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Exploring Problem-Based Learning in Teacher Education Through *Laura's Story*

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Abstract

This article critically examines "Laura's Story: Using Problem-Based Learning in Early Childhood and Primary Teacher Education" by Suzy Edwards and Marie Hammer (2006), highlighting its significant impact on Problem-Based Learning (PBL) research. This seminal work is distinguished by its practical focus on teacher education, using the narrative of Laura's story to demonstrate PBL's effectiveness in real-world teacher education scenarios. The article employs a slow-reading approach, offering a detailed and reflective examination of the sections of the text from introduction to conclusion. This thorough analysis aims to uncover deeper meanings and assess the text's influence on the role of PBL in developing essential teaching skills. Through this meticulous process, the article seeks to provide valuable insights into PBL's application in teacher education, highlight its pedagogical implications, and suggests directions for future research.

Keywords: Early Childhood Education; Laura's Story; Primary Teacher Education; Problem-Based Learning (PBL); Scenario; Slow-reading Approach

Introduction

In the evolving landscape of teacher education, Problem-Based Learning (PBL) has emerged as a critical pedagogical approach (Kırkgöz, 2015). Among the

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significant scholarly contributions to this field is the seminal work titled "Laura's Story: Using Problem-Based Learning in Early Childhood and Primary Teacher Education" by Suzy Edwards and Marie Hammer (2006). By exploring PBL through a practical case study, this text provides researchers with a valuable example of how PBL can enhance critical thinking and problem-solving skills in early childhood and primary education, making it a crucial addition to any curriculum aimed at developing effective and reflective educators.

The purpose of this article is to analyze and reflect on the mentioned text using the "slow-reading approach" to gain a comprehensive understanding and extract meaningful insights into its contributions to PBL research and teacher education. The next section provides a brief summary of Laura's Story, which serves as the PBL framework, guiding our examination of how the text addresses the core principles of PBL. The methodology section offers a detailed analysis of the text through the lens of the "slow-reading approach." Additionally, reflections explore how the authors' insights align with or challenge existing paradigms within PBL research and practice. This thorough exploration concludes by highlighting the impact of the text on advancing PBL methodologies and its implications for the future of teacher education.

"Laura's Story" as a Practical Framework

Laura's Story is a significant scholarly work that highlights the common challenges faced by early childhood and primary educators. Through this narrative, the authors (Edwards & Hammer, 2006) demonstrate how PBL can be used to address these challenges. What distinguishes this text is its practical approach to teacher education. Rather than simply discussing theoretical concepts, the authors embed them within a real-world scenario—Laura's story—providing pre-service educators with a concrete framework to develop the essential skills and competencies required for their roles. The text also offers a detailed background on the origins and principles of PBL, tracing its development from the medical field to other disciplines, including education. This historical context helps readers understand the rationale behind adopting PBL as a pedagogical approach.

Method

This study employs a slow reading approach to evaluate the text. Unlike rapid reading, which focuses on speed and surface-level understanding, slow reading involves engaging with the text at a deliberate pace to deepen comprehension and reflection. The text is read in short manageable segments, such as one

paragraph or section at a time. During this process, the reader takes notes on key points, pausing frequently to reflect on the author's purpose and effectiveness. By carefully working through each section, readers can uncover deeper meanings and insights, gaining a fuller understanding of the author's arguments and assessing the overall coherence of the article. The deliberate pace helps readers develop a more informed and critical evaluation of the text's contributions and limitations (Baldi & Mejia, 2023; Honoré, 2004).

Application of slow reading to Edwards and Hammer's work

The Introduction effectively establishes the context by discussing the growing significance of problem-solving, critical thinking, and collaboration skills across various professions, including teaching. The Theoretical Framework builds on this foundation by linking the principles of PBL to constructivist and social-constructivist theories of learning. Through a slow-reading process, the authors emphasize the development of key competencies essential for educators, such as critical thinking, problem-solving, and collaborative skills. By situating PBL within a real-world context, Edwards and Hammer (2006) provide pre-service teachers with a practical and valuable tool to navigate the complexities of teaching. This alignment justifies the suitability of PBL for teacher education by underscoring its focus on active learning and problem-solving.

The Methodology section emphasizes the significance of child development theories in early childhood education and highlights the role of pre-service educators in supporting children's learning. The study is reported to have emerged from:

> "an examination of pre-service educators' responses to their participation in a PBL scenario designed for use in a unit of study associated with the Bachelor of Early Childhood Education and the Bachelor of Primary Education at Monash University (Victoria, Australia). The unit, EDF 2202 Child Development 2, had a theoretical focus on the influences on children's development from within and beyond the family." (Edwards & Hammer, 2006, p. 468)

The previous approach to the unit followed a conventional lecture-tutorial format, where:

> "preservice educators were lectured on a range of developmental theories, offered opportunities to discuss these during tutorials and expected to complete a case study and presentation on the relationship between theories of development and education." (Edwards & Hammer, 2006, p. 468)

The preservice educators enrolled in the unit of study were second- and third-year Bachelor of Primary and Early Childhood Education students (aged 19–40)

who had prior field experience, having completed at least a 1–3 week teaching practicum. The PBL scenario involved pre-service educators working in groups of five to address the learning and developmental needs of a fictional child named Laura. While Laura was technically 'fictional', her challenges reflected real problems the lecturers had encountered in their professional practice. Edwards and Hammer (2006) describe the role of each group as follows:

> "Each member of the groups of five were randomly assigned a different stakeholder role in Laura's life including, her mother (Chantelle), her early childhood educator, her case-worker (assigned to Laura as a child 'at risk' of neglect), her future primary school teacher and parents of Laura's peers at the kindergarten in which she was currently enrolled." (p 469)

The text emphasizes the thoughtful integration of lecture material into weekly chapters about Laura's life, noting, "issues arising from the weekly lecture content were embedded into the chapters about Laura's life that were posted to the website" (p. 270). This approach effectively connected theoretical knowledge with practical application, enabling students to explore real-world complexities through their assigned stakeholder roles. The episodic structure immersed students in Laura's evolving narrative, encouraging deeper engagement with her circumstances and needs. For instance, in the initial chapter, Laura is introduced as "a child of 4.9 years and tall for her age," alongside details of her recent traumatic experiences, such as being removed from her mother's care following her mother's arrest. This vivid portrayal grounded the learning process in a realistic and emotionally resonant context, fostering both empathy and critical thinking. The phased structure ensured that students systematically progressed from understanding the problem-to-problem-solving and reflection.

The slow-reading approach reveals that pre-service educators demonstrated their understanding of Laura's development through presentations based on their assigned stakeholder roles and reflective essays. Presentation sessions simulated professional collaboration, with group members engaging in dynamic, role-based discussions to address Laura's needs. The final assessment, a reflective essay, encouraged participants to critically evaluate their interactions and overall learning experiences. This reflective component was particularly impactful, prompting them to connect their practical experiences with their philosophical beliefs about teaching and learning -an essential step in shaping their professional identity.

Student perceptions of the unit were assessed using an anonymous questionnaire comprising both quantitative (10 Likert scale items) and qualitative components (three open-ended questions). The quantitative

responses were summarized with mean scores and standard deviations. Applying a slow-reading approach to the thematic analysis of the qualitative data revealed three key categories. By carefully reading each category, we can fully appreciate the specific insights gained by the respondents. First, "awareness of professional challenges" was the most prominent, with nearly half of respondents recognizing the importance of preparing for potential obstacles and developing strategies to overcome them. This aligns with the PBL approach of simulating real-world challenges. The second category, "connecting theory to practice" (38%), emphasized the value of scenarios in bridging the theory-practice gap in teacher education, helping participants apply theoretical knowledge in practical contexts. Lastly, "communication and collaboration skills" (17%) highlighted the development of teamwork and communication, as students engaged in role-play and collaboration, gaining insights into various stakeholder perspectives in early childhood education.

As a teacher educator, I found the text highly relevant to teacher education, as it effectively demonstrates the value of PBL in bridging the gap between theory and practice. By embedding PBL within a practical narrative like Laura's Story, the study fosters a stronger connection between theoretical knowledge and real-world application. It highlights how PBL cultivates essential skills such as empathy, collaborative problem-solving and reflective practice, which are key competencies for effective teaching. The structured yet open-ended scenario enables pre-service educators to navigate the complexities of child development and educational practice, preparing them for the unpredictable realities of early childhood and primary education.

While the text highlights the many benefits of PBL in teacher education, the slow-reading approach also reveals some potential challenges. The text raises the question of how the actual PBL scenario influences pre-service educators' learning and decision-making processes. The nature of the scenario-learning relationship remains underexplored, leaving a gap in understanding how specific elements of PBL scenarios contribute to or hinder learning.

Although not explicitly stated in the text, the slow reading approach suggests that PBL is a resource-intensive endeavor. Designing realistic scenarios, facilitating group work, and providing continuous support demand considerable time and effort from instructors, which may not be feasible for all teacher education programs. The complexity of PBL scenarios, particularly those involving multiple stakeholders and interdisciplinary challenges, can sometimes overwhelm learners. Achieving the right balance between realism and manageability seems to be crucial to ensure that the scenarios remain engaging without causing cognitive overload. Moreover, the limitation of only

five chapters over a 13-week period may have constrained the depth of student engagement with the PBL process.

The authors acknowledge that "the questionnaire used was not piloted before it was used" (Edwards & Hammer, 2006, p. 470), which limited the broader applicability of the insights gained. While the evaluation method provided useful descriptive data, the absence of a pilot test reduced its rigor. This limitation diminishes the generalizability of the findings, framing the study as a descriptive case. Despite this, the study still offers valuable insights into how students perceive the scenario's role in bridging theory and practice.

In the past, I integrated PBL into my academic work, adopting a practical, student-centered approach that bridged theoretical understanding with real-world applications. I embedded PBL in Materials Development Program by creating scenarios that mirrored authentic challenges faced by English language teachers. PBL provided pre-service teachers with hands-on experience, helping them apply theoretical concepts to classroom situations enabling prospective English teachers to develop problem-solving, critical thinking, and collaborative skills. Reflection practices, including journals and feedback sessions, reinforced learning and helped educators adapt theoretical principles to diverse classroom settings (Kırkgöz, 2015).

Inspired by Laura's Story, I plan to continue integrating PBL into my academic work by expanding its application across various aspects of teacher education and professional development. I intend to further develop PBL scenarios that reflect the complexities of modern language teaching, with a specific focus on addressing pedagogical challenges, technological integration, and classroom management. By using real-world problems, I will help pre-service teachers hone their problem-solving, critical thinking, and collaborative skills, which are essential for their future teaching careers.

I also plan to incorporate PBL more extensively in the design of workshops for practicing teachers, emphasizing areas such as curriculum innovation and assessment strategies. By offering teachers the opportunity to engage with real teaching challenges in a collaborative environment, I believe I can support their professional growth and readiness to address evolving educational demands. Furthermore, I aim to continue researching the effectiveness of PBL in enhancing teacher competence, with a focus on the integration of digital technologies in the classroom and preparing teachers for 21st-century skills. This will involve collecting and analyzing data from classroom observations, teacher feedback, and pre-service teacher performance to assess how PBL influences teaching practices and student outcomes. Ultimately, I envision using PBL as a key pedagogical tool to prepare both pre-service and in-service teachers for the ever-changing demands of the education field, ensuring that

they possess the practical skills and mindset required to navigate the complexities of contemporary classrooms effectively.

Conclusion

The purpose of this analysis has been to employ the slow-reading approach to deeply engage with and reflect on the seminal work by Edwards and Hammer (2006), aiming to derive meaningful insights into its contributions to PBL research and teacher education. By examining the text in detail, from its theoretical foundations and research methodology to its findings, this analysis reveals the profound impact of the work on the field of teacher education. The analysis of Laura's story underscores the profound impact that the work has had on my understanding of the subject. Through a detailed examination of her narrative, I have highlighted the fact that Laura's story serves not only as a compelling illustration of PBL's effectiveness in teacher preparation but also as a practical framework for addressing real-world challenges in educational settings. As such, Laura's story remains a vital resource for scholars and educators committed to improving teaching methodologies and fostering effective PBL learning environments.

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