Joce Nuttall · Alex Kostogriz
Mellita Jones · Jenny Martin   *Editors*

Teacher Education Policy and Practice

Evidence of Impact, Impact of Evidence

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**Australian
Teacher Education
Association**

Springer

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Introduction

This volume presents the second annual collaboration between Springer and the Australian Teacher Education Association examining contemporary policy and practice in teacher education. It is published amidst ongoing—and intensifying—debates about the impact of initial teacher education on pre-service teachers, classroom students, and teacher educators themselves. These debates raise questions not only about how the field of teacher education might demonstrate *evidence of impact*, but also the *impact of evidence* provided by teacher education research.

Contemporary policy frameworks in teacher education around the world seek to increase the capacity of graduating teachers to act with confidence and competence in classrooms. Yet teacher education is a relatively new field of research, working apace to build a robust platform of research evidence that speaks to policy, to practices of teacher education, and to the role of teaching and teacher education in wider society. The dialogue between the enterprise of teacher education and evidence for its effects in the twenty first century is a complex one. Taken as a whole, the chapters in this volume can only touch on this dialogue, even as they seek to take a critical position on the very notions of 'evidence' and 'impact' underpinning contemporary policy frameworks.

Notions of evidence and impact in teacher education are notoriously difficult to define. As Gore (2015) argues, any approach to assessment of the impact of teacher education

> …must have reasonable levels of validity, reliability, and fairness, recognising both the desire for scientific integrity and the messy reality of the social worlds of schooling and teacher preparation. (Gore, 2015, p. 1)

Nevertheless, present policy reforms in Australia seem to conceptualise impact as series of 'testable' outcomes, each determining the next within a causal chain: the entry characteristics of pre-service teachers (PSTs) cause them to learn in a certain way; this learning then causes them to teach in a certain way; and teaching in a certain way optimises outcomes for classroom students. In this formulation, the role of teacher education is to instil in pre-service teachers a solid grasp of 'what works'

so that they can graduate 'classroom ready' (TEMAG 2014). Although this formulation is bound up in discourses of 'teacher quality', it essentially positions teachers as technicians (Zeichner 2013). This volume does not aim to resolve the highly contested construct of teacher quality, but to contribute to debates that understand it as nuanced, problematic, and worthy of study from multiple angles.

Analysis of current reforms provides ample opportunities for teacher educators to slide into cynicism; to throw their hands up in despair at the failure of the policy process to recognise the challenges, complexity, and nuances of effective teacher education. But this is itself a simplistic response. A great deal is known about pedagogical practices that are more or less likely to promote student learning. Teacher educators must share these practices with pre-service teachers, but this knowledge does not—and cannot—prepare every graduate to respond optimally to every child in every classroom at all times and in all contexts. The chapters in this volume honour Gore's 'messy reality' of teachers, learners, and classrooms by engaging with the notion of impact in rich ways.

The concept of evidence is also reflected in interesting ways in this volume. The range of methodologies described for interrogating policy and practice is wide, including (but not limited to) historical analysis, narrative methods, document analysis, surveys, and case study research. The complementarity of the chapters presented here means they could be ordered in a variety of ways. We have chosen to arrange them under three broad themes to assist the reader: international perspectives on assessing the impact of teacher education policy and practice; the impact of change and innovation in teacher education practice; and investigation and critique of debates about evidence and impact in teacher education.

International Perspectives on Assessing the Impact of Teacher Education Policy and Practice

In the opening chapter Diana Pullin traces the development of policies for reform and accountability in initial teacher education in the US and Australia. Pullin describes the move from testing in schools to testing in teacher education, and describes the history of tests and other data-driven technologies that have provided "unsatisfying outcomes" for policy and practice. A key aspect of these calls for testing from outside the profession is the move from documenting inputs (program design, resources, pedagogical practices) to documenting outputs (test scores, classroom behaviour, subsequent student achievement). In the midst of this shift, the field still lacks robust evaluation models for teacher education and effects. Pullin argues that changes such as these, mandated from outside the teacher education profession, can only have limited success. Pullin's call is therefore for reflection and action within teacher education itself, and she identifies a 'window of opportunity' in the present climate, particularly in Australia, to develop a more confident way forward.

The focus of the chapter by Ellen Larsen (Chapter "Developing Professional Learner Identities: A Critical Piece in the Classroom Readiness Puzzle") is the messy reality of determining 'classroom readiness' beyond regimes of testing. Larsen's stepping-off point is the way classroom readiness is conceptualised within the most recent review of teacher education in Australia (TEMAG 2014), as fully equipped to begin teaching. Counterintuitively, but productively, her research focuses on the role of *unsuccessful* experiences in fostering novice teachers' development. Larsen argues that if beginning teachers routinely attribute the causes of these experiences to solely internal or external factors, they are *less* likely to engage in continuing professional learning. By contrast, novice teachers who have more complex explanations for lack of success, who understand that multiple factors are often implicated, have the greatest likelihood of developing an identity as professional learners. Larsen hypothesises that frequent attribution of unsuccessful experiences to purely internal or external factors undermines beginning teachers' self-efficacy. This tendency is exacerbated by the reality that many beginning teachers analyse their success and failure in isolation. Larsen concludes by offering a rich target for assessment of classroom readiness: a beginning teacher who has productive ways of reflecting on challenges.

Chapter "Policy-Makers' and Practitioners' Perspectives on Impact, Evidence, and Support for Teacher Educators Implementing Environmental Education for Sustainability in India" in this first section, by Sylvia Almeida, shifts the focus to teacher education in India. Almeida's abiding interest is in Environmental Education for Sustainability (EEfS), and how this is conceptualised and implemented within teacher education curriculum. Based on an earlier study of Indian teacher educators' perspectives, Almeida turns to the issue of teacher educators' role in EEfS policy formation. She asks What is the impact of EEfS on teacher education policy? And can it be formulated more effectively, to ensure greater impact? Her entry point is the perspectives of key policy-makers from Indian government and non-government organisations. Teacher educators in minority-world countries who are struggling to maintain a dialogue with policy-makers may be surprised by Almeida's chapter: rather than teacher educators and teacher education being positioned as a 'problem' in policy implementation, Indian policy-makers recognise the key role teacher education must play in promoting EEfS in a rapidly developing post-colonial nation.

The Impact of Change and Innovation in Teacher Education Practice

The second section of this volume also opens with an international dialogue between Australia and the US. Amanda McGraw, Janna Dresden, Erica Gilbertson, and Melissa Baker (Chapter "Site-Based Teacher Education as a Context for Attending to the Complexity and Person-Centred Nature of Teaching and Learning: A Narrative

Inquiry Involving Teacher Educators from Australia and the United States") describe their continuing dialogue across the Pacific about the nature, challenges, and impact of site-based teacher education. Time spent practicing teaching in schools has long been a feature of initial teacher education but site-based education takes this to another level, anchoring pre-service teachers' learning *primarily* in school settings. Their narrative accounts of the experiential and critically responsive nature of site-based teacher education is a rich stepping-off point for shared research and reflection on practice, with narratives used as a way of engaging with what puzzles the authors: How do we measure the impact of partnership? How do we ensure a discourse of impact does not shut down the relational nature of site-based teacher education? The terms they use to describe their experiences—variety, unpredictability, emergence, complexity, and disorder—seek to disturb linear and causal assumptions about the preparation of beginning teachers. But these uncertainties are underpinned by a rich definition of what the impact of teacher education can be on the dispositions of its graduates: strategic thinking, creativity, and people-centeredness.

Jenny Martin, Stephen Keast, and Lucy Anders (Chapter "Becoming Professionally Agentic: Researching Pedagogical Reasoning in Initial Teacher Education") are also concerned with innovation to improve the impact of teacher education practice. They describe two approaches to working with pre-service teachers that require PSTs to de-privatise their pedagogical reasoning, with the aim of fostering PSTs' pedagogical agency. Martin, Keast, and Anders argue that increased agency, in turn, increases the likelihood that beginning teachers will engage in professional learning. In an echo of Buchanan (Chapter "Caught Between Competing Worlds: Teacher Education in Australia"), these authors argue that professional standards cannot account for the complex decision-making that is at the heart of professional agency, since the performative nature of professional standards does not allow for the shift from 'how' teaching is enacted to 'why' it is enacted in particular ways at particular moments with particular groups of learners.

The two chapters that follow in this section move the discussion of change in teacher education from inside the teacher education classroom to the extra-curricular realities of pre-service teachers' lives. These too are changing because the demographic characteristics of PSTs are changing. Increasingly, PSTs making the transition to teacher education are not entering direct from secondary schools. Indeed, as Meera Varadharajan and Sandy Schuck show in Chapter "Can Career Changers Be Game Changers? Policy, Research and Practice Concerning Career Changers", these non-school leavers are frequently making a major career change, often responding to a long-held desire to contribute to society or share their passion for a particular curriculum domain by entering teaching. Varadharajan and Schuck report on the way this shift can be problematic. Although career-change entrants to teacher education may have a wider range of life experience to apply in teaching situations, they can also struggle with pre-conceived beliefs about teaching.

Varadharajan and Schuck also touch on the way non-school-leaver entrants to teaching can face considerable demands on their personal lives. This alternative conceptualisation of impact is the theme taken up by Deanna Grant-Smith and Jenna Gillett-Swan in Chapter "Managing the Personal Impact of Practicum:

Examining the Experiences of Graduate Diploma in Education Students". Their specific focus is the impact of the practicum but they interrogate this not in relation to the learning of PSTs but the impact of the practicum on the wellbeing of older PSTs. Grant-Smith and Gillett-Swan remind readers of the characteristically stress-inducing nature of the practicum—it is organised around a compressed time frame, in a new environment, involving multiple stakeholders—and for many mature students it also complicates their external commitments. This chapter's conceptualisation of 'impact' is moving and challenging. Seventy percent of women participants in the authors' research reported struggling with the demands of the practicum and just over fifty percent of men. These struggles were nontrivial, demanding complex personal and financial coping strategies: using food banks or seeking loans to buy food; losing part-time income due to interrupted employment; working additional or back-to-back shifts in casual jobs to compensate for lost income; and the inevitable health impacts of worry, assessment pressures, and caring for others. But the chapter is not without positive news. Most of the participants in the research succeeded in managing these complex stresses. But Grant-Smith and Gillett-Swan question whether these impacts need to occur at all. They draw on data contributed by their research participants to argue for reconsideration of program design around the practicum to improve its impact on PST wellbeing and, therefore, learning.

Investigation and Critique of Debates About Evidence and Impact in Teacher Education

The two closing chapters widen the scope of debates about evidence and impact even further. John Buchanan (Chapter "How do the Standards Stand up? Applying Quality Teacher Frameworks to the Australian Professional Standards") turns to the "language and literature" of standards for teaching as a key component in determining evidence and impact in teacher education. Buchanan touches on teaching standards frameworks in several countries to argue that such standards do not define quality teaching but provide, instead, frameworks of (potentially) assessable outcomes. Like other authors in this volume, Buchanan points to the contextual complexity of the relationship between teaching and learning, and argues that standards can both protect and intimidate the profession.

Finally, the chapter by Sally Knipe and Tanya Fitzgerald (Chapter "Caught Between Competing Worlds: Teacher Education in Australia") is perhaps the most imaginative recent contribution to debates about the 'problem' of initial teacher education. They set out to 'reverse engineer' teacher education by drawing on the changing realities of life in schools. If initial teacher education is based, they argue, on the idea of its graduates working in "ordinary schools" then the opportunity to educate PSTs for the changing nature of schooling will be lost. At a time when the lines between 'early childhood education', 'primary school', and 'secondary school'

are becoming blurred by moves such as 'early years' programs and 'middle schools', initial teacher education remains primarily organised as early childhood, primary, and secondary education courses. Knipe and Fitzgerald argue that initial teacher education remains stuck between the industrial imperatives on which schooling was established and the demands of global citizenship that are now reshaping schools, and that "systemic influences are in the policy spotlight (for example, teacher education and teacher quality) but the system [of schooling] itself remains unexamined."

In preparing this collection of chapters for publication, we acknowledge the willingness of authors to work within the tight timeframe necessitated by working toward a conference deadline. We trust the chapters presented here will stimulate debate about the nature of impact and evidence in teacher education, and contribute positively to the wider research literature on teacher education and its effects.

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Part I
International Perspectives on Assessing the Impact of Teacher Education Policy and Practice

What Counts? Who is Counting?
Teacher Education Improvement
and Accountability in a Data-Driven Era

Diana Pullin

Abstract This chapter offers an overview of policies for reform and accountability in teacher education, addressing the role of evidence, and the opportunities for improvement within the field of teacher education. It focuses upon efforts to utilize tests or assessments and data-driven methodologies to inform government, the public, and educators. The discussion draws from the manner in which these issues have played out in the United States, to contrast with approaches and opportunities in the Australian context. The unsatisfying outcomes of many past initiatives in the United States point to the need to improve reform and accountability efforts in order to maximize the chances for meaningful change in education. The chapter concludes with a call for reflection and action within teacher education itself, arguing a "window of opportunity" exists, particularly in Australia, to develop a more confident way forward in the context of present reforms.

Around the globe, the goals for teacher preparation programs focus upon the creation of a better world through the provision of a more meaningful opportunity to learn for all students, both future teachers and the students they will eventually teach. Beginning in the late twentieth century, leaders within the field of teacher education embraced efforts to professionalize teaching and to reform the preparation of future teachers through implementation of research-based improvements to practice. Increasingly, however, voices outside the field of teacher education have criticized the quality and consequences of teacher education, seeking greater quality assurance, and calling for substantial reforms and more accountability for the enterprise (Australian Government 2016; Hess 2011; Michelli and Earley 2011; Wilson and Youngs 2005; Labaree 2004; Kramer 1991; Murnane 1991).

This chapter offers an overview of policies for reform and accountability in teacher education, addressing the role of evidence, and the opportunities for improvement within the field of teacher education. It focuses upon efforts to utilize tests or assessments and data-driven methodologies to inform government, the

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public, and educators. The discussion draws from the manner in which these issues have played out in the United States in contrast to the approaches and opportunities in the Australian context. The unsatisfying outcomes of many past initiatives in the United States point to the need to improve reform and accountability efforts in order to maximize the chances for meaningful change in education.

1 The Contexts and Calls for Reform and Accountability

A series of efforts in the U.S. over decades to "reform" teacher education have consistently left policymakers, the public, and educators themselves dissatisfied. One characteristic of any profession is the need for continuous change in light of new research and developments in the context for the work and in the field of practice. Yet when changes are mandated from outside the profession, especially in the public policy context, requirements for change can sometimes have undesirable effects.

Globalization of education reform initiatives is a growing phenomenon, particularly in the Anglo-American context, with adoption of reform approaches from one nation into another (Lingard et al. 2016). Quality assurance for teacher education has become an increasing global phenomenon (Tatto 2015; Mawdsley and Cumming 2011). Local variation in implementation occurs, but all in pursuit of global notions of the importance of schooling and accountability.

The context for teacher preparation is changing rapidly. Teacher preparation is now situated not only in colleges and universities but in an increasing number of alternative and nontraditional providers.[1] These include charitable not-for-profit entities, but also in the U.S. corporate, for-profit entities; most of both these types of alternative programs operate without ties or with limited ties to traditional tertiary education institutions. At the same time, the elementary and secondary schools that teacher preparation programs are intended to serve are also changing dramatically in response to new external demands for reform and accountability in those institutions. Finally, teacher preparation is situated in an increasingly politicized marketplace for education services, with more consumerist perspectives on the part of future students and eventual employers on the provision and accountability of education. At the same time, changing types of government intervention and oversight have occurred in the U.S. (Pullin 2015, 2013).

In Australia, the series of efforts to improve the performance of primary and secondary schools and to enhance teaching parallel many U.S. initiatives (Lingard et al. 2016; Mawdsley and Cumming 2011). One initiative seeks to increase the capability of entrants to teacher preparation by requiring top 30% test performance

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[1]Teach for America was one of the early alternative providers in the United States. It then expanded to become a separate international organization, Teach for All, which includes Teach for Australia, the recipient of significant government support. See www.teachforaustralia.org.