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Reinventing EdD Research Methods Courses:
Elevating Traditional Teaching with Transformative Learning

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ABSTRACT

The education doctorate program fills an essential niche that allows practitioners to earn a doctorate and make a difference in educational practice and policy. However, critics claim EdD programs are failing to effectively prepare students. There has been a push for the reinvention of the EdD which includes improving EdD student confidence in their ability to undertake research. This calls for a redesign of research methods courses and purposefully grounding them in adult learning theory. The framework of transformative learning can foster higher-order learning by including key components such as critical reflection, collaborative dialogue, and awareness of context. This article shares a transformative learning model used to redevelop an EdD research methods course that emphasised self-reflective tasks such as identity memos, research design maps, and cognitive interviews. This learner-centred, constructivist approach resulted in positive learning outcomes including increased student confidence and enhanced practical knowledge and research skills.

KEYWORDS

education doctorate, EdD, research methods courses, adult learning, transformative learning

BACKGROUND

Reinvention of the EdD

The education doctorate (EdD) was first adopted in the early 1920s by Harvard and Columbia University to fill an essential niche. The purpose of the EdD was to allow practitioners to earn a doctorate and contribute to educational practice and policy, as well as facilitate further research in the field. However, the worthiness and quality of the EdD has since been debated, as critics claim EdD programs are not handing the juxtaposition of academic and professional components and are failing to effectively prepare students (Levine, 2005; Wergin, 2011). The EdD is sometimes equated to a PhD-lite, a watered-down version of the PhD, as opposed to a quality degree that stands on its own merits (Buttram & Doolittle, 2015). There has been a push for the reinvention of the EdD by critically examining its purpose and delivery. The Carnegie Project on the Education Doctorate (CPED) was launched in 2007 to give the EdD increased rigor and validity with the goal "to make it the highest quality professional preparation experience for educational leaders" (Perry, 2018, p. 35).

With member as well as non-member institutions showing commitment to the CPED vision to improve the EdD, it is hoped that a purposeful redesign might also help to mitigate the concerning rates of attrition of EdD students (Buss & Allen, 2020). Student dropout and the all but dissertation phenomenon are influenced by factors such as lack of finances, poor mentoring, social isolation, and program quality (Kelley & Salisbury-Glennon, 2016). Some students also lack research self-efficacy and feel they are not sufficiently equipped with the practical skills to undertake their research.

Improving the overall experience and confidence of EdD students calls for a redevelopment of the structure of the EdD, including a redesign of research methods courses to adequately prepare educational practitioners to conduct rigorous research (Kerrigan & Hayes, 2016). While the purpose for conducting research may be different for the PhD versus the EdD program, as EdD students often investigate ongoing educational problems with the goal to improve practice (CPED, 2021), conducting any type of doctoral-level research requires equally high levels of skill. Research undertaken by EdD students helps to address the implementation gap between academia and the practical application of educational research in the field (Storey & Hesbol, 2014). Practitioner research must meet exacting standards in quality and rigor for it to be trusted to influence necessary changes in practice to improve educational leadership, teaching, and learning.

Teaching research methods courses and supporting students to acquire multifaceted and highly nuanced research skills is a complex challenge. As described by Kilburn et al. (2014), "The capacity to engage with and undertake research… demands a combination of theoretical understanding, procedural knowledge and mastery of a range of practical skills" (p. 191). Yet, pedagogical guidance to support the teaching of research methods course is disjointed and underdeveloped, and the quality and structure of research methods courses vary widely (Earley, 2014; Nind et al., 2015). Some scholars go as far to say that there is great ignorance on the use of sound pedagogical approaches when teaching research methods, resulting in disappointing outcomes (Garner et al., 2016). This sentiment is echoed by Strayhorn (2016), who reported:

> Teaching research methods is difficult and often a miscellany of approaches is used to proffer students a less than useful

> introduction to a wide range of concepts. In fact, a large majority of graduate students complain that their research methods courses inadequately prepared them for independent research. (p. 119)

When investigating the best practices of teaching research methods, the literature points to transformative, active learning pedagogies (Allen & Baughman, 2016; Gunn, 2017; Lundahl, 2008; Zhou, 2022), yet many instructors continue to follow a traditional, teacher-directed approach (Kilburn et al., 2014). Caution is given against teaching research methods courses using simplistic approaches, as ineffective teaching using a linear process "poses the danger of [students] adhering to strict methodological prescriptions with little regard for varying contexts or sensitivity to emergent research problems" (Preissle & Roulston, 2016, p. 13). Thus, passive learning is not enough. Helping students to become researchers requires transformative teaching that includes hands-on, learning-by-doing opportunities to think creatively, challenge assumptions, and practice inquiry, analysis, and evaluation skills (Lewthwaite & Nind, 2016).

Change is needed and meeting the challenges in reinventing the EdD requires courageous new designs and the willingness to experiment and try new approaches (Shulman et al., 2006). This article outlines an improved research methods course design that is purposefully grounded in adult learning theory, specifically transformative learning theory, to increase EdD students' research proficiency. Two frameworks of transformative learning are presented, followed by details on how these frameworks were combined to create a comprehensive model for the redevelopment of an EdD research methods course to promote higher-order learning.

Adult Learning Theory

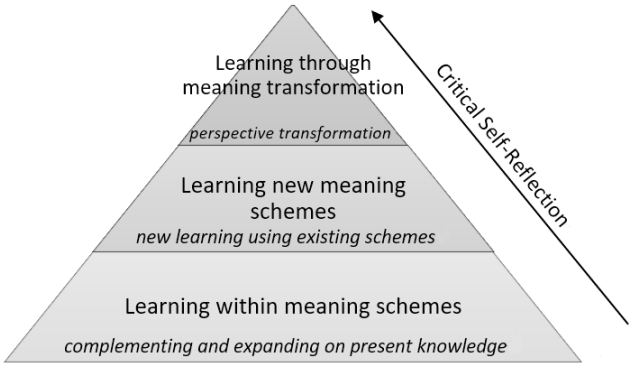
When seeking to address the criticisms of professional doctoral programs with the redevelopment of course content and delivery, the chosen pedagogical approach must be both meaningful and practical to address the academic and professional doctoral degree requirements (Olson & Clark, 2009). Course design must meet the specific needs of adult learners and provide them with the essential knowledge and skills required to investigate solutions to educational problems, including critical thinking, analysis, and synthesis skills. Malcolm Knowles (1984) is credited for popularizing the term andragogy as a new learning pedagogy specifically targeting adults. The core assumptions of Knowles' theory describe adults as self-directed learners who build on prior experience and are ready to learn relevant, real-world content. Yet like all strong theories, andragogy has been widely critiqued and debated. Among some of the shortcomings is the criticism that andragogy relies too heavily on individualization and conformity and ignores transformation (Grace, 2001). Thus, attention has turned to transformative learning, an adult learning theory that includes an additional core component missing from Knowles' (1984) theory of andragogy—critical self-reflection (Cranton & Taylor, 2012; Kheang, 2019; Taylor & Laros, 2014). While both andragogy and transformative learning theory have common elements such as fostering self-directed learning and building on existing experience, transformative learning theory builds upon andragogy with the added dimensions of cognition, meaning schemes, and levels of learning. The application of these additional components found within transformative learning theory are vital to creating an effective learning environment in higher education classrooms, especially in research method courses which require students to use complex critical thinking and analysis skills, often accompanied with a shift in mindset. Some students come into research methods courses thinking they have effective interview techniques or an understanding of thematic coding, when in fact their skills are rudimentary, and they bring with them many misconceptions about research (Gunn, 2017). Instruction based on transformative, higher-order learning is essential in supporting students to become aware of distorted or incomplete assumptions and to reevaluate and transform their understanding so that their research studies are properly conducted to produce valid results. This article describes the redevelopment of an EdD research methods course based on the combination of two transformative learning frameworks: Mezirow's (2000) three ways of learning through meaning and Taylor's (2009) six core elements for a transformative approach to teaching. Each framework alone does not address all the components of transformative teaching, however, when used in combination, they create a comprehensive model for a higher-order learning environment.

Transformative Learning: Mezirow's Ways of Learning Through Meaning

Jack Mezirow (1981) is recognized as one of the key founders of transformative learning theory. Transformative learning emerged in the late 1970s as a theory in progress and is often first linked to Paulo Freire (1970) who described traditional teaching as banking, illustrated as teachers depositing knowledge upon passive students. His remedy was conscientization, whereby students are encouraged to develop critical awareness through reflection and action and learn to think for themselves. Mezirow was influenced by Freire and by the work on paradigms of knowledge by learning theorist Jürgen Habermas (1971) (Fleming, 2018). One distinctive component of Mezirow's (1981) transformative learning theory is metacognitive growth that results from reflecting critically on the nature and consequences of our assumptions and those of others, which promotes a shift of consciousness, or perspective transformation, by the learner. The ability for students to critically reflect and transform their mindset is especially important in research methods courses where the validity of results depends on the researcher's ability to identify biases and assumptions. While reflexivity is an essential component in quality research practice, it is frequently overlooked in EdD programs (Finch, 2022). Reflexivity and critical self-reflection provide the foundation for Mezirow's (2000) three ways of learning, which describe changes to individual meaning perspectives based on content, process, and premise. As illustrated in Figure 1, Mezirow's (2000) ways of learning through meaning include: 1) learning within meaning schemes, such as complementing and expanding on current understanding, 2) learning new meaning schemes, such as adding additional knowledge to existing understanding, and 3) learning through meaning transformation, such as by changing points of view (seeing from another's perspective) or changing habits of mind (redefining assumptions and beliefs).

While all levels of learning have value, it is only the uppermost level of learning, learning through meaning transformation, that results in perspective transformation. This dimension involves a critical re-evaluation of oneself that often includes a realization that what was believed previously no longer holds true. Inherent in perspective transformation is the examination of preconceived

Figure 1. Mezirow's Ways of Learning



assumptions that, upon deeper deliberation, reveal social injustices and inequalities:

> Transformative learning refers to the process by which we transform our taken-for granted frames of reference (meaning perspectives, habits of mind, mind-sets) to make them more inclusive, discriminating, open, emotionally capable of change, and reflective so that they may generate beliefs and opinions that will prove more true or justified to guide action. (Mezirow, 2000, p. 7-8)

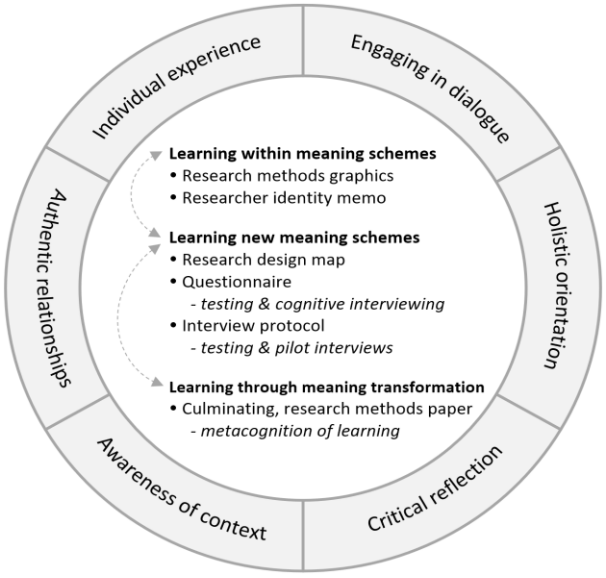
Research methods courses that incorporate transformative, critical thinking approaches help create practitioners with a heightened sense of social justice, privilege, and inequity, resulting in more inclusive and richer research outcomes (Perkins et al., 2020).

Transformative Learning: Taylor's Core Elements for a Transformative Approach to Teaching

Over the past few decades, a growing number of journal articles, books, conferences, and dissertations have examined, developed, and supplemented the understanding of transformative learning. While the literature on transformative learning theory itself is expansive, less studied is how transformative learning theory meets practice (Kostara et al., 2022; Mezirow & Taylor, 2009) and how to explicitly implement the many facets of transformative theory to benefit learners in the classroom (Kasworm & Bowles, 2012; Kreber, 2022). Among the limited choice of approaches to inform instructors on best practices for teaching adults, Taylor's (2009) framework for a transformative approach to teaching is perhaps the most well-known, as it has evolved over decades of research that included collaboration with Mezirow. Taylor (2009) was concerned with the lack of clear direction and theoretical foundations when teaching adults, and he cautioned against "rudderless teaching, with no clear goal or purpose" (p. 5). After reviewing the empirical literature to ascertain the essential components of transformative teaching, Taylor (2009) proposed six core elements of adult learning in practice: individual experience, awareness of context, dialogue, authentic relationships, holistic orientation, and critical reflection. These six elements were not intended to stand alone, as elements interact with each other, such as relationships can influence successful dialogue, or experience can influence understanding of context and holistic orientation. These interdependent elements help in the creation of an effective environment for adult learning that is conducive to critical questioning, probing discourse, and reflective evaluation.

When choosing a transformative learning framework to guide the redesign of an EdD research methods course, Taylor's (2009) six core elements provide an excellent structure for a transformative approach for teaching, yet this framework does not fully encompass Mezirow's (2000) transformative learning dimensions of cognition, meaning schemes, and levels of learning. In turn, while Mezirow's (2002) three ways of learning add deeper meaning dimensions, they are not sufficient as a stand-alone framework as they lack the practical scaffolding for teaching that is provided by Taylor's (2009) six elements. Neither framework alone provides a complete model to fully implement the constructs of transformative learning, however, when integrating the unique strengths of Mezirow's (2002) ways of learning with Taylor's (2009) core elements, the result is a comprehensive model of transformative learning (see Figure 2). The use of this combined transformative learning model that provides both structure and a guide for deeper meta-cognitive learning is a helpful tool for the reinvention of EdD research methods courses, as explained in more detail in the next section.

Figure 2. A Comprehensive Transformative Learning Model for EdD Research Methods Courses



THE PEDAGOGICAL REDESIGN OF EDD RESEARCH METHODS COURSES

Barriers to a Transformative Learning Approach

Research methods courses are a critical component of doctoral programs for education practitioners, as proficient research skills are fundamental in linking doctoral scholarship to the field of practice. Essential skills in research include identifying a research problem, synthesizing the literature, determining the research questions, collecting, analyzing, and interpreting data, and reporting and evaluating research (Creswell & Guetterman, 2019). The nature of undertaking a research study is especially well suited to transformative methods and critical reflection, from choosing a meaningful purpose statement and constructing significant research questions, to effectively analyzing data and appropriately interpreting resulting themes. However, few higher education instructors base their course content and delivery on the theoretical underpinnings of

adult learning theory (Hidalgo et al., 2018). Instructors come from a range of backgrounds and expertise in teaching, and without the proper training or expertise, many struggle to effectively incorporate transformative learning. Some are put off by the notion that transformative learning can be uncomfortable and awkward (Moore, 2005). Others cite lack of time as a barrier and take a reductive approach to teaching: "They demand information about 'what works' and reject opportunities for their own formation and transformation as teachers and learners" (Kostara et al., 2022, p. xviii). Thus, many instructors focus on teaching what research is, as opposed to providing students with hands-on learning opportunities that shift away from teaching about research, towards learning how to do research (Strayhorn, 2016). Active learning falls under the umbrella of constructivist learning and requires purposeful lesson planning, as it is a student-centered rather than teacher-driven approach where the learner is actively constructing knowledge, as opposed passively taking in information. Many instructors, as part of their university's professional development, would appreciate learning opportunities about hands-on, transformative strategies, but are hard-pressed to find appropriate courses or resources (Christie et al., 2015).

Implementing a Model for Transformative Learning in an EdD Research Methods Course

To aid instructors in understanding how to incorporate adult learning theory into practice, the transformative learning model introduced (see Figure 2) is further explored in the subsequent sections of this article. This comprehensive model was used by the author to guide the redesign of an introductory EdD research methods course taught in an Educational Leadership and Policy program. Permission was granted by a few selected students to include their self-reflections (anonymously) to help illustrate student learning.

Core Elements of Adult Learning in Practice

In the redesign of the EdD research methods course, the structure for the planning and delivery was provided by Taylor's (2009) six core elements of adult learning in practice: individual experience, awareness of context, dialogue, authentic relationships, holistic orientation, and critical reflection. Each class, task, or activity incorporated a number of core elements into their design, depending on their purpose and nature, as further explained in the following sections.

Core Elements 1 and 2: Individual Experience and Awareness of Context. Previous experience was highly valued throughout the EdD course, as each adult learner brought different knowledge and skills from which to draw. Relevant experience was acquired through prior academic studies, professional work, or personal life experience. Students were encouraged to be aware of their contexts and be mindful about how these might affect their thinking or create inherent biases. New contexts, such as personal, professional, and sociocultural factors, were introduced by the course content, setting, readings, tasks, and by fellow classmates. To facilitate student awareness of the significance of experience and context, the pedagogical framework for the course was presented and openly discussed in the first class to provide transparency regarding expectations and to assist in the understanding of the learning approach. Coursework allowed for differentiation to better meet individual learner's needs and build on their personal and professional experiences, as students in the EdD course were typical of those pursuing the EdD programs in that they brought with them differing levels of knowledge about conducting research. Some students had undertaken a comprehensive research thesis in their MA programs, while others had completed a course-only MEd that did not require a research component such as a thesis or a major research paper. In addition, students came from varying subject-based backgrounds including arts, science, philosophy, and math, and each having different epistemological approaches. To allow students to build on their varying backgrounds and experiences, tasks and assignments were purposefully designed with multiple entry points, and assignments had supplementary options based on skill or interest, and choice was given for content, process, and product.

Core Elements 3 and 4: Dialogue and Authentic Relationships. Creating a collaborative community of learners was a central component of the EdD course design. Opportunities for dialogue with fellow classmates and the instructor were embedded throughout, as transformation happens "through trustful relationships that allow individuals to have questioning discussions, share information openly[,] and achieve mutual and consensual understanding" (Taylor, 2007, p. 179). When learning to perform new research methods and skills, students often have misconceptions or take a wrong turn, which creates the opportunity for valuable learning. Fostering an inclusive learning space that allowed individuals to feel safe to share ideas and make mistakes was essential for growth. In the EdD course, creating a welcoming environment started with the instructor, who established a positive learning culture by fostering supportive and genuine relationships with students and by readily offering guidance and support. Student-student relationships were promoted with the use of an online discussion platform, class breakout rooms, collaborative tasks, as well as independent small group sessions. Classmates provided each other with encouragement, suggestions, and critical feedback. In addition, students reviewed other classmates' work with the goal of undertaking self-assessment and engaging in metacognitive reflection of their strengths and weaknesses and understanding how new perspectives could improve their work.

Core Element 5: Holistic Orientation. Holistic orientation encompasses both the affective and rational ways of knowing. While the rational process (analyze-think-change) is more often recognized, the affective process (see-feel-change) is also an important factor for true change to occur (Brown, 2006). When cognition is accompanied by emotion, this can elicit a reflective process that more deeply challenges previously held assumptions about knowledge or about self (Dirkx, 2008). Many of the activities in the EdD research methods course were set within the zone of proximal development of the learners—where students left the comfortable realm of what they know, to be challenged to acquire new skills and new learning (Vygotsky, 1978). When faced with a challenge or novel experience, students experienced emotions of doubt or anxiety. However, after achieving a successful outcome with support from the instructor and their peers, these feelings were replaced with pride and increased self-confidence in their abilities. As revealed by an EdD student during a reflective activity in the final class: "I used to fear that collecting reliable data for my dissertation was an overwhelming task. Now I feel far more optimistic that I have the skills and supportive, critical friends to conduct a study that will offer a valid contribution to the literature."

Core Element 6: Critical Reflection. Although critical reflection is listed as a separate core component, it is inextricably woven into

all other core components. Critical reflection has a strong foundation in critical theory and is divided into two categories: critical reflection of others' assumptions and critical self-reflection of one's assumptions (Kreber, 2012). Incorporating critical reflection components into the EdD course structure required planning tasks and activities that encouraged learners to identify their perspectives as well as those of others to identify, scrutinize, interpret, and explore alternatives. Like holistic orientations, critical reflections can be both rational and emotional. For example, discomfort may arise when engaging with social justice and equity issues and discovering that one's views and convictions are revealed to be flawed. Critical reflection and self-reflection were integrated throughout the EdD course, starting with defining a research topic on a problem of educational practice and identifying positionality and biases. Critical thinking was integral to all tasks including designing research maps, considering ethical implications, identifying methodological worldviews, creating, piloting, and conducting surveys and interviews, and gathering valid and reliable data from participants. Critical self-reflection was also a key factor in the assessment rubric for the culminating research methods paper, which included a section devoted to students' analysis of the difficulties they encountered and their learning and growth as researchers.

Ways of Learning Through Meaning

Transformative learning through critical self-reflection is a process of questioning and critique, and the most profound adult learning occurs when meaning perspectives are transformed and core presumptions are reconstructed (Kreber, 2022). To assist students in the EdD course to re-evaluate and alter existing beliefs to achieve higher-order meaning transformations, Mezirow's (2000) ways of learning through meaning were used to provide further depth to Taylor's (2009) core elements. The center of the model shown in Figure 2 lists the key course tasks and assignments that were grouped under each of the three ways of learning. Course content and activities were scaffolded to allow students to sequentially gain the knowledge and skills required for the culminating assignment, with the ultimate goal of preparing students for their dissertation in practice. While the model depicts a linear structure with tasks and assignments categorized under a particular way of learning, arrows were included to indicate the levels of learning could occur at any point, depending on the learner and the nature of the task. A description of selected course tasks within each meaning scheme is presented in the following sections.

Learning Within Meaning Schemes. The first way of knowing involves learners using what they already know and expanding on or complementing their existing knowledge base. Specific tasks in the EdD course within this meaning scheme included students working in collaborative groups to create graphic visualizations (infographic, mind map, sketch note, or graphic slide) of different research methods. Some students brought with them a basic understanding of qualitative research, but were given the opportunity to expand their understanding of narrative inquiry, phenomenology, grounded theory, ethnography, case studies or mixed methods. Students were also tasked to write a researcher identity memo (Maxwell, 2013), a reflexivity task to clarify and contextualize their position about the research process and help situate themselves into their proposed area of study. The researcher identity memo included an examination of their background, research interests, beliefs, strengths, and concerns. This memo was revisited at a number of points throughout the course to incorporate new understanding and track how conscious and unconscious assumptions might have changed.

Learning New Meaning Schemes. The second way of knowing involves learners acquiring new understanding that is compatible with existing knowledge, as new meaning schemes often fit into existing perspectives. In the EdD research methods course, students created a research design map (Maxwell, 2013) that included the key components of a research study and the ways in which these components may be affected by one another. The design map included research goals, research questions, and a conceptual framework, as well as a description of methodology, validity, and environmental constructs (ethics, researcher skills, and resources). The design map helped students understand the purpose and structure of their study and how to successfully carry it out. Students acquired deeper understanding of the intricacies of research design, such as how to write effective research statements and how to graphically visualize a conceptual framework. Revisions to the design map occurred throughout the EdD course as students progressed with their research studies and gained valuable new insights and aptitudes. As voiced by one EdD student, revisiting the design map in collaboration with fellow classmates helped to provide new insights and understanding:

> My discussion with classmates provided me with a deeper layer of review and probing. I felt that our conversations using course articles and our original design maps resulted in deep critical thinking about the alignment of our study's purpose with our research questions. One significant point of learning for me was reflecting on the type and wording of my questions and whether they aligned with the study's conceptual framework. Did they actually target my original goals and research intentions? I was surprised at how my initial wording was not as effective as I had originally thought, and how the questions were not asking what I thought they were. I have come to a new realization of the complexities involved in designing research and how poorly constructed research questions can create problems for the rest of the study.

A large portion of the EdD course was dedicated to the hands-on, learning-by-doing acquisition of research skills. Collaborative discourse with fellow classmates to provide feedback and support was integral to this process. For example, one active learning task was based on Castillo-Montoya's (2016) four-phase process for systematically developing and refining an interview protocol. Steps included posting interview protocol scripts to the class discussion forum for preliminary feedback, undertaking cognitive interviews to refine questions, and using their revised interview script to conduct pilot interviews with fellow classmates before initiating actual interviews with participants. For many students, the series of learning activities not only included uncovering new meaning schemes, but also prompted critical self-reflection that progressed into reevaluation of previously held beliefs and assumptions. As shared by one EdD student, collaborative debate during cognitive interviews provided valuable learning:

> I was initially a bit skeptical when it came to cognitive interviews, but I learned—it's all in the details! The most minor misuse of a word can create major misinterpretations and alter the outcomes of the results. Discussing each question in detail with classmates was such an eye-opener, as it helped me to eliminate or modify statements that participants might interpret differently than I had intended. A particularly heated discussion

was about whether we should ask about a participant's race, and whether race would, in fact, contribute anything to the research. (Was it worth keeping, knowing that it risked offending some people?) This process proved to be highly valuable, and I learned how collaborative discourse greatly enhanced the validity of my study.

Learning Through Meaning Transformation. The highest order of learning requires an awareness of one's distorted or incomplete assumptions and reevaluating or reordering meaning to transform it (Mezirow, 2000). Points of view can be changed by being open to others' interpretations and perspectives. Habits of mind can be transformed by being critically reflective of one's own premises, and by questioning assumptions, beliefs, and feelings (Kitchenham, 2008). In the EdD course, transformation occurred in one of two ways—sudden or dramatic, triggered by an incident or revelation, or slow and incremental, involving a series of incidents or experiences that caused a change in viewpoint or mindset (Mezirow, 2000). Certain tasks began with first order learning but transitioned to learning through meaning transformation by adding critical self-assessment or discourse, as transformation requires meaning to be explored, questioned, and debated.

As part of the expectations of the EdD course, students posted their weekly work on the online discussion forum in order to give and receive feedback from fellow classmates. Some of the richest learning occurred from seeing their classmates' work, which prompted metacognitive assessment to improve their work. In the final assignment, student learning was demonstrated in their research methods paper by the growth in knowledge and skills they gained throughout the EdD course. Growth was also revealed by students in their reflections, where many shared that they had experienced a change in their understanding or perspective. As expressed by one EdD student, they appreciated being pushed to rethink existing assumptions:

> My greatest takeaway was the value in having critical friends to spend unhurried time with me participating in deep, reflective conversations about my research design, allowing me to gain not only clarity but also foundational skill development. My peers helped me to look at my study through a different lens and allowed me, as a researcher, to shed light on issues that I had not previously considered. This learning process changed my entire perspective on how to conduct effective research. As the professor shared in her introductory class, the framework for this course was collaborative, active, hands-on learning. At the time, I couldn't imagine what that entailed. Now, in retrospect, I know I have learned more by doing the learning in these short 12 weeks than I ever have before.

CONCLUSIONS AND FUTURE DIRECTIONS

The nature of an EdD research methods course lends itself particularly well to the use of transformative learning pedagogies, as conducting a valid and reliable study is intrinsically a transformative undertaking for the researcher. Conducting research requires critical reflection when considering researcher positionality, bias, inclusion, and ethics. When researchers are accepting of input from differing perspectives, especially in the creation of research instruments, the end product enhances the trustworthiness of the data collected. Higher-order thinking skills and the use of a critical lens are especially important when analyzing and interpreting data. To ensure the proficiency of future researchers, it is essential for research methods courses to be based on an adult-centered, transformative approach.

The model of transformative learning for research methods courses presented in this paper is intended to be a tool to assist instructors achieve rich and rewarding results for adult learners, such as increased self-confidence, personal satisfaction, stronger connections with others, empowerment, and deeper understandings (Moore, 2005). The model emphasised fostering relationships that supported the creation of a safe learning environment. Adult learners were encouraged to build on previous experience and could choose to investigate real-world issues relevant to their situations and interests. Critical self-reflection was integral to the many meta-cognitive tasks such as researcher identity memos, research design maps, ethical considerations, and the collaborative creation of research instruments using cognitive interviews. An active learning approach facilitated gains in essential research skills, and growth was further supported by peer feedback and dialogue. Transformation was achieved when learners were open to situating themselves into differing viewpoints and changing previously held assumptions and beliefs. These transformative outcomes are in alignment with a number of the guiding principles found within The CPED (2021) Framework that supports a high-quality, rigorous EdD program by embracing the use of signature pedagogy that fosters the preparation of scholarly practitioners who act with integrity and challenge their pre-existing assumptions.

It should be acknowledged that this article provides but one example of how to redevelop an EdD course using adult learning theory. While all learners demonstrated significant growth, some transformed more than others, depending on previous skill levels and mindsets. Due to the scarcity of research on the pedagogy of research methods courses, next steps would be to encourage further mapping of new directions for EdD courses based on theoretical underpinnings (Gunn, 2017). The literature lacks exemplars of theoretical frameworks to foster the instruction of effective transformative learning and reduce the practice of arbitrary and disconnected strategies (Taylor & Cranton, 2012). To help fill this gap, the transformative learning model presented in this article, created from the integration of Mezirow's (2000) and Taylor's (2009) frameworks, is a tool that can be used in future studies by researchers when investigating the use of adult transformative learning pedagogies in EdD programs. Additions to the literature on the merits and pitfalls of transformative learning would help to increase the knowledge base of both researchers and educators and help meet the ultimate goal of supporting EdD students to feel confident in contributing rich research in practice.

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