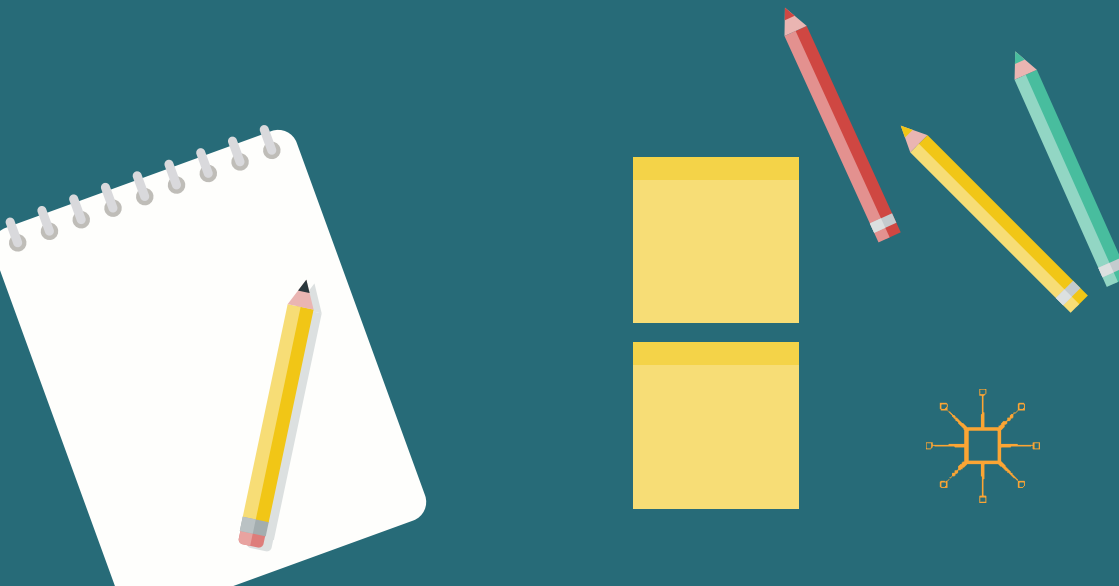
PALGRAVE STUDIES IN EDUCATION RESEARCH METHODS

Edited by Dolene Rossi, Francis Gacenga and Patrick Alan Danaher

NAVIGATING THE EDUCATION RESEARCH MAZE

Contextual, Conceptual, Methodological and Transformational Challenges and Opportunities for Researchers



Palgrave Studies in Education Research Methods

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Editors

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Series Editors' Foreword: The Metaphorical Maze: Analogic Thinking for/in the Research Process

R.E (Bobby) Harreveld

> Gandalf: "I am looking for someone to share in an adventure that I am arranging, and it's very difficult to find anyone."
>
> Bilbo Baggins: "I should think so–in these parts! We are plain quiet folk and have no use for adventures. Nasty disturbing uncomfortable things! Make you late for dinner! I can't think what anybody sees in them." (Tolkien 1937/2012, p. 7)

Some hobbits such as Bilbo Baggins cannot think what anyone would see in an adventure, just as some researchers may not be able to think what anyone would see in a maze as being allegorical of their work. Both adventure and maze may be disturbing and uncomfortable and can take over hobbits' and researchers' lives. Yet, as in Tolkien's novels, the maze of social science and educational research is entered into with just as much excitement and trepidation, fear and bravery, challenges and opportunities as his wandering wizard and hobbits found on their adventures. This book is a metaphorical story of the research maze crafted with similarly discursive analogical thinking.

Navigating the education research maze: Contextual, conceptual, methodological and transformational challenges and opportunities for researchers is the second in the *Palgrave Studies in Education Research Methods* series that sets out the requirements for ethical, effective, impactful, relevant and rigorous education research (understood in the broadest sense). The editors of this collection (Danaher, Rossi and Gacenga, Chap. 1) invite

readers to think about the transformational aspects of the research process constructed through a series of analogical transpositions in three parts: (1) politics, ethics, philosophies and theories of research mazes; (2) specific navigational methods for entering and maneuvering through the mazes; and (3) tools and techniques for navigating, negotiating and nullifying contextual, conceptual, and methodological challenges encountered in the research process maze.

Metaphors represent a particular feature of analogic thinking, namely its "pervasive, irreducible, imaginative structure of human understanding that influences the nature of meaning and constrains rational interferences" (Johnson 1987, p. xii). The choice of metaphor requires linguistic and cultural connectivities, such that the metaphor is the product of analogic thinking in which different elements are related through similarity and/or difference to create new understandings, meanings and constructions of knowledge. A metaphor may emerge from shared experiences (e.g., reading Tolkien's books or watching the movies); from other common lived experiences such as completing a doctorate, working in a university or undertaking a research project; or from existing well-known narratives, myths and/or legends (Bioy and Nègre 2011). The choice of the maze as metaphor for examining the conditions of contextual, conceptual, methodological and transformational change in the research process reflects the authors' socio-cultural and historical framings of their work as researchers across a number of disciplines.

This is an important distinction. If I have never known of a maze—if I have no concept of a maze—then the metaphor will not speak to me. If in my working life I have never had to maneuver in, with and through political, ethical, philosophical and/or theoretical dilemmas, then navigating and negotiating a research maze may be discursively incomprehensible. Further, if analogic thinking is a peculiarly cultural construct, then, when working in the maze, neoliberal managerialism is to university academic work as the knowledge economy is to the construction of academic capitalism (Jensen-Clayton and Murray, Chap. 2). This metaphorical maze works when readers have also experienced the pleasure and pain of academic capitalism, of wanting the intellectual and material goods that westernised academic work may bring and of daring to go thinking and working beyond westernised normative processes of what counts as research (Jensen-Clayton and Murray, Chap. 15).

Similarly, the maze of politics and ethics encountered when being non-compliant in an educational bureaucracy, such as that examined by

Trimmer in Chap. 3, suggests that embarkation points for navigating the research maze vary from situation to situation. Such was the case for Salton (Chap. 4), who took as her embarkation point for navigating the maze of her PhD research process her theoretical and methodological encounters with her *researcher self*. Yet there are multiple points for navigating the maze and negotiating when in the maze. This means that metaphorically the maze also inspires a scholarship of integration among multiple institutional logics from different disciplinary domains (Somasundaram, Howard and Reed, Chap. 5).

The research maze is not for the faint hearted. It requires "a determined sense of adventure" (Meenach, Chap. 6) with trusty navigational tools of questions, ideas and research-led practices. At its most transformational, this sense and "spirit of adventure" are imbued with a disposition to negotiate unknown paths such as those encountered by Burke in her design-based research (Chap. 7). Adventuring in the maze can be dangerous if researchers are not aware of, then engage with, the powerful paradigmatic debates and methodological contradictions encountered in the maze (Donovan, Chap. 8; Fasso, Knight and Purnell, Chap. 9).

Metaphorical representations of the research process are replete in the literature, often using analogic thinking to broker meaning within and across different disciplinary boundaries, data sources and types. Computing researchers use metaphors to understand complex social objects and/or phenomena, represented through a maze of images and metaphorical constructs (Naidoo, Chap. 10). So too for nursing researchers who use the metaphor of the maze to choose among technologically mediated discovery tools when systematically reviewing their literature (Ramsay and Williamson, Chap. 11). Mobilising complex social networking secondary datasets in information systems research represents both a challenge and an opportunity when examined through the lens of a metaphorical maze (Pervin and Nishant, Chap. 12).

While the lodestars of research such as problem, question/s, context, concept, theory, methodology and method/s provide navigational guidance through the process, the sometimes troubling, often puzzling prickles and pebbles encountered along the way must still be addressed. In the governance of twenty-first century research, Gacenga (Chap. 13) argues that eResearch services interacting with computing infrastructure and associated technological tools are additional navigational aids or lodestars to improve research data management, explain outcome impact measures and present publications. Another metaphorical lodestar promulgated as

being essential for the navigating, negotiating and nullifying research process maze is that of collaboration. Rossi (Chap. 14) challenges taken-for-granted assumptions about the beneficence of collaboration, especially in cross-institutional, multidisciplinary collaborative processes.

Going outside your disciplinary and institutional doors to do research is indeed dangerous business, but, like the authors in this edited collection, there is no telling where you might be swept off to—and what adventures will then ensue.

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CHAPTER 1

Navigating, Negotiating and Nullifying Education Research Mazes: Successful Strategies for Mobilising Contextual, Conceptual, Methodological and Transformational Challenges and Opportunities

Patrick Alan Danaher, Dolene Rossi, and Francis Gacenga

Introduction

Metaphors stand tall in all fields of human enterprise, ranging from the leitmotifs of music (Górska 2010) and the imagery of poetry (Lakoff and Turner 1989) to the epochs of historical analysis (Tucker 2009) and the political and spatial representations of cultural studies (Swiss and Herman

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2000) to the accounts of families in biological species (Mindell 2013) and the depictions of networks in explaining technologies (Grint and Woolgar 1997). Metaphors have always been, and continue to be, insightful and powerful renderings of often complex internal processes and also of connections between the subject of the metaphor and other phenomena in the systems under review. Consequently, metaphors help to generate new understandings of such processes and phenomena and can underpin fresh research into those areas of human activity.

More specifically, contemporary scholarship abounds with vivid metaphors for characterising the intentions, outcomes and vicissitudes of education research projects (with "education" being used here and throughout the book in a broadly inclusive sense, encompassing formal educational provision as well as informal learning by individuals and communities). Accordingly, this chapter, and the book that it introduces, are particularly concerned with the diversity of metaphors that accompany and enrich such education research endeavours. Importantly, this diversity encompasses recognition of the limitations and even the risks attending some metaphors. For example, Regehr (2010) was critical of "… a common metaphor of 'legitimate' science, and goals for science, which is shaping the conceptualisation of what constitutes 'good' research in education: namely, the metaphor of the physical sciences" (p. 31). Likewise, Pitcher (2014) reported research findings whereby metaphors used in teaching electronics theory varied in their effectiveness, with students exhibiting a range of reactions to the metaphors and others forgetting the metaphors over time. More broadly, research in domains such as public policy has been depicted as having "… moved beyond both metaphors and popular units of analysis" (Pump 2011, p. 1), suggesting metaphorical analysis as being useful in the early stages in the development of a scholarly field but becoming less fruitful as the field progresses.

By contrast, education research has also highlighted the development of metaphors as a discernible link between intelligence and creativity (Silvia and Beaty 2012). Furthermore, as one example of the creative power of mobilising metaphors, Bazeley and Kemp (2012) examined the potential insights to be gleaned from analysing and applying mixed methods research in terms of mosaics, triangles and DNA. Moreover, Bruckmüller et al. (2013) distilled a similarly tripartite set of metaphors—in their case, ceilings, cliffs and labyrinths—to encapsulate current research into workplace gender discrimination. Another benefit claimed for metaphors is their capacity to simplify complex research understandings—for instance,

"brain architecture", "toxic stress" and "serve and return" being advocated as metaphors to communicate sophisticated scientific concepts to non-scientists (Shonkoff and Bales 2011). Other metaphors of research collected from the contemporary literature include diffusion, cascading and life cycles being used to account for the emergence and dissemination of sociocultural norms (Bucher 2014); "… gardener, buddy, saint, cyborg, commander and bully" (Alvesson and Spicer 2011, p. 1) synthesising selected understandings of the work of business leaders and managers; and machine, organism, brain, culture, politics, psychic prison, flux and transformation, and instruments of domination representing some of the different metaphorical understandings of organisations (Bell et al. 2012).

From this perspective, education research mazes emerge as integral components of the education research enterprise—simultaneously signifiers of the complexity and messiness of research and enablers of effective, efficient and ethical techniques for apprehending that complexity and messiness. Certainly, metaphors need to be taken seriously as significant signifiers of deeper and wider complexities of understandings of research aspirations and outcomes across a diverse range of scholarly disciplines. The chapters in this book—including this one—explore one specific metaphor, that of research as a maze, to elaborate the multiple ways in which education researchers can and should devise and enact research to address some of the real-life concerns and issues confronting the world today. Presenting several variations on the image of mazes, the authors of the subsequent chapters illustrate different but equally legitimate means of engaging (with) research that help to explain, pursue, contest and where appropriate and possible transform the multiple mazes occupying contemporary education research.

In order to foretell and situate the chapters to follow, the remainder of this chapter is divided into five sections:

- A necessarily selective review of literature pertaining to education research as mazes
- A theoretical framework and a conceptual model that distil three distinctive approaches to engaging with such mazes
- These three approaches illustrated by reference to two of the authors' respective research projects
- Some suggested broader implications for mobilising education research mazes
- An overview of the book's rationale and structure.

Literature Review

The notion of the maze is understood in this chapter and in the book as a whole as a differentiated, multifaceted phenomenon whose form, impact and importance take shape differently in diverse contexts. At the same time, the term "maze" evokes a varied but nevertheless consistent set of meanings, including "… confusion and complexity …" (MacQueen 2005, p. 14); dilemmas, mysteries and pathways (Missiuna et al. 2006); a complex task whose successful completion demonstrates learning achievement (Grieshaber 2008) and requires the application of "… the necessary practice knowledge to negotiate…" (Walshaw 2015, p. xi); enduring the likelihood of "… the path ahead…[being indirect] and [that as researchers] you will take many twists and turns and go down a few blind alleys before you reach your goal" (Bell with Waters, 2014, p. 5); and bearing the marks and traces of the mazes' designers that convey meaning to those who experience them (Hayles 2000).

Those commonalities of defining characteristics duly noted, there is considerable variety in the ways in which education scholars have depicted and derived meaning from the proposition of research as a maze. Some researchers have highlighted the ethical maze attached to particular research dilemmas, such as gaining children's informed consent to participate in research (Cocks 2006). A variation on that theme has included characterising as a research maze the complexities of securing approval from research ethics committees to conduct sensitive research (Roberts et al. 2007). Others have portrayed the doctoral journey as a particular kind of research maze requiring the application of agency by the doctoral candidate to survive and indeed to thrive during and following that journey (Jones 2013; see also Miller and Brimicombe 2004). Still others, building on that assumption of researcher agency, have emphasised that "… the maze of research has several entries and choices of paths and directions" (Ringsted et al. 2011), drawing our attention to the possibilities for creativity and innovation in enacting such choices. Likewise, Munro (2010) communicated the timely reminder that even apparently unproductive pathways can yield important information for researchers and practitioners alike.

Similarly, the maze metaphor has been deployed productively across a range of scholarly disciplines and educational levels and sectors. For instance, Daniel (2012) posited the maze as a useful encapsulating device for imagining the constraints as well as the possibilities attending the cur-

rent efflorescence of Massive Open Online Courses (MOOCs) traversing both formal and informal learning. An educative approach was advocated as "A way through the moral maze … of poor ethical practice by image-based researchers" (Prosser 2005, p. 147) with regard to the recording, selection, representation and distribution of images of children and other potentially vulnerable groups in education research. Moreover, Borbasi and Jackson (2016) highlighted the educational dimension of navigating the maze of research in relation to nursing and midwifery practice by emphasising the attitudes, knowledge and skills required to design and conduct research in this challenging professional field. Finally, Hirschkorn et al. (2015) elaborated specific elements of the maze to which they likened efforts to research the landscape of teacher education in Canada; these elements included:

> … duplication of research ethics procedures across institutions; feelings of vulnerability as faculty [academic staff members] in various institutions worry about potentially damaging comparative information arising from a national study; and lack of funding and vision for research that transcends provincial and territorial boundaries. (p. 20)

Clearly, considerable diversity characterises the ways in which education researchers have defined the concept of a research maze and in which they have appropriated and applied this concept in their respective research projects. This diversity includes the degree to which such mazes are perceived as negative phenomena to be controlled and subdued and/or they are positioned as positive phenomena that afford and enable opportunities to reconsider otherwise taken for granted assumptions about the educational issue being researched. Despite this diversity, most education researchers regard research mazes as complex, contextualised and fluid entities that require the mobilisation of specific approaches to engage (with) these entities. Three of these possible approaches are elaborated in the next section of the chapter.

Navigating, Negotiating and Nullifying Research Mazes: A Theoretical Framework and a Conceptual Model

Theoretical frameworks consist of a system of concepts, assumptions, expectations and beliefs that support and inform the research process (Maxwell 2005). Three important elements have been acknowledged: the

framework, a conceptual model and the constructs (Garrison et al. 1999). As Garrison (2000) explained, a theoretical framework represents a broad paradigmatic set of assumptions that provides the elements of the theory but without the detail and completeness (nuances) of a comprehensive theory. A model is a less abstract form of a theory and represents structural relationships among the key concepts. It is a replica and often provides visual simplicity that can be grasped at a glance. However, by itself, it may lack the richness of explanation inherent in a theory. Finally, concepts are the building blocks of a theory and evolve from ideas generated from direct experience. In this way, they are less abstract and do not have the coherence of a framework, model or theory (pp. 3–4).

Based on this description, a theoretical framework provides an outline that may be developed further by the concepts that emerge during the research process, and the conceptual model offers a visual representation of the relationships among initial or subsequent theoretical constructs. Theories and models serve several functions, in that they inform research practice (Garrison 2000), and they may also enable researchers to demonstrate links between their fields of interest and those of other researchers (Anderson 2008).

From the literature review in the previous section of the chapter, it is evident that the conceptualisation of education research as a maze is not uncommon and that there are many examples illustrating its relevance and/or use in a diverse range of research studies. In the chapters in this book, the authors traverse the elements inherent in any research study: the contexts or conditions that impact upon the investigation; the conceptual understandings of the researchers; the methodological decisions that are made; and the potential for transformation as a result of the knowledge and understandings constructed as a result of the work. In this chapter, the editors of the book articulate three possible approaches to engaging with education research mazes and with the challenges that education research studies present: ***navigating*** (by identifying and heading towards, away from and/or around selected points of scholarly reference); ***negotiating*** (through interacting with research frameworks, technologies, participants, gatekeepers and other stakeholders in the research); and ***nullifying*** (in the sense of understanding and where appropriate diminishing and/or sometimes enhancing what is puzzling or troubling about the research). Figure 1.1 illustrates each of these approaches and depicts the contextual, conceptual, methodological and transformational elements of any education research study as both a challenge and an opportunity. The relationship between each research element and the approaches that may

be utilised within any given education research maze are illustrated in the figure, which accordingly represents both the theoretical framework and the conceptual model for this chapter and for the book as a whole.

Illustrating the Theoretical Framework and the Conceptual Model

Within this section of the chapter, two of the authors of the chapter utilise the concept of a metaphorical education research maze as the basis for their contributions. From this perspective, a maze, whether metaphorical or theoretical in character, is generally envisaged as a path or a collection of paths that leads from an entrance to a final destination. In education research, the destination or the goal is invariably the construction of new knowledge or the development of new understandings about a phenomenon or an area of interest. Although the aim of each research study is the same, the researcher's journey may be simple or complicated and convoluted. In order to demonstrate the relevance of the maze as a theoretical framework and the potential value of the conceptual model presented in Fig. 1.1, this section draws examples from the contributions of Francis Gacenga (see also Chap. 13) and Dolene Rossi (see also Chap. 14).

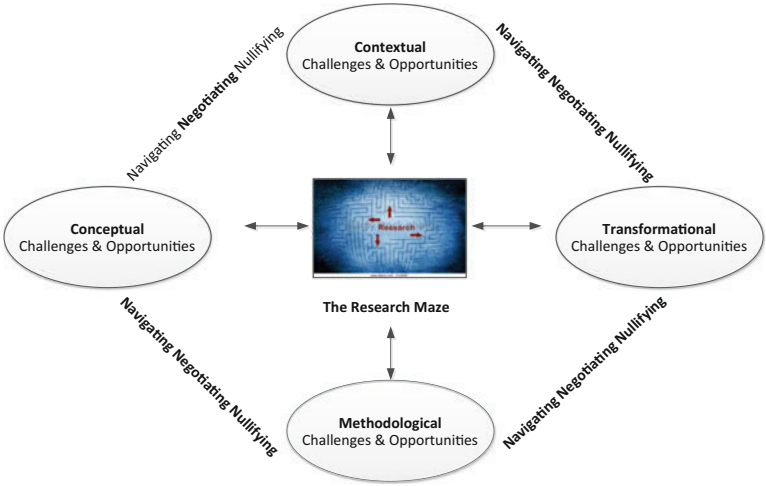

Fig. 1.1 Theorising and conceptualising the education research maze

In pursuing his research, Gacenga acknowledges a range of contextual, conceptual and methodological challenges and opportunities that have occurred and that will continue to occur as the result of technological advances in research, research methods and research computing tools. Gacenga points out that in the world today all researchers rely, to varying degrees, on information and communication technologies (ICTs) in their research and that the extent to which they do so will vary depending on the research discipline, the nature of the research, the ICT environment and the level of ICT knowledge, skill and experience held by the individual. That said, organisations and research institutions are presently investing heavily in computer environments where ICT resources are located centrally in data centres and accessed remotely. Termed "cloud computing", these environments have the potential to deliver greater computing capability, including big data storage, powerful processing power and enhanced collaboration. Within the scholarly literature, it is argued that, while empirical, analytical and simulation methods have provided answers to many questions, a new scientific methodology, driven by data intensive problems, is now emerging labelled "the fourth paradigm". In this regard, e-research is predicted to unite theory, experimentation and computation, and to change the ways that research is funded, communicated and published (Collins 2010). Gacenga points out that, as new research approaches and resources and advanced technologies co-exist with traditional research tools, the conceptualisation of research as a maze is fitting for researchers required to navigate, negotiate and sometimes nullify the contextual challenges associated with the effective application of new research approaches.

From a different perspective, Fig. 1.2 illustrates the application of the maze as a conceptual framework to elucidate the factors that had an impact on the conduct of a cross-institutional, multidisciplinary education research study, as elaborated by Rossi in Chap. 14. Researchers within the externally funded, collaborative study analysed various forms of learner interactions within multiple online courses of study. Within Fig. 1.2, these elements are linked to the contextual sphere and relate to the location and context of the research, thereby representing an opportunity that the researchers were keen to grasp. As the study was situated across institutional boundaries, organisational considerations are also represented. In this case, the organisational policies and procedures constituted a challenge. Also depicted are the measures that the researchers negotiated in order to proceed with the project.

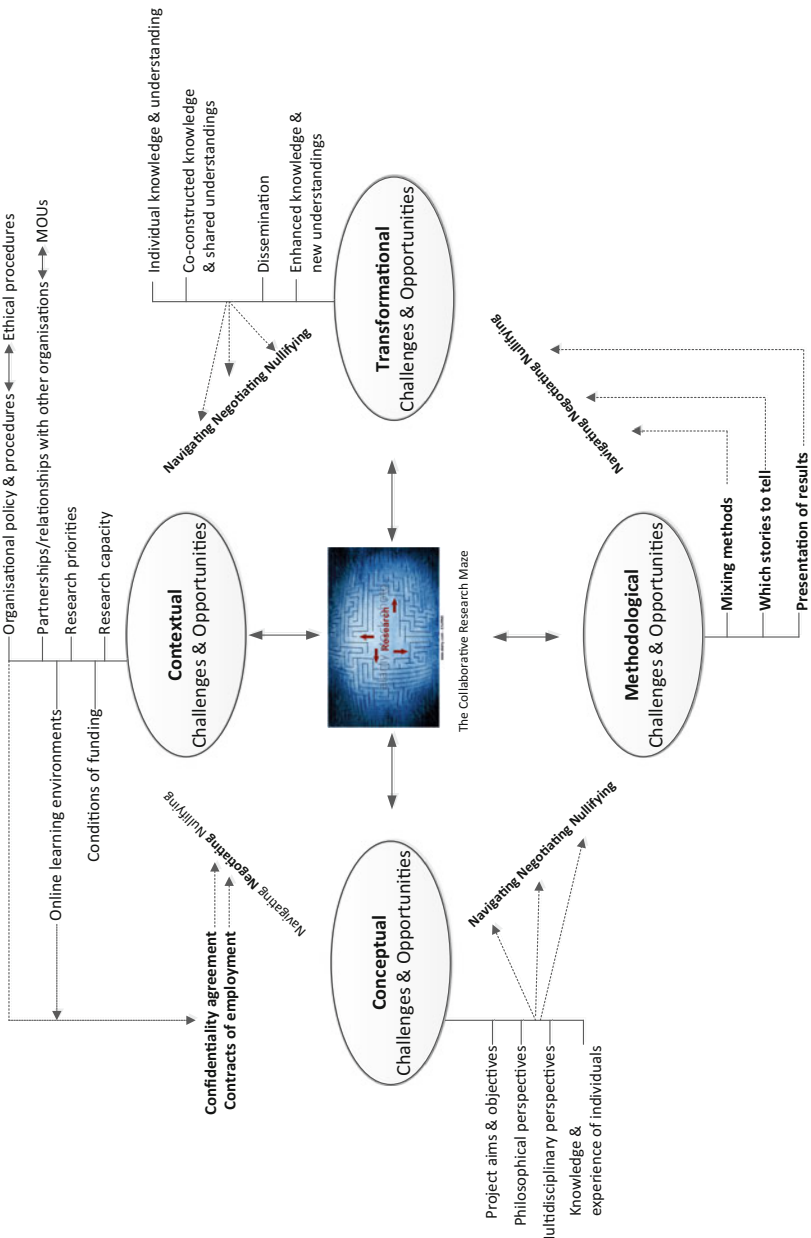

Fig. 1.2 Navigating, negotiating and nullifying the research maze: exemplars from a cross-institutional, multidisciplinary case study

In this example, the conceptual challenges related to researcher characteristics and included references to understandings of project aims and objectives, discipline orientations, philosophical perspectives, and the knowledge and experience of individuals. In this case, individuals were required to share knowledge derived from previous personal research. As a consequence, these individuals were presented with conceptual challenges as well as opportunities to develop cross-disciplinary understandings. In this respect, each researcher was required to navigate, to negotiate and potentially to nullify personal limitations to prepare for participation in the collaborative research project.

More specifically, together the researchers were required to collect and to analyse qualitative and quantitative data. This approach proved challenging and required the adoption of a collective perspective in order to make sense of the data, determine which stories to tell and formulate a strategy to present the results. This process required individuals not only to accommodate but also to adopt different perspectives. The process, while challenging, also afforded researchers the opportunity to construct and co-construct knowledge, and to develop enhanced and shared understandings. Interestingly, the construction of knowledge did not end with the conclusion of the project and the dissemination of the project results, as each researcher has drawn and continues to draw from the experience to create new knowledge and greater understandings, not only about the research process but also about the foundational characteristics of collaborative research and the potential to continue to learn through reflective practice and to extend knowledge by accessing personal and professional networks.

Implications for Mobilising Education Research Mazes

Why is it important to mobilise education research mazes and the contextual, conceptual, methodological and transformational challenges and opportunities that attend them? How does doing so enhance the capacities of education researchers to engage authentically and wholeheartedly with the vicissitudes of research projects and to contribute productively to contemporary debates about education and possible alternative futures for educational policy-making and provision? What kinds of successful strategies for beginning and more experienced education researchers derive from enhancing these capacities?

One response to these appropriate and enduringly significant questions relates to the metaphorical power of likening education research to a maze. This metaphorical power generates new insights and understandings by making explicit and opening to critique otherwise implicit and tacit assumptions about the character and impact of research. For example, envisaging research design as a maze (Wahyuni 2012) emphasises the complex and high level decision-making attendant on developing, enacting and evaluating research designs in specific research projects, rather than positioning research design as automatic, easy, straightforward and unproblematic.

From a different and wider perspective, and resonating with some of the chapters in this book, Bridges (2003) raised concerns about the perceived ethical and political dimensions of "research for sale" and whether such research constitutes a "moral market" or a "moral maze" (p. 153). Seeing education research through the prism of a "moral maze" (and/or in terms of a "moral market") constitutes a timely reminder that decisions made in the context of specific research projects take (their) place against the backdrop of broader educational, political and sociocultural forces and influences. This might suggest the notion of "a maze within mazes", with the effects of ever-enlarging mazes coursing like ripples through and beyond particular studies. While some education researchers might feel alarmed by this seemingly unending complexity and fluidity, others see it instead as a reflection of the multiple and sometimes contradictory realities that they encounter in their research projects.

Furthermore, education researchers can benefit from reflecting on the metaphor of the maze being applied to educational practice. A recent and telling example came from the field of teaching students with disabilities (Mazzotti et al. 2013). The authors propounded that, while "evidence-based practice" (p. 159) is lauded and even idealised, the reality is somewhat more complicated for teachers seeking to improve the learning outcomes of their students with disabilities. Thus, although the suggested strategies for the teachers appeared to be sensible—"… (a) follow a research-based framework …, (b) use practices with the best available research evidence to support effectiveness; and (c) use data-based decision making to guide [the] use of evidence-based practices" (p. 159)—the elicitation of these strategies in response to "… the process of navigating the evidence-based practice maze …" (p. 159) highlighted that these strategies were not necessarily easy to implement. For instance, education researchers do not always agree about what the most effective approaches

are, and there are often multiple and sometimes conflicting interpretations of data, even assuming that access to such data is comprehensive and equitable and that those data are accurate and reliable.

All of this accentuates both the need for and the complexity of elaborating and applying successful strategies for mobilising the challenges and the opportunities alike attendant on contemporary education research mazes. Many of the subsequent chapters articulate several such strategies and explain and illustrate their application in specific research projects. At the same time, the chapter authors express caution in not advocating the wholesale adoption of these strategies in other contexts or for other purposes. While it is crucial to explicate the influences on and the effects and the effectiveness of these kinds of strategies, it is equally vital to recognise their situatedness and to avoid propounding them as unproblematic panaceas for addressing educational and research-related dilemmas.

The Book's Rationale and Structure

Against this backdrop of the preceding discussion in the chapter, this book is focused on exploring several of the contextual, conceptual, methodological and transformational challenges, and the accompanying opportunities, presented in and by the conduct of contemporary educational research. Drawing on a variety of situational, philosophical, theoretical and methodological approaches, the subsequent chapters examine the diverse ways in which researchers engage with these challenges and take up these opportunities. The intention is to build on the contributing authors' respective accounts of navigating the education research maze in order to elicit broader lessons for enhancing the impact, quality and significance of such research.

The remaining 14 chapters in the book have been clustered around three parts of the book, each coordinated by one of the editors. The four chapters constituting Part One, edited by Patrick Alan Danaher, are directed at "Navigating the politics, ethics, philosophies and theories of research mazes". Part Two, edited by Francis Gacenga, consists of five chapters that explore "Navigating mazes in and with specific research methods". Finally, in Part Three, edited by Dolene Rossi, the five chapters pursue strategies for "Navigating mazes in and with specific research tasks and technologies". (The details of the individual chapters are summarised by each editor in the respective introduction to the three parts of the book.)

The subsequent chapters in the book have all undergone a rigorous process of double-blind peer review. Moreover, academic quality was maximised by means of two structured writing workshops (held on 4 November 2014 and on 27 February 2015) in which successive chapter drafts were presented and received formative peer feedback.

Conclusion

For us, and also for the authors of the following chapters, the metaphor of the education research maze occupies an important place in contemporary research discourses. From one perspective, this metaphor might be seen as disabling, paralysing and stultifying—mazes can be spaces of confusion, of going round and round in unproductive circles, of repeating already failed manoeuvres and of unsuccessful efforts to escape the confines of restrictive thinking and action. From a very different perspective, research mazes can be perceived as generating new ways of thinking and action that are much more imaginative, innovative and productive. This is as a consequence of being required to rethink previously unexamined assumptions and to identify and evaluate potential alternative solutions to existing problems.

It is this second perspective that is elaborated at length in this book. While in no sense seeking to understate the complexities and the challenges in doing so, we contend that it is in embracing the opportunities involved in engaging with these complexities and challenges that education research mazes, and the differentiated and heterogeneous issues that they encapsulate, can be understood more comprehensively. More specifically, we have proposed and illustrated in this chapter that three distinct approaches—navigating, negotiating and sometimes nullifying—can be useful options to consider when taking up these opportunities. Certainly strategies such as these, and also like those canvassed in the subsequent chapters, are vital elements in the toolkits available to education researchers as they pursue the contextual, conceptual, methodological and transformational dimensions of education research mazes.

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