathways align well with the desired competencies and standards for pre-service teachers. The chi-square test indicated a significant validation of the experiential learning pathways, leading to the rejection of the null hypothesis. Key recommendations include orienting pre-service teachers on experiential learning pathways, fostering portfolio development, and implementing comprehensive assessment practices.

Keywords and phrases: *Pre-service teachers, experiential learning, experiential learning pathway, portfolios, teacher training, educational standards*

Introduction

Teachers play a crucial role in disseminating education and upholding national values. Effective teacher education programs are vital, as well-prepared teachers significantly contribute to student performance, school effectiveness, and the efficiency of the educational system (Darling-Hammond, 2017). Despite advancements in pedagogical methods, rote learning practices persist, leading to unsatisfactory learning outcomes and inadequate preparation for real-world challenges (Mushahari, 2022). Experiential learning bridges the gap between theory and practice, enhancing the professional development of pre-service teachers (Kolb, 2015).

Recent studies emphasize the importance of hands-on, practical experiences in teacher training, highlighting that experiential learning opportunities are critical for developing reflective practitioners who can adapt to diverse classroom settings (Darling-Hammond et al., 2020). The integration of experiential learning in teacher education programs not only fosters the acquisition of pedagogical skills but also supports the development of critical thinking, problem-solving, and decision-making abilities (Zeichner, 2017). These competencies are essential for teachers to effectively address the dynamic and complex nature of contemporary educational environments.

Furthermore, the COVID-19 pandemic has underscored the need for adaptive

teaching strategies and the ability to seamlessly transition between in-person and remote learning contexts (Crawford et al., 2020). Experiential learning pathways that incorporate digital tools and platforms can better prepare pre-service teachers for these challenges, ensuring they are equipped with the skills necessary to utilize technology in enhancing student engagement and learning outcomes (Johnson, 2021). This study aims to validate an experiential learning pathway tailored for pre-service teachers at Jose Rizal Memorial State University – Siocon Campus, providing empirical evidence to inform and improve teacher training practices.

The adoption of experiential learning pathways also aligns with global educational goals, such as those outlined in the Sustainable Development Goals (SDGs), particularly SDG 4, which focuses on quality education (United Nations, 2015). By embedding experiential learning into teacher education, institutions can contribute to the broader goal of providing inclusive and equitable quality education, promoting lifelong learning opportunities for all. This study seeks to contribute to this global initiative by validating an experiential learning pathway and assessing its impact on the professional development of pre-service teachers.

Methods

A descriptive-survey design was employed to validate the experiential learning pathways for pre-service teachers. The study was conducted at Jose Rizal Memorial State University-Siocon Campus, involving 170 fourth-year students enrolled in the academic year 2022-2023. Data were gathered using a structured questionnaire, validated by academic experts, and analyzed using statistical tools including frequency counts, percentages, Likert scale, weighted mean, Slovin's formula, and chi-square tests.

The questionnaire was designed to capture various aspects of the experiential learning pathways and their perceived effectiveness in developing the competencies and professional skills of pre-service teachers. It consisted of multiple sections, including demographic information, assessment of learning outcomes, alignment with educational standards, and feedback on the experiential learning process. The questionnaire employed a Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) to measure respondents' perceptions and experiences.

The instrument underwent a rigorous validation process to ensure its reliability and validity. Initially, the draft questionnaire was reviewed by a panel of experts in teacher education and experiential learning. Their feedback was incorporated to refine the content and structure of the instrument. A pilot test was then conducted with a small group of pre-service teachers who were not part of the main study sample. The pilot test aimed to identify any ambiguities or issues with the questionnaire items. Based on the pilot test results, further revisions were made to enhance clarity and comprehensiveness.

Data collection was carried out through face-to-face administration of the questionnaire, ensuring that all respondents completed the survey in a controlled environment. The researchers provided instructions and clarifications as needed to facilitate accurate responses. The collected data were then coded and entered into a statistical software program for analysis.

Ethical Considerations

Ethical considerations were central to the study's design and implementation. Informed consent was obtained from all participants, ensuring they were fully aware of the study's purpose, procedures, and potential risks. Data confidentiality was strictly maintained, with all identifying information anonymized in the analysis and reporting. The study adhered to the ethical guidelines set forth by the institutional review board and relevant national and international regulations.

Results

The analysis revealed a predominance of female respondents, accounting for 73.53% of the sample, while male respondents constituted 26.47%. This gender distribution reflects the current trends in the teaching profession, where females often outnumber males.

The study assessed the alignment of learning outcomes and objectives with the desired competencies and standards for pre-service teachers. The findings indicated a strong alignment, with the respondents very much agreeing that the learning outcomes and objectives were clearly articulated and communicated. The overall weighted mean score for this aspect was 3.56, suggesting that the experiential learning pathways were effective in defining and aligning learning outcomes with the required competencies.

Further analysis showed that the assessment methods employed in the experiential learning pathways were perceived as highly effective. Respondents very much agreed that self-reflection activities, peer assessments, rubrics, and feedback from experienced educators were valuable in evaluating the attainment of learning outcomes. The highest weighted mean score of 3.76 was observed for the effectiveness of observation and feedback from experienced educators, indicating the crucial role of mentorship in experiential learning.

To ensure consistency and standardization across diverse educational settings, the study identified several key strategies. Continuous monitoring and evaluation processes were deemed essential, receiving the highest rank among the strategies. Regular communication and collaboration among educators and stakeholders also played a significant role in maintaining consistency and alignment in experiential learning practices.

The study also explored methods to measure the long-term effectiveness of experiential learning pathways on pre-service teachers' professional development. Portfolios and self-reflection journals were highly valued for demonstrating growth, creativity, and the ability to apply learned concepts. Pre- and post-assessments, classroom observations, and feedback from mentor teachers were also considered effective methods for evaluating the impact of experiential learning on professional development.

The chi-square test results provided statistical validation of the experiential learning pathways. The computed chi-square value of 1.895 was significant, leading to the rejection of the null hypothesis. This statistical evidence supports the effectiveness of the experiential learning pathways in enhancing pre-service teachers' professional development and



readiness for classroom practice.

Discussion

The findings of this study underscore the importance of experiential learning pathways in enhancing the professional development and readiness of pre-service teachers. This aligns with previous research by Darling-Hammond et al. (2020), who emphasized the critical role of hands-on experiences in preparing teachers for the complexities of modern classrooms. The high level of agreement among respondents regarding the alignment of learning outcomes with educational standards indicates that the pathways are effectively designed to meet the competencies required in the teaching profession.

The effectiveness of various assessment methods, such as self-reflection activities, peer assessments, and feedback from experienced educators, highlights the multifaceted nature of experiential learning. These methods not only provide a comprehensive evaluation of pre-service teachers' performance but also foster critical thinking and reflective practices, which are essential for continuous professional growth (Johnson, 2021). This is consistent with the findings of Brown (2022), who noted that diverse assessment techniques are vital in capturing the holistic development of pre-service teachers.

The study's identification of key strategies for ensuring consistency and standardization across educational settings is crucial for the broader applicability of experiential learning pathways. Continuous monitoring, regular communication among educators, and the establishment of clear guidelines and protocols are essential for maintaining high standards in teacher education. These strategies resonate with the recommendations of Zeichner (2017), who advocated for systematic approaches to ensure the quality and effectiveness of experiential learning programs.

Furthermore, the exploration of long-term assessment methods, such as portfolios and self-reflection journals, aligns with the findings of Crawford et al. (2020), who emphasized the importance of ongoing evaluation in professional development. These methods provide a detailed account of pre-service teachers' growth over time, allowing for a more nuanced understanding of their progress and areas for improvement.

The significant chi-square test results validate the experiential learning pathways, reinforcing their effectiveness in preparing pre-service teachers for classroom practice. This statistical validation supports the broader implementation of such pathways in teacher education programs, as suggested by Darling-Hammond et al. (2020).

Overall, the results of this study contribute to the growing body of literature on the benefits of experiential learning in teacher education. By integrating hands-on experiences with comprehensive assessment methods and ensuring consistency across educational settings, experiential learning pathways can significantly enhance the readiness and professional development of pre-service teachers.



Conclusions

The study conclusively demonstrates that experiential learning pathways significantly enhance the professional development and readiness of pre-service teachers. The high level of alignment between learning outcomes and the required competencies underscores the effectiveness of these pathways in preparing pre-service teachers for the demands of the teaching profession. The positive reception of various assessment methods, such as self-reflection activities, peer assessments, and feedback from experienced educators, indicates their critical role in fostering comprehensive and reflective professional growth.

Moreover, the study highlights the importance of consistency and standardization in implementing experiential learning pathways across diverse educational settings. Continuous monitoring, regular communication among educators, and the establishment of clear guidelines are essential for maintaining high standards. The exploration of long-term assessment methods, such as portfolios and self-reflection journals, provides valuable insights into the ongoing professional development of pre-service teachers.

The significant chi-square test results provide robust statistical validation of the experiential learning pathways, reinforcing their efficacy in enhancing pre-service teachers' competencies and preparedness. These findings align with contemporary educational demands and support the broader implementation of experiential learning in teacher education programs.

Recommendations

Orientation and Training Programs: Pre-service teachers should receive comprehensive orientation and training on the objectives, structure, and benefits of experiential learning pathways. Workshops and seminars should be conducted to ensure that pre-service teachers understand how these pathways contribute to their professional growth and meet educational standards.

Development of Comprehensive Portfolios: Encourage pre-service teachers to develop and maintain portfolios that document their learning experiences, reflections, and achievements. Portfolios should include lesson plans, assessments, self-reflection journals, and feedback from mentors to provide a holistic view of their professional development.

Enhanced Mentorship Programs: Establish robust mentorship programs where experienced educators provide regular feedback and guidance to pre-service teachers. Mentor training should emphasize the importance of constructive feedback and its role in fostering reflective practices and continuous improvement.

Regular Review and Update of Learning Outcomes: Periodically review and update the learning outcomes and objectives of experiential learning pathways to ensure they remain relevant and aligned with current educational standards and practices. This review process should involve educators, stakeholders, and pre-service teachers to incorporate diverse perspectives.

Standardized Assessment Tools: Develop and implement standardized assessment



tools, such as rubrics and scoring criteria, to evaluate pre-service teachers' performance consistently across different educational settings. These tools should be aligned with the desired competencies and provide meaningful feedback for improvement.

Integration of Digital Tools and Platforms: Incorporate digital tools and platforms into experiential learning pathways to enhance the flexibility and accessibility of learning experiences. Utilize online portfolios, digital assessment tools, and virtual mentorship programs to support pre-service teachers in remote and hybrid learning environments.

Longitudinal Tracking and Evaluation: Conduct longitudinal studies to track the long-term impact of experiential learning pathways on pre-service teachers' professional development and career progression. Collect data on their teaching performance, student outcomes, and ongoing professional learning activities to evaluate the sustained benefits of experiential learning.

Policy Advocacy and Institutional Support: Advocate for policies that promote the adoption and integration of experiential learning pathways in teacher education programs. Institutions should provide the necessary resources, support, and infrastructure to implement these pathways effectively and ensure their sustainability.

By addressing these specific recommendations, the findings of this study can be effectively translated into actionable steps that enhance the quality and impact of teacher education programs, ultimately contributing to the preparation of highly competent and reflective educators.

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In compliance with Threshold's guidelines for the ethical use of artificial intelligence (AI) and automated tools in academic research, the authors disclose the use of OpenAI's ChatGPT for enhancing the quality and clarity of the manuscript. ChatGPT was utilized to assist in refining the language, structure, and formatting of the text, ensuring a high level of academic rigor and coherence. The authors confirm that all data analysis, critical interpretations, and conclusions presented in this manuscript were conducted independently by the research team. The AI tool was employed strictly for editorial assistance and did not influence the scientific content or ethical considerations of the study. All intellectual contributions from the AI tool are in accordance with the authors' original intentions and have been reviewed and approved by all co-authors. The use of ChatGPT complies with Threshold's ethical standards and guidelines for transparent reporting of AI involvement in research. The authors remain fully responsible for the integrity and accuracy of the content presented in this paper.



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