


Mechanisms for Change: Infusing the EdD with Change-making Practices

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ABSTRACT

While the COVID-19 pandemic forced the rapid development of adaptations in educational systems, these innovations often disappeared as schools returned to so-called pre-pandemic normalcy. This essay explores the role of the Education Doctorate (EdD) programs in equipping candidates with the necessary tools to foster sustained change within their institutions, even in the face of limited power. Drawing from the metaphor of the Rider and the Elephant, this essay proposes specific practices within the EdD framework to support students in appealing to both logical reasoning and emotional engagement to drive change. By aligning the Rider (conscious thinking) with the Elephant (unconscious emotions) and creating a conducive path (environment), lasting behavioral change can be achieved. Additionally, the essay highlights the importance of recognizing the interplay between educational research and the practical realities of classroom instruction, emphasizing how EdD graduates can bridge the gap between education research claims and local education system needs.

KEYWORDS

behavior change, systemic change, educational research

The rapid spread of COVID-19 in the spring of 2020 resulted in a multitude of changes to educational systems to adapt to a biological reality reminiscent of a plot point from a dystopian novel. Surprisingly, while there were many innovations in these responses, the focus remains on getting back to normal, discarding those innovations that may be useful moving forward. This emphasizes the question of not only how to evoke change within larger structures, but also how to make change persist. If the purpose of the Educational Doctorate program is to truly transform education, how are EdD preparation programs supporting candidates with practices to enact ongoing change within their own institutions, even when they themselves may have very little power within those institutions?

Research loves data: collecting it, analyzing it, and reporting it. It is a beloved notion that exposure to data will incite change. Data, however, have limited effects on inciting change, as logic is only one piece of what is known about how to support change. Borrowing the metaphor of the rider and the elephant (Haidt, 2006; Heath & Heath, 2010), this essay seeks to outline the ways in which EdD programs might support their educational doctorate students in feeding the

logical rider necessary data, to appeal to the emotions of the elephant the rider sits atop, and present a new pathway for both rider and elephant. Drawing upon the EdD framework, this essay seeks to outline specific practices aligning within this metaphor to support EdD in developing the technical skills that bring about and sustaining change.

THE RIDER AND THE ELEPHANT

Jonathan Haidt's (2006) Elephant and the Rider metaphor provides a simple but powerful framework for understanding behavioral change. Within this metaphor, our minds consist of two distinct parts: the rational *Rider* and the emotional *Elephant*. The Rider represents our conscious and deliberate thinking, while the Elephant represents our unconscious and emotional reactions. The Rider may be able to control the Elephant for a while, but eventually, the Elephant will always win if it really wants to go in a certain direction.



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In our collective response to the COVID-19 pandemic, the Elephant responded swiftly to enact change as emotions ran high at a truly unprecedented time. Schools shifted their structures of work through remote learning, hybrid learning, and alternate day experiences to provide social distancing to ensure student, faculty, and administrative safety. Free and reduced meal programs were taken into neighborhoods, providing much-needed relief. Many of these changes shifted behaviors during the pandemic but did not last as institutions shifted back to practices enacted prior to the onset of the pandemic, regardless of their impact.

To create lasting behavioral change, Haidt (2006) argues that we need to appeal to both the Rider and the Elephant simultaneously. The Rider needs to understand the reasons behind the change and be motivated to make it, while the Elephant needs to feel a deep emotional connection to the change. For example, if someone wants to try to eat healthier, the Rider may decide to plan meals and count calories, but the Elephant may need to be convinced that eating healthily will result in feeling better and more energetic.

Chip and Dan Heath (2010) build upon the Rider and Elephant metaphor by adding a third component: the Path. In their book *Switch: How to Change Things When Change is Hard*, the Heath brothers argue that for successful behavior change, the Rider, Elephant, and Path all need to be aligned. The Path represents the environment or context in which behavior occurs. According to the Heath brothers, the Path can either facilitate or impede behavior change. They suggest that making changes to the environment or context in which behavior occurs can make it easier for the Rider and Elephant to move in the desired direction. The changes being asked are broken into manageable tasks, moving toward a larger change through a series of such tasks, referred to as shrinking the change. For example, revisiting the earlier example, if someone is trying to eat a healthier diet, they might make changes to the Path by removing junk food from their pantry or preparing healthy meals in advance. This makes it easier for the Rider and Elephant to make the right choices because the Path, and the direction one is to take on the path, is aligned with the desired behavior.

CHANGE WITHIN THE CPED FRAMEWORK

The Carnegie Project on the Education Doctorate (CPED) has taken on the task of differentiating the EdD from the PhD with a unique blend of rigorous academic inquiry, meaningful practical applications, research methodologies grounded in real-world contexts, and a strong emphasis on creating value for education stakeholders. All of this is done for the sake of repositioning how those with education doctorates might shape instructional practices within their local contexts, despite challenges detailed later in this essay. Graduates of EdD programs are uniquely positioned, because of their training and position, to enact change that is not only impactful but also lasting. Improvement science has been taken up as one such pathway to support EdD students in their work.

Improvement science is an applied approach theorizing the connection between knowledge and improvement, which has been utilized in a wide range of fields including the automobile industry (Rother, 2009) as well as medicine (Gawande, 2007). Within an improvement science framework, there is an essential connection between basic knowledge about education (the understanding of how grammar impacts the meaning of a sentence in writing, for

instance) and a system of profound knowledge (Deming, 1993) needed to practice that knowledge within a particular system.

Systems theory has been identified as a theoretical tool supporting a macro view of social systems, such as organizations like schools, by examining the relationships and interactions between the various components of the system. It emphasizes the importance of understanding the whole system, rather than just its individual parts, and recognizes that changes in one part of the system can have ripple effects throughout the entire system.

Much of the work of the Dissertation in Practice (DiP) is in understanding how systems produce the problems of practice practitioners are asked to identify and address. Elements of a system within a DiP framework can include "system processes, information infrastructure, human relations, and governance" (Perry et al., 2020, p. 57). By giving students the opportunity to unpack the systems that create the problem of practice, they can better understand the complex relationships within those systems and target their efforts to a particular category while recognizing the interrelatedness of all categories. When EdD students recognize the problem is created by the system while also being part of the system themselves, they can then begin to unpack the problem to identify the root cause. Additionally, if practitioners can frame the problem within the system and recognize how the system creates the problems, there is the potential to enact change that will both solve the problem as well as change the system.

Systems theory is not synonymous with Demi's (1993) aforementioned system of profound knowledge and is, rather, a management philosophy emphasizing the importance of understanding and improving the underlying processes that drive organizational performance. It includes four interrelated areas of knowledge: systems thinking, understanding variation, understanding human behavior, and understanding the theory of knowledge, summarized in Table 1.

Table 1. Elements of Systems of Profound Knowledge

Element	Operationalization
System Appreciation	Understanding and managing the interrelated components of a system
Knowledge about Variation	Understanding the nature of variation in processes and how it can impact organizational performance
Theory of Knowledge	Understanding how knowledge is acquired, created, and applied within an organization, and how it can be used to drive continuous improvement
Understanding of Psychology	Understanding human behavior and motivation in the workplace

Note. Adapted from Deming (1993).

While both systems theory and Demi's (1993) system of profound knowledge recognize the importance of understanding the whole system and the interconnections between its various parts, they differ in their focus and scope. Systems theory is a more general framework for understanding complex systems and can be applied to a wide range of fields, including the natural sciences, social sciences, and engineering. Profound knowledge, on the other hand, is a specific management philosophy that is focused on improving specific organizational performance through a deep, nuanced understanding of the underlying processes.

Educational Research and Change in Educational Systems

Consider the following quote by University of Missouri Professor of Special Education Matthew Burns:

“We’d really hoped that would cause schools to stop and pause and take a look and think, is this really an effective approach?” (Burns, quoted in Hanford, 2022, 31:10.)

The *that* to which he is referring is research done around reading instruction. His perspective was the reading experiments were completed, the research was presented and written up, and sent out into the world. Reading instruction in the thousands upon thousands of elementary classrooms within the entirety of the United States of America should have shifted based upon those findings; however, they did not. While the Science of Reading controversy rages on in literacy education, this specific example highlights the ways in which educational research continues to have a problematic relationship with shifting educational practice within systems.

There has been a long-standing tension between educational research and classroom practice (Kaestle, 1993; Lagemann, 2003), particularly in relation to educational research’s reputation amongst teachers and administrators and its application to policy and classroom practice. Research has found that approximately two-thirds of teachers infrequently use educational research to support their classroom instruction or none at all (Dagenais et al., 2012; see also Cain, 2016b).

Epistemological beliefs, which encompass conceptions of legitimate knowledge and how it is acquired, play a crucial role in understanding teachers’ attitudes towards educational research (Buehl & Fives, 2009; Schon, 1995). These beliefs shape teachers’ views on what constitutes valuable teaching knowledge, how knowledge evolves, and the ways in which it can be challenged and replaced (Ferguson & Lunn Brownlee, 2018). Examining teachers’ epistemological beliefs provides valuable insights into their attitudes and dispositions towards integrating research into their instructional practices (Hofer & Pintrich, 1997; Villegas, 2007).

Teachers’ beliefs regarding the generalizability or transferability of research findings to their own classrooms significantly influence their utilization of research (Cain, 2016a, 2016b; Drill et al., 2013). If teachers perceive knowledge as highly context-bound and specific to their individual teaching contexts, they may consider research findings as inapplicable to their own instructional practices (Raths McAninch, 1993). This belief in the limited applicability of research findings presents a significant barrier to teachers’ engagement with published research, hindering its potential impact on classroom instruction.

Teachers’ perceptions of trust in their administrators and the overall climate of their schools exert a strong influence on their utilization of research in classroom instruction (Brown et al., 2016; Cain, 2016b). Positive school climates characterized by trust and supportive environments facilitate teachers’ engagement with research. Moreover, understanding teachers’ perceptions of the level of support provided by their immediate school and district is vital, as it affects their willingness to adopt research-based practices (National Center for Educational Statistics, 2019).

Preparing CPED Students to Enact Change

The CPED program explicitly emphasizes the pursuit of change as a fundamental objective, but as we laid out at the onset of this article, not all changes are lasting. Students engaged in CPED coursework are equipped to adopt systematic perspectives of their organizations, enabling them to comprehend the appropriate level of complexity required to address the problems of practice they aim to enhance. However, it remains unclear how CPED graduates are prepared to actively facilitate and implement lasting changes within their specific local contexts.

Given the limited utilization of educational research in classroom instruction, it becomes crucial to recognize the unique position held by individuals with an educational doctorate in bridging the global objectives of educational research with the localized needs of the educational systems in which they operate (Joyce & Cartwright, 2020). Beyond simply acknowledging the existence of these systems, those with an educational doctorate possess profound knowledge that not only enables them to perceive the intricate workings of the systems they navigate but also equips them with the capacity to effectively manage the changes they endeavor to enact based on their work.

It is worth noting that profound knowledge, despite being a management philosophy seemingly distinct from the CPED degree, actually positions holders of an educational doctorate in a way that empowers them to leverage their Dissertation in Practice (DiP) to ensure the utilization of their findings for meaningful system-level changes. This managerial element ensures that educational doctorate holders can efficiently translate their research outcomes and local knowledge into actionable transformations within the systems they are already embedded in.

For Tachier, the second author of this essay, is currently enrolled as an EdD candidate in a CPED cohort originating from the Department of Teaching, Learning, and Teacher Education at the University of Nebraska-Lincoln. Her ongoing Dissertation in Practice (DiP) study aims to explore the effectiveness of reading intervention classes in multiple middle schools. What has captivated Nicholas, Stephanie, and Guy, all members of Tachier’s doctoral committee, is how she has strategically designed her proposal and the structure of her DiP as a tool to drive change within her local educational context with the purpose of long-term change. As a practitioner whose district leveraged a variety of strategies during the COVID-19, Tachier saw firsthand many of those strategies disappear, some from a lack of resources and others from a lack of will, regardless of their improvement of students’ lives. Her DiP ambitiously seeks to evaluate existing programs within her district and construct an argument that feeds into scalable and sustainable change.

With her DiP positioned as a catalyst for change, the metaphor of the Rider, the Elephant, and the Path has proven particularly insightful when contemplating the work that lies beyond the dissertation defense. While evaluating reading interventions in middle schools, Tachier has remained acutely aware of the logical Riders, including administrators and classroom teachers, who possess rational and analytical inclinations that must be addressed. She has selected methodologies that not only facilitate her exploration and understanding of her specific problem of practice but also generate data that captures the interest and compels other stakeholders. Concurrently, she acknowledges the presence of the Elephant upon which the Rider rests, recognizing the significance of emotions and intuitions that propel progress, aligning with existing

efforts toward equity and every teacher's commitment to supporting student learning.

Guided by these two crucial elements, Tachier has begun contemplating the Path she must chart to foster enduring change for middle school readers in her district. Although this path is still unfolding and discernible only through inferences as she progresses with data analysis and draws conclusions, she endeavors to consider data that resonates with different stakeholders while comprehending the emotional motivations that engage them. Additionally, she thoughtfully ponders an emerging Path that directs both individual and collective behavioral change as she delves into data analysis. Through these considerations, she has developed an action plan that surpasses the confines of her dissertation, highlighting the evident fact that the Dissertation in Practice serves as an initial phase within a broader process of enacting substantial transformation.

Supporting Change in Educational Systems

Many of the transformations witnessed in the educational system during the pandemic can be attributed to the immediate responses of stakeholders, comparable to the metaphorical Elephant reacting to the circumstances. The intensity of emotions ran high as we grappled with the widespread and high stakes implications of the biological reality of COVID-19. While acknowledging that the decisions made were not devoid of rationality, these interventions were predominantly shaped by the exigencies of the moment. Now that it is widely perceived that the immediate crisis has subsided (although this perception is debatable), many of these changes have either completely vanished or been assimilated into pre-pandemic practices.

Nonetheless, we believe that affecting lasting changes in existing educational systems necessitates a comprehensive understanding of both human dynamics and idea management. Specifically, it requires the strategic utilization of data and analysis derived from a DiP, coupled with a deep comprehension of the emotional underpinnings that drive the research project. This understanding allows for a delineation of a transformative path that administrators and educators can traverse to bring about systemic changes. Undertaking enduring change is an arduous undertaking, and those pursuing an EdD are uniquely positioned to leverage their research to influence educational systems and enhance student learning outcomes, provided they possess a strategic awareness of how to do so.

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