ImpactingEducation
JOURNAL ON TRANSFORMING PROFESSIONAL PRACTICE

The Impact of Bias on the Scholar-Practitioner's Doctoral Journey:

Strategies to Legitimize it

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ABSTRACT

This essay discusses the utilization of safeguard strategies, particularly Improvement Science principles, in the academic and professional writing of scholar-practitioners within EdD programs. These strategies bridge the gap between theory and practice, enabling graduate students to apply their scholarly insights meaningfully. The essay highlights the roles of bias, professional wisdom, positionality, and reflexivity in inquiry, empowering scholar-practitioners to develop authentic solutions to the problems of practice they encounter. Drawing on the recommendations of Perry and colleagues (2020), the essay emphasizes rigorous data collection, explicit theoretical frameworks, evidence of impact on practice, and transparent mitigation of biases. Strategies such as positionality and reflexivity statements, adoption of Improvement Science as a conceptual framework, critical questions as safeguards, and engagement with critical friend groups (CFG) enhance the integrity and rigor of scholar-practitioners' inquiries. By implementing these measures, scholar-practitioners foster a robust examination of problems of practice and contribute to the advancement of knowledge.

KEYWORDS

improvement science, scholar-practitioner, bias, professional wisdom

I was motivated to write this essay while reflecting on the challenges I faced when writing my dissertation-in-practice (DiP). Specifically, I struggled to find resources emphasizing the significance of professional wisdom and its application to doctoral inquiry. While I found literature discussing the relevance of professional wisdom in people professions (see Bondi et al., 2016), there was limited guidance regarding its significance for scholar-practitioners in training.

For my DiP, I conducted a program evaluation of a diversity pipeline program to promote the transition of youth with disabilities into post-secondary education. The program was one that I designed and implemented at my place of work. In addition, I came up with the idea for the diversity pipeline program as a result of looking for similar programs for a close family member. As I delved deeper into my DiP project, I faced interrogations from faculty and staff both within and outside my doctoral program. Some questioned the validity of my inquiry, suggesting that my close involvement compromised objectivity. Consequently, I felt compelled to articulate the value of my professional wisdom as a scholar-practitioner within the scope of my project, differentiate it from personal bias, and integrate safeguard strategies to substantiate the credibility of my inquiry.

As a program director, instructor, and proud EdD graduate, I recognize that my colleagues and students encounter similar challenges with addressing bias and professional wisdom when researching and writing about topics close to their hearts. Therefore, I believe it beneficial to share practical exercises and strategies to help individuals engage in self-reflection, embrace their professional wisdom, and uphold the rigor of their academic and research pursuits. In the subsequent sections, I present several strategies that scholar-practitioners, as well as faculty, students, and other readers, can find valuable in reducing and transforming bias within their research endeavors.

INTRODUCTION

EdD programs celebrate insider knowledge and provide spaces where experience and professional wisdom can fuel scholar-practitioners to implement and evaluate solutions to real-world problems. DiPs serve as the vehicle through which scholar-practitioners address problems of practice while transforming their educational contexts (Pape et al., 2022). However, traditional research norms have historically dictated an objective stance, necessitating researchers and scholars to detach themselves emotionally and subjectively from the problems or phenomena under investigation to extract an independent truth. As the Carnegie Project on the Education Doctorate (CPED) continues its advocacy work to replace the EdD's reputation as a PhD Lite and legitimize it as a degree that prepares scholar-practitioners as leaders in educational innovation (Perry, 2016), we must ask ourselves: what is the role of professional wisdom in academic inquiry? Why is bias considered detrimental to rigorous academic research? What strategies can we employ so that our DiPs reflect the interplay of theory and practice while advancing the field and remaining authentic?

This essay describes how safeguard strategies, including

Improvement Science principles, can serve as a base to legitimize the professional and academic writing of scholar-practitioners in EdD programs. By incorporating these strategies, graduate students can demonstrate the importance of bridging the gap between theory and practice while applying their scholarly insights to their writing in meaningful ways. The forthcoming strategies will elucidate the roles of bias, professional wisdom, positionality, and reflexivity in inquiry, emphasizing their critical functions in crafting genuine solutions to the specific problems of practice encountered by scholar-practitioners in their distinct settings.

BIAS AND PROFESSIONAL WISDOM

Before delving into the definitions of bias, professional wisdom, and the distinctions between these related but sometimes muddled concepts, one must understand how the EdD is distinct from other doctoral programs, such as the PhD. Only then can the significance of professional wisdom in the practice and inquiry of a scholar-practitioner be fully grasped. The EdD emerged in the early 20th century as a response to the need for improved professional education in fields such as medicine, law, and engineering. As such, the degree has been historically associated with the tradition of training scholar-practitioners who can apply research to solve real-world problems (Perry, 2016; Perry et al., 2020). While the PhD in education typically emphasizes producing original research that contributes to academic knowledge, the EdD focuses on applying existing research to improve professional practice. While both degrees involve a rigorous research component, the EdD emphasizes the practical application of research findings in professional settings. To do this effectively, scholar-practitioners tap into their professional experience and capacity to apply theory to practice. However, using professional wisdom in inquiry can sometimes be confused with bias.

Bias refers to a systematic error in the collection, analysis, interpretation, or presentation of data that leads to a distortion of results (Creswell, 2014; Dwyer, 2018; Popovic & Huecker, 2022). Engagement in bias can be caused by conscious or unconscious factors such as personal beliefs, values, prejudices, or interests that influence a scholar-practitioner's decision-making process (Creswell, 2014; Popovic & Huecker, 2022). Partiality can lead to inaccurate or unreliable research findings that do not reflect the reality of the studied phenomenon and should not have a place in serious academic inquiry.

On the other hand, professional wisdom, also commonly referred to as practice wisdom, refers to knowledge and expertise gained through practical experience (Klein & Bloom, 1995; McNiff, 2008). This professional acumen is based on accumulating knowledge over time through practice and reflection, and it can help scholar-practitioners make informed decisions about research design, data collection, analysis, and interpretation. Professional wisdom can lead to more relevant, reliable, and valid research findings that reflect the reality of the studied phenomena (McNiff, 2008). A researcher with a biased perspective may overlook certain aspects of a studied phenomenon, leading to incomplete or inaccurate data collection or analysis. In contrast, scholar-practitioners who incorporate professional wisdom into their inquiry may have a more nuanced and informed perspective that leads to an added comprehensive understanding of the problems of practice under examination (Holden Thorp, 2023; Lambrev, 2021; McNiff, 2008).

"Scientists bring their whole selves to their research, which, on the one hand, makes individual scientists susceptible to motivated reasoning and biases (Holden Thorp, 2023, para. 5)." But practice and inquiry are enriched by that same diversity of thought that comes from the professional wisdom that is generated between motivated reasoning and biases; the variety of personal and professional experiences that scholar-practitioners bring to the table ensures careful consideration of evidence from diverse perspectives, bringing attention to topics of inquiry that may otherwise not be pondered or even well-understood by mainstream scientists focused solely on objectivity (Holden Thorp, 2023; Son Hing, 2022).

In practice-based research, which is encouraged in many EdD programs, professional wisdom can be beneficial to students in shaping inquiry questions, designing their methodology, and interpreting results. Professional wisdom can result in enriched inquiry design, helping scholar-practitioners design research studies that are more relevant to the problems of practice they face. For example, scholar-practitioners can use their practical knowledge and experiences to design inquiry questions that are driven by the Model of Improvement, which addresses the goals of the practitioner, what changes will result in improvement, and how to determine if a change resulted in improvement (Langley et al., 2009). Professional wisdom can also improve data collection. Because of their experience and proximity to the problem of practice, scholar-practitioners can identify the most suitable data collection methods, sampling techniques, and data analysis tools, helping them collect data more efficiently and effectively (Langley et al., 2009).

Increased credibility can also be a benefit of professional wisdom. Researchers who deeply understand the practical aspects of a particular field are more likely to engage in relevant, reliable, and valid inquiry. This understanding, in turn, sets the stage for translating inquiry findings into pertinent practical implications that can be applied in real-world settings (McNiff, 2008). In addition, professional wisdom can result in improved dissemination, helping scholar-practitioners communicate their inquiry findings in plain language, making research more accessible. Scholar-practitioners can use their practical knowledge to develop communication strategies tailored to different stakeholders' needs, such as practitioners, policymakers, and the public (Crow et al., 2019; Perry et al., 2020).

Why is Professional Wisdom Important in the Development of Doctoral Inquiries?

As stated in the previous section, professional wisdom is a value-driven knowledge system that blends personal and professional experience with scientific information (Klein & Bloom, 1995). The EdD is, first and foremost, a practice-oriented doctorate; as such, it must celebrate and incorporate professional wisdom to produce effective and relevant knowledge. This expertise should be reflected in the writing of EdD students. Professional wisdom serves as the basis for on-the-spot practice hypotheses, improving skills, and contributing to educational knowledge development (Klein & Bloom, 1995). However, as graduate students, pupils need to acknowledge their positionality and actively engage in reflection to cultivate a scholar-practitioner identity that effectively integrates professional wisdom into their inquiry.

Positionality, Reflexivity, and the Scholar-Practitioner Identity

Positionality refers to a scholar-practitioner's social and cultural position, including their personal experiences, beliefs, values, and biases, which influence their inquiry process and findings (Bourke, 2014). In the context of practice-based research, positionality plays a crucial role in shaping the scholar-practitioner's understanding of participants and their cultural, educational, and socioeconomic experiences, as well as their interpretation of the research outcomes.

In her book, *The Gifts of Imperfection*, Brown (2010) shared that when she engages in social research analysis, she tries to think only about what the data mean to her participants and not how she might experience any given phenomenon herself. Moreover, graduate students are frequently encouraged to adopt a detached approach to inquiry. However, it is essential to clarify that this does not imply complete detachment from the research; this interpretation differs from Brown's intended meaning. Bourke (2014) contended that one's identity inevitably exerts influence on the meaning-making process, emphasizing that detachment from it is neither possible nor advisable. In the course of engaging with research and inquiry, scholars should maintain a forefront focus on their positionality, acknowledging that knowledge cannot be generated in isolation (Bourke, 2014; McNiff, 2008). Positionality serves as a tool to understand the role of context in shaping and sustaining one's identity and its relationship with research. This understanding enables a clearer and more objective extraction of meaning from data by emphasizing reflection on the voices of participants rather than the researchers themselves through implication. Successful achievement of this recognition of positionalities necessitates engagement in reflexivity.

Reflexivity is the conscious exercise of scrutinizing the relationship between one's identity and one's inquiry from a place of self-awareness (Bourke, 2014). In her book, *Decolonizing Methodologies: Research and Indigenous Peoples*, Smith (2021) emphasized the need for researchers to critically examine their positions and power dynamics within research, mainly when working with historically marginalized groups. In general, reflexivity in inquiry refers to the scholar-practitioner's self-awareness and scrutinization of their role, assumptions, biases, and perspectives in the research process (Smith, 2021). It involves acknowledging and considering how the scholar-practitioner's characteristics, values, and experiences, as well as their historical and political contexts, may influence the inquiry design, data collection, analysis, and interpretation of findings. Reflexivity encourages scholar-practitioners to reflect on the potential impact of their positionalities on the research process and outcomes. Engaging in reflexivity is vital because, through this exercise, scholar-practitioners can challenge traditional research paradigms, question assumptions, promote social justice, and center inquiry on the communities they serve (Smith, 2021).

Through engaging in reflexivity, scholar-practitioners can enhance the rigor and validity of their research by being transparent about their positionality and considering how it may shape their research questions, data collection methods, and interpretation of results. Reflexivity helps researchers identify and address potential biases, increase objectivity, and better understand the research topic. It also promotes ethical research practices by encouraging researchers to probe power dynamics, ethical considerations, and the potential impact of their research on participants and broader communities.

The intertwined concepts of positionality and reflexivity are crucial to the integrity and depth of scholarly inquiry. Positionality serves as a reminder that unique life experiences, beliefs, and biases are brought to the research table, shaping one's understanding of the world. It underscores the importance of not aiming for detachment from research but instead cultivating acute awareness of how our identities inform interpretations. Reflexivity, conversely, guides individuals on a journey of self-awareness, prompting a critical examination of roles, assumptions, and potential biases. Together, these practices enable scholar-practitioners to conduct inquiry that is transparent, ethically sound, and socially just. They contribute to enhanced validity and rigor in scholarly work, prioritizing the voices of participants over the scholar-practitioners' own. Embracing positionality and reflexivity strengthens the quality of research and fosters a more equitable and empathetic academic community where inquiry is rooted in a profound understanding of the self and others.

STRATEGIES TO LEGITIMIZE PROFESSIONAL WISDOM IN INQUIRY

Popper (1979) argued that scientific knowledge is distinct from other forms of knowledge because it is characterized by its objective nature. He emphasized the critical role of falsifiability and empirical testing in scientific theories, asserting that scientific theories must be framed to be empirically tested and potentially refuted through evidence to ensure objectivity (Popper, 1979). Nevertheless, Popper's (1979) concept of the third world of objective knowledge – which refers to a realm of knowledge that consists of abstract ideas, theories, and concepts that exist independent of our individual thoughts but can be shared and discussed by many people – may support the idea of professional wisdom as the basis of inquiry.

In principle, the third world reflects the essence of practice-based inquiry, where scholar-practitioners' subjective experiences and biases serve as a starting point for research. However, the research's validity and credibility ultimately depend on its ability to withstand objective scrutiny, empirical testing, and implementation by others in the academic and professional community. This transition from subjective bias to objective knowledge is fundamental to the scientific and scholarly method; it underscores the importance of rigorous evaluation and the open exchange of ideas and findings. This essay supports rigor for applied inquiry by introducing inquiry safeguard measures such as positionality, reflexivity, improvement science, critical questions, and CFGs. What follows is a discussion of how these strategies contextualize the role of professional wisdom in practice-based research.

McNiff and Whitehead (2009) suggested that scholar-practitioners can establish the soundness of their inquiries by engaging in rigorous and systematic data collection tactics, being explicit about the theoretical and conceptual frameworks that underpin improvement inquiries, providing evidence of the impact of their inquiries on practice, being transparent about potential biases that can affect their work, and how these are being mitigated. Several strategies can be applied to the DiP to achieve these recommendations and protect against bias. The strategies include a positionality statement and a reflexivity statement to make the scholar-practitioner's position and relationship to their inquiry clear;

the adoption of Improvement Science as a conceptual framework that is data-driven and evidenced-based; employing critical questions as safeguards to enhance the inquiry process and its analysis; and engaging a CFG to serve as peer reviewers. Scholar-practitioners can deliberately apply these additional reliability measures to bolster the integrity of their inquiries and foster a robust and rigorous examination of their identified problem/s of practice within their DiP.

Positionality Statement

Positionality and reflexivity statements are vital components of the DiP. When scholar-practitioners include these statements in their research, they openly recognize their individual viewpoints, life experiences, and possible biases. These statements form the basis for transparency, allowing readers to grasp the researcher's standpoint and illustrating their dedication to self-awareness and ethical conduct. However, the specific content of a positionality statement may vary depending on the inquiry context, methodology, and individual experiences. It is essential for scholar-practitioners to communicate their positionalities and the potential impact authentically and transparently, while demonstrating a commitment to rigorous and ethical analysis. This transparency can be achieved through the inclusion of key points of discussion and disclosure.

First and foremost, the positionality statement should be self-reflective, contemplating one's social, cultural, and personal background and acknowledging personal experiences, beliefs, values, and biases that may shape perspectives on inquiry and research. Secondly, it should explore and discuss the scholar-practitioner's identity as a student and professional and how the interplay of these two informs their inquiry. Scholar-practitioners should address how their positionalities impact the inquiry process, including how their backgrounds and beliefs may shape their research questions, methodology choices, data interpretation, and potential biases that could emerge.

Positionality statements should also be a space in which scholar-practitioners discuss their awareness of ethical responsibilities and how they plan to navigate power dynamics, maintain participant confidentiality, and ensure respect for diverse perspectives within the research context — this is especially critical in promoting equity and social justice. In addition, scholar-practitioners should consider the implications of their positionalities on the validity of the research findings. They should discuss strategies to ensure the study's transparency, credibility, and trustworthiness, such as triangulation of data sources, member checking, or peer debriefing. Most importantly, the positionality statement allows the scholar-practitioner to tell their story, i.e., how their unique setting, professional acumen, and lived experiences informed and motivated them to pursue their inquiry. Through this exercise of transparency, scholar-practitioners can protect the credibility of their work, break down power structures, and engage readers, letting them know why the work matters on a personal level.

Reflexivity Statement

Incorporating a reflexivity statement within the DiP serves as a powerful tool for scholar-practitioners to assess how their values, beliefs, and biases influence and mold their research process (Bourke, 2014). This practice, guided by self-awareness, consciously examines the interplay between one's identity and the inquiry process. Scholar-practitioners, through reflexivity, can rigorously scrutinize their biases, assumptions, and subjective perspectives, fostering transparent acknowledgment of the impact of personal experiences and beliefs on their research. This addition of a reflexivity statement significantly bolsters the validity and credibility of their work while enabling a more nuanced grasp of the research topic and its implications.

Distinguishing itself from the positionality statement, a reflexivity statement centers on the scholar-practitioner's active involvement in introspection and a critical examination of their role in the research process (Bourke, 2014). It encourages profound reflection on the influence they exert over the research process and outcomes. This may take the form of journal keeping, recording emotional responses during interviews or survey analysis, or documenting initial perceptions upon meeting research participants. As EdD students committed to framing inquiries around equity, ethics, and social justice, addressing ethical dilemmas encountered during research and detailing practical strategies for navigating them is paramount. Highlighting instances where initial assumptions or biases were challenged or evolved during the research process illustrates how these moments of reflexivity subsequently impacted data collection, analysis, and interpretation.

A reflexivity statement serves as a valuable platform for scholar-practitioners to share insights and personal growth resulting from their reflexivity process. This statement should delve deeply into how reflexivity has enriched the scholar-practitioner's understanding of the research topic, participants, and the broader inquiry domain. Of utmost importance is the connection of these reflections to validity implications, elucidating how the scholar-practitioner's reflexivity efforts have favorably influenced the overall validity and credibility of the research. Specific measures taken to address potential biases, ensure transparency, and promote trustworthiness can be emphasized within this context.

Improvement Science

For many years, EdD programs in the US were created as a mirror to more traditional PhD programs in an attempt to validate their worth in academic spheres (Perry, 2016; Perry et al., 2020). That exercise in emulation restricted what made the EdD unique – equipping practitioners with the tools necessary to improve their practice via robust inquiry. Perry and colleagues (2020) suggested using Improvement Science as the signature pedagogy for EdD programs to support this goal of rigor. Improvement Science is a methodological approach that employs disciplined inquiry to solve problems of practice (Crow et al., 2019; Perry et al., 2020). It is multidisciplinary and relies heavily on applying professional wisdom to quality improvement (Institute for Healthcare Improvement, n.d.a). As a conceptual framework, Improvement Science promotes change. It seeks improvement based on actionable and nascent problems of practice while welcoming, honoring, celebrating, and highlighting the professional wisdom of practitioners and the voices of people with lived experiences.

Utilizing Improvement Science in DiPs is a powerful safeguard against bias, elevating the rigor, validity, and impact of inquiry. By emphasizing continuous improvement and learning, Improvement Science employs iterative cycles, theoretical frameworks, and data-driven analysis to curb bias and ensure accountability effectively. Through collaboration with stakeholders, the validity and relevance of findings are strengthened, while early dissemination fosters a culture of learning, collaboration, and continuous improvement. Together, these strategies provide a robust framework for scholars to

produce research that is rigorous, reliable, and free from bias, contributing to the advancement of knowledge in their respective fields.

Iterative Cycles

Improvement Science demands well-structured change initiatives supported by rigorous measures and systematic testing cycles. Common approaches to these iterative cycles encompass the Plan-Do-Study-Act (PDSA) method (Langley et al., 2009) and the Strategize, Implement, Analyze, and Reflect (SIAR) approach (Perry et al., 2020). Whether one opts for the PDSA or SIAR model to guide iterative cycles of implementation and evaluation, the process of testing and refining interventions assumes critical importance in demonstrating validity. Maintaining a comprehensive record of cycle data allows scholar-practitioners to showcase the evolution of their research based on continuous learning and feedback.

In an Improvement Sciencebased DiP, SIAR cycles are instrumental as they help the scholar-practitioner establish clear, measurable goals that are followed by a series of rapid and iterative cycles designed to test the proposed change idea. Data generated from each cycle plays a pivotal role in determining change, expanding improvement, and facilitating sustainable scaling (Langley et al., 2009). Notably, the SIAR cycles extend beyond mere planning, implementation, and data analysis, akin to the PDSA cycle, by also fostering reflection and critical thinking (Perry et al., 2020). This reflective practice encourages the identification of potential biases that may influence the construction of meaning and the selection of research methodologies. Such a framework, as exemplified by the use of SIAR cycles in Improvement Science, thus actively contributes to the promotion of rigorous data collection practices and reflexivity, effectively mitigating researcher bias and ensuring accountability in the inquiry process.

Theoretical Framework

Improvement Science can serve as the conceptual framework that ties change ideas together during testing cycles and implementation. However, selecting a theoretical framework to guide the development of change ideas based on research and evidence-based practices is also essential. Theoretical frameworks undergird students' thinking and provide a blueprint from which dissertations are built (Grant & Osanloo, 2014). Traditionally, demonstrating how research is grounded in theory and how the findings contribute to developing or refining theory helps to establish the quality of doctoral students' research. Generally speaking, scholar-practitioners are not looking to create theory but rather address problems of practice and devise practical solutions. To legitimize these efforts, Improvement Science encourages using theory to guide the development and evaluation of improvement interventions (Perry et al., 2020). Infusing inquiry with theory will provide structure to the DiP and a lens through which the development of solutions to problems of practice can be devised, reducing the potential impact of personal bias and increasing the reliability and validity of the inquiry findings (Grant & Osanloo, 2014).

Measurement

Improvement science promotes rigor by promoting measures emphasizing data collection and analysis to inform decision-making and drive improvement (Perry et al., 2020). By using standardized measures and data-driven analyses, Improvement Science helps scholar-practitioners minimize the influence of personal biases and subjectivity in evaluating educational practices. Using measures with Improvement Science provides a systematic and evidence-based approach to addressing educational challenges and improving outcomes. This safeguard against bias is vital for scholar-practitioners conducting research and seeking to generate valid and reliable evidence to inform educational policies and practices. This approach fosters transparency, accountability, and continuous improvement in education research and practice.

Whether scholar-practitioners design their own data collection measures or use well-established ones, they should consider multiple measures, frequency of data collection, and appropriate analysis techniques to capture and interpret data accurately. Several tools can help with this laborious task, such as MAXQDA, Dedoose, and others. By embracing improvement science's stance on measurement, scholar-practitioners can contribute to evidence-based decision-making and make meaningful contributions to their fields while minimizing biases and enhancing the validity and reliability of their findings.

Collaboration and Engagement

In her research on the value of community-based learning in professional doctorates, Lambrev (2023) stated that it is imperative that we acknowledge that local community contexts serve as invaluable educational environments that foster the cultivation of research practices that are rooted in equity, commitment, and ethics. Borrowing from translational research practices, Improvement Science further emphasizes the importance of engaging stakeholders in collaborative research. Collaborative research promotes quality because it serves to demonstrate how the research has been informed by the perspectives and experiences of the stakeholders and communities affected by its results. Collaboration and engagement also provide regular feedback, reflection, and discussion opportunities. Scholar-practitioners can share their findings, methodologies, and interpretations with their collaborative group, receiving constructive criticism, alternative viewpoints, and suggestions for improvement. This iterative feedback and reflection process strengthens their inquiry's rigor and validity. Involving a collaborative group in the research process enhances the credibility and trustworthiness of the findings.

Another significant advantage of collaboration and engagement is gaining the consent of your research participants, ensuring that your inquiry approach respects the rights, values, and needs of the participants and the community. The engagement of stakeholders ensures that the inquiry is relevant, applicable, and aligned with real-world contexts and needs, which helps to address potential biases. Collaborative inquiry encourages the translation of research findings into actionable knowledge and practice, establishing a pathway for co-creating knowledge relevant and applicable to real-world contexts. This knowledge mobilization ensures that the research has a meaningful impact and contributes to positive change within the field. Adopting collaborative inquiry and promoting stakeholder engagement can serve as a vital accountability safeguard for doctoral students conducting DiPs.

Dissemination and Implementation

Improvement Science promotes dissemination to facilitate learning, continuous improvement, collaboration, implementation, and accountability (Perry et al., 2020). Demonstrating how research

has been disseminated and implemented and its impact on individual practice can help scholar-practitioners show the quality of their work. Furthermore, Improvement Science emphasizes the importance of disseminating findings and implementing successful interventions to create opportunities for others to scrutinize and evaluate the rigor of inquiries. This transparency helps build trust and confidence in the research process (Carnegie, 2010; Perry et al., 2020). Dissemination as an expression of a student's ability to critically analyze and synthesize research, engage with diverse stakeholders, and effectively communicate research findings to various audiences should be a distinguishable core competency for EdD students. Disseminating research findings before the DiP is complete enables scholar-practitioners to receive valuable feedback from peers and experts in their respective fields. Examples of early dissemination of results can include conference poster presentations, research symposiums, thesis competitions, or Pecha Kuchas.

Dissemination of research results, especially early on, helps scholar-practitioners demonstrate the validity and credibility of their research inquiries by promoting transparency, receiving peer feedback, facilitating iterative improvement, enabling external validation, fostering collaboration, and supporting real-world application. Dissemination is an essential component of improvement science, supporting its overarching goal of generating and spreading knowledge to achieve meaningful and sustainable improvements in various domains (Crow et al., 2019; Perry et al., 2020). By engaging in early dissemination, scholar-practitioners can demonstrate their expertise, enhance the rigor and impact of their inquiries, and contribute to advancing knowledge in their respective fields.

Critical Questions as Safeguards

Vassallo (2004) suggested that awareness of potential biases can improve evaluation reports and reduce threats to their validity. He suggested that this consciousness can be achieved by employing critical questions as safeguards when evaluating results (Vassallo, 2004). Scholar-practitioners can similarly use critical questions to assess the clarity, relevance, progress, intended or unintended outcomes, objectives, implementation, resources, alignment, policy, stakeholders, and alignment of their inquiry objectives (Vasallo, 2004). Critical questions compel the scholar-practitioner to question whether their objectives are well-defined, if they address the critical issues at hand, and if they are specific enough to guide the inquiry process effectively.

The additional layer of critical questioning supplementing the research guiding questions can help identify potential factors affecting credibility, such as design, data collection, and attitudes toward participants. By incorporating critical questions as safeguards, scholar-practitioners can engage in a reflective and evaluative process that enhances the quality and credibility of their applied research. Critical questions encourage scholar-practitioners to think critically, challenge assumptions, and address potential biases or limitations, ultimately strengthening the validity and reliability of their inquiries.

Critical Friends Group

The term "critical friends group" (CFG), a registered trademark of the National School Reform Faculty (NSRF), describes a type of professional learning community that provides a structured and collaborative environment for educators to engage in professional development and offer constructive feedback to improve their practice (Mattoon & McKean, 2020). Critical friends are learning partners that support the professional development of a scholar-practitioner by providing insight and subsidizing their autonomy in creating knowledge related to their practice (Kember et al., 1997; Noor & Shafee, 2011). Critical friends serve as consultants and peer-reviewers, eliciting reflection and offering impartial feedback (Kember et al., 1997; Lambrev & Cruz, 2021; Noor & Shafee, 2011). In addition, and in support of engaging a collaborative learning approach, a recent study by Lambrev (2023) stated that "collaboration adds value to mastering the tenets of research together with similarly engaged colleagues because this is how practitioners normally work: as part of a team" (p. 50). CFGs are an avenue that doctoral students can exploit by "utilizing each other's strengths, knowledge, and expertise" (Lambrev, 2023, p. 50) to increase their learning and keep them accountable.

Critical friends can include other doctoral students and professional colleagues. In informal meetings, critical friends can offer honest and neutral feedback, helping scholar-practitioners brainstorm through areas of concern and adopting a more neutral approach to their inquiries. Conversations between critical friends can occur in formal or informal meetings. In formal meetings, a conversation protocol, such as those offered by the NSRF, can be used to guide the discussion. I used a discussion protocol borrowed from my time at the Association of University Centers on Disability's (AUCD) Leadership Academy. It includes a 15-15-15 format with 15 minutes to present a summary of your work, 15 minutes to receive feedback, and 15 minutes for open discussion. As part of the conversation protocol, critical friends deliver reactions and opinions that serve to deepen the understanding of findings by infusing it with different perspectives, scrutinizing the inquiry process, and questioning scholar-practitioners' assumptions (Blake & Gibson, 2021; Creswell, 2014; Noor & Shafee, 2011). These conversations enhance the inquiry process, support professional integrity, and help scholar-practitioners reflectively inform next steps.

The safeguard strategies discussed in this section collectively serve as a powerful toolkit for scholar-practitioners seeking to address bias head-on in their academic and professional writing. They facilitate a transition from subjective inquiry rooted in personal biases to research that stands up to rigorous scrutiny (Popper, 1979). By implementing these measures, scholar-practitioners legitimize their inquiries and contribute to the broader advancement of knowledge, fostering a scholarly environment that thrives on transparency, self-awareness, and commitment to rigor.

CONCLUSION

The significance of professional wisdom in the practice and inquiry of a scholar-practitioner is best understood within the context of the EdD program's distinct focus on applying existing research to improve professional practice. Professional wisdom enriches the design of research studies, improves data collection methods, increases credibility, facilitates the translation of research findings into practical implications, and supports effective dissemination. In practice-based research, professional wisdom aids in shaping inquiry questions, designing methodologies, and interpreting results, resulting in relevant, reliable, and valid research. Recognizing their positionalities and engaging in reflexivity allows scholar-practitioners to incorporate professional wisdom responsibly, promoting social justice and centering their inquiry on the communities they serve.

To establish the soundness and credibility of their inquiries, scholar-practitioners must be transparent regarding potential biases, adopt rigorous data collection tactics, explicit theoretical and conceptual frameworks, and demonstrate evidence of impact. Positionality and reflexivity statements serve as powerful tools when integrated into scholar-practitioners' research. They allow scholar-practitioners to recognize their distinct viewpoints, personal experiences, and potential biases openly. These statements establish transparency, giving readers insight into the researcher's standpoint and showcasing a dedication to self-awareness and ethical conduct. Improvement Science enhances research rigor, validity, and impact by focusing on continuous improvement and learning. It employs iterative cycles, theoretical frameworks, and data-driven analysis to curb bias and ensure accountability. Collaboration with stakeholders strengthens the validity and relevance of findings, while early dissemination fosters learning, relationships, and continuous improvement. Critical questions and engagement with CFGs further enhance the validity and credibility of applied research by addressing biases and leveraging collective expertise.

The EdD degree, as emphasized by Perry (2016), celebrates the invaluable role of professional wisdom in addressing real-world challenges and enriching the inquiry process. Professional wisdom bridges the gap between research and practice, making research accessible and impactful. It refines the relevance and applicability of research, resonating with practitioners, policymakers, and the general public. By integrating professional wisdom, the DiP can empower scholar-practitioners to drive meaningful change and create a more inclusive research landscape. Utilizing the strategies discussed in this essay, scholar-practitioners can showcase their commitment to rigorous methodologies that yield evidence of validity, credibility, and reliability while celebrating the guiding force of professional wisdom in their scholarly pursuits.

Future Steps

In order to advance the suggestions presented in this essay, there are intriguing avenues for further exploration. One avenue involves conducting a comprehensive review of dissertations-in-practice through document analysis, aiming to uncover additional strategies scholar-practitioners employ to mitigate bias and underscore the significance of professional wisdom.

Moreover, research has indicated the influence of creativity and flow on research productivity (Schutte & Malouff, 2020a; Schutte & Malouff, 2020b). Lambrev's (2023) recent work has revealed that engaging in consultancy models and integrating practical wisdom into scholarly pursuits fosters heightened learning and the development of a robust scholar-practitioner identity. Creativity, entailing the generation of innovative ideas and solutions (Kaufman & Beghetto, 2009), and flow, representing a state of profound engagement and optimal experience (Schutte & Malouff, 2020b), are interconnected. Engaging in creative endeavors can induce a state of flow, while being in a state of flow can enhance creative thinking and expression (Schutte & Malouff, 2020b). It would be interesting to delve further into this research to explore whether incorporating professional wisdom in academic writing can amplify flow and creativity. Additionally, investigating potential correlations between these concepts would lend further support to the consultancy model and the utilization of CFGs within the EdD program design.

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