Reform and the Reconceptualisation of Teacher Education in Australia

Jennifer M. Gore

1 The Australian Context

Reform of teacher education in Australia has been high on government, professional, and public agendas (Centre for Education Statistics and Evaluation, 2014; Louden, 2008; Mayer, 2014; Teacher Education Ministerial Advisory Group [TEMAG], 2014), intensifying during the past two decades. Underpinned by the view that improving the efficiency and equity of schooling depends on getting and keeping good teachers (Barber & Mourshed, 2007; Organisation for Economic Co-operation and Development [OECD], 2005), major recent reforms have included: extended programs of teacher education; the development of a national approach to accreditation of teacher education programs; and tighter regulation of who can teach and who can enter teaching programs. Unlike in other contexts, such as England where schools play a much more direct role, Australian reforms have all centred on universities as the key providers of teacher education.

1.1 Program Length and Professionalisation

From the late 1970s, the length of teacher education programs has been on the reform agenda, taking the majority of teacher education programs from 3-year diploma courses to 4-year baccalaureates (Aspland, 2006; Dyson, 2005). More recently, length of program concerns have targeted postgraduate teaching qualifications with most institutions moving from 1-year postgraduate diplomas to 2-year Master of Teaching awards, now a requirement for accreditation of postgraduate

teacher education programs (Australian Institute of Teaching and School Leadership [AITSL], 2011).

Modifications to program length form part of a broader professionalisation agenda (Australian Council of Deans of Education [ACDE], 1998) to increase the status of teaching as an occupation by requiring preparation to be structured in similar ways to other professional occupations (Lovat & McLeod, 2006). This kind of move saw the amalgamation of teachers' colleges (at the time known as colleges of advanced education) with universities in 1988, to create a unified national system of higher education. In so doing, a range of new opportunities and challenges opened up (Aspland, 2006), including ongoing concerns about the status of teaching as a disciplinary field in higher education.

Since the vast majority of teacher education provision moved into universities during the late 1980s, public and political debate and academic commentary have focused more or less consistently on a range of desirable improvements to teacher education, mostly under the guise of partnerships with schools, time spent in schools, the discipline or content underpinnings of teacher preparation, and the adequacy of preparation particularly in relation to diverse student and community types. These kinds of issues have become constant challenges to teacher education in Australia – unresolved in part because each enhancement has significant consequences for government funding of teacher education, university student numbers, and the working conditions of teachers and teacher educators. For example, calls to increase time spent in schools as part of teacher education programs need to be balanced with the costs to universities of meeting demands of the industrial award which requires payment to teachers, as well as the perceived costs to schools of accommodating large numbers of student teachers. In Victoria alone, it is estimated that up to 25,000 placements are needed each year, highlighting the scale of the challenge (Victorian Department of Education and Early Childhood Development, 2013).

1.2 National Regulation

Regulation of teacher education has intensified throughout the period since amalgamation and especially with the establishment by the federal government of the Australian Institute for Teaching and School Leadership (AITSL) in 2010 as a public company funded by the Australian Government and the Minister for Education and Training as the sole member. While AITSL operates under its own constitution, with decisions made by an independent board of directors, and is intended to provide relatively independent national oversight of teacher education, its reliance on government funding and its need to be responsive to tasks and targets set by the Minister has significant consequences for the development of policy and processes. For example, a recent media release announced that "the Australian Government will provide an additional \$16.9 million over 4 years to the Australian Institute for Teaching and School Leadership (AITSL) to improve initial teacher education and to ensure teacher graduates are 'classroom ready'" (Department of Education and

Training, 2015). The Minister said: "AITSL will also *be instructed* to monitor and revise accreditation arrangements on an ongoing basis to make sure the stronger quality assurance actually impacts on the classroom readiness of graduates" (emphasis added).

Furthermore, arguably, many of AITSL's policy outputs are underpinned by calls for submissions and opinion pieces rather than empirical evidence (not surprisingly given the timelines and budget restrictions on more rigorous forms of analysis to inform its policy statements), an irony not lost in the context of criticisms of teacher education for its inadequate evidence base (Riddle, 2015). At the time AITSL was established, several states in Australia had already set up their own regulatory authorities with responsibility for assuring the quality of teacher education (including Queensland, South Australia, New South Wales, and Victoria), but the national push through AITSL aimed to assure consistent high quality teacher education across the nation.

The development and implementation of teacher education program standards *Accreditation of Initial Teacher Education Programs in Australia: Standards and procedures* (AITSL, 2011) produced a tightening of program components and structures, with rigid requirements for program length, days of professional experience in schools (80 days in 4-year programs, 40 days in 2-year programs), specific amounts of discipline content, and attention to such matters as teaching Aboriginal and Torres Strait Islander students and students with special needs. In addition the program standards dictate who should be allowed entry into preservice teacher education programs, who should be employed as a teacher educator, and who can provide supervised teaching in schools (AITSL, 2011).

National policy has been notoriously difficult to implement in Australian education. Despite all State ministers of education agreeing to the establishment of AITSL and signing up to national standards, some states insist on stamping their own character (Tuinamuana, 2011). In NSW for example, so-called "elaborations" of the standards have been imposed, in the areas of classroom management, special needs, Aboriginal and Torres Strait Islander education, ICT, and literacy and numeracy, despite all of these matters being attended to in the articulation of the national standards. While perhaps trivial in the larger scheme of things, such additional requirements that impact directly and rather onerously on the already-cumbersome documentation required of teacher education providers, are illustrative of the overregulation of teacher education not only through national requirements, but also state requirements, both of which also sit alongside already rigorous internal and external program development requirements within universities (Tertiary Education Quality and Standards Agency [TEQSA], 2014). The national effort by teacher educators to meet all of these requirements amounts to millions of dollars annually, in part because of the sheer scale of the teacher education enterprise in Australian universities with, for example, 8.7% of all commencing university enrolments in Education in 2014 (Australian Government Department of Education and Training, 2015b).1

¹ For all domestic students, total EFTSL in "Teacher Education" in 2014 was 52,536 (36,573 was at undergraduate level). Total EFTSL for all domestic students across all disciplines in 2014 was 719,363 – 7.3% (Australian Government Department of Education and Training, 2015a).

J.M. Gore

1.3 Current State of Teacher Education

Indeed, the scale of initial teacher education across Australia is significant. In 2013, there were more than 450 programs in 48 institutions (AITSL, 2014) (mostly universities, with a few colleges and TAFE providers also involved). While this number is sometimes derided as indicative of a foolhardy proliferation of programs, it is easily explained by the listing of discrete programs for each secondary specialisation - mathematics, science, physical education, English, social sciences, visual arts, languages, and so on – with considerable overlap in program requirements within each institution. Nonetheless, in 2013 there were 79,623 students enrolled as pre-service teachers (Australian Government Department of Education and Training, 2014a) in Australia. In the same year, higher education providers graduated 17,900 initial teacher education students, entering a workforce of 261,585 full time equivalent teachers (Australian Government Department of Education and Training, 2014b). This volume of activity poses significant challenges for accreditation and other regulatory processes which currently end up relying on "truckloads" of documentation (Mockler, 2015) comprised substantially of box-ticked matrices relating teacher education program assessments to the Professional Standards for Teachers.

With the increased regulation of both teacher education and teaching (through the Australian Professional Standards for Teachers (AITSL, 2011)), to qualify as a graduate teacher and be eligible for employment in Australian schools, participants must now hold a 4-year full-time equivalent higher education qualification, structured in one of the following ways:

- A 3-year undergraduate degree plus a 2-year graduate entry teaching qualification:
- An integrated qualification of at least 4 years combining discipline studies and professional studies;
- A combined degree of at least 4 years;
- Other combination approved by teacher regulatory authorities in consultation with AITSL deemed equivalent to the above.
- While the "other approved combination" leaves room for alternate modes of teacher education, there are currently very few such pathways into teaching in Australia, and even those existing, such as Teach for Australia, rely on strong university involvement.

Despite a strong system of initial teacher education in Australia, political and public dissatisfaction remains a prevalent feature of the discursive terrain. As put by the-then Minister for Education, the Honorable Christopher Pyne:

There is evidence that our teacher education system is not up to scratch. We are not attracting the top students into teacher courses as we once did, courses are too theoretical, ideological and faddish, not based on the evidence of what works in teaching important subjects like literacy. Standards are too low at some education institutions – everyone passes. (Knott, 2014)

The adequacy of evidence for such statements aside, there are consistent calls for reform in teacher education, with the most recent federal government report *Action Now: Classroom Ready Teachers* (TEMAG, 2014) calling for an "overhaul" of teacher education in Australia:

The evidence is clear: enhancing the capability of teachers is vital to raising the overall quality of Australia's school system and lifting student outcomes. Action to improve the quality of teachers in Australian schools must begin when they are first prepared for the profession. (p. viii)

The articulated goals of such reform, as with nearly all reform of teacher education, centre squarely on enhancing the quality of teaching in schools in order to improve outcomes for students (often meaning performance on standardised national and international tests), including more equitable outcomes.

Key strategies advocated in this context include restricting entry to teacher education to the best quality students (the top 30 % of the population) (Wilson, Dalton, & Baumann, 2015), improving the quality of teacher education programs, and enhancing partnerships with schools in order to ensure a better integration of theory and practice. The TEMAG (2014) report also concluded that many higher education providers and practitioners adopt strategies which reflect populist thinking (TEMAG, 2014), have not been linked with student learning, and are not well understood by those teaching them (Parliament of Victoria, 2005), rather than being informed by research (National Inquiry into the Teaching of Literacy, 2005). This view is echoed by Roberts-Hull, Jensen, and Cooper (2015) who declare that many programs are teaching obsolete or ineffective practices or strategies. Moreover, TEMAG reported that many teacher preparation programs are not modeling the practices they expect from students. Nor are they integrating theory and practice throughout program components. Note that the evidence for these claims comes primarily from submissions to reviews and the opinions of (often vocal) commentators or well-known critics of teacher education, including external companies with strong links to the federal government.

The Action Now: Classroom Ready Teachers (TEMAG, 2014) report named as key problems in Teacher Education (or more accurately, summarized as key concerns articulated by those who made submissions):

- Australian Professional Standards for Teachers are weakly applied;
- Australians are not confident that initial teacher education entrants are the best fit for the job;
- not all programs are equipping graduates with evidence-based teaching strategies;
- teacher education providers are not assessing classroom readiness against the Professional Standards;
- insufficient support for beginning teachers;
- a lack of useful information on the effectiveness of the teaching program which hinders continuous improvement (p. viii).

These concerns are poised to impact on the ongoing reform of teacher education in Australia. Accreditation of teacher education programs with a focus on outputs rather than inputs (AITSL/TEMAG), addressing the quality of entrants (e.g., Bowles, Hattie, Dinham, Scull, & Clinton, 2014), and gathering evidence of the impact of teacher education programs (AITSL, 2015a; see also Dinham, 2015; Gore, 2015a; Mayer, 2015) are at the forefront of the most recent pronouncements.

The impact of these latest government/public pushes for reform of teacher education in Australia remains to be seen. A focus on restricting entry to the 'best and brightest' (Smith, 2014) makes for persuasive government policy but its enactment alongside other (equally?) appealing calls to widen participation in higher education, including among historically under-represented groups (Bradley, Noonan, Nugent, & Scales, 2008), will test the resolve of reformers. This is especially so at a time when universities are under considerable financial strain and when attrition from teaching remains high (both among beginning teachers and with large numbers expected to retire in the near future) (McKinnon, 2016; Weldon, 2015). Focusing on outputs and the impact of teacher education programs also makes for compelling government rhetoric, but the enactment of such processes is enormously challenged by unresolved international efforts to measure the quality of teaching and the quality of teacher education (e.g., Darling-Hammond, 2015; Goldhaber, 2015; Goldring et al., 2015; Teachers College Columbia University, 2015).

It is against this backdrop that local teacher education programs in Australia are developed and refined. Within the tightly regulated program standards, and despite concerns about homogenising effects (Gannon, 2012) there is scope for innovation as illustrated in the following two case studies from the University of Newcastle – its implementation of the National Exceptional Teachers for Disadvantaged Schools (NETDS) Program and its development of a revised Master of Teaching (MTeach) Program. In the remainder of this chapter, I outline these 'new' teacher education programs in which I am involved and interrogate how far they go in providing 'solutions' to key 'problems' identified in and with teacher education. I consider the extent to which it is possible to create forms of teacher education that are professionally defensible from a higher education perspective while responding to public and political concerns.

2 Case Study 1. The Exceptional Teachers for Disadvantaged Schools Program

The Exceptional Teachers for Disadvantaged Schools (ETDS) program was pioneered by Jo Lampert and Bruce Burnett at Queensland University of Technology (Lampert & Burnett, 2011). It provides a pathway for high quality early career teachers to be professionally and personally prepared for roles within schools situated in low socio-economic areas, thus placing the "best" teachers into the most challenging schools (Rice, 2008). This program was developed in response to the

finding that top-performing education graduates are far less likely to accept positions in disadvantaged schools (Cochran-Smith, Davis, & Fries, 2004), given that they are often snapped up quickly by independent schools or offered 'more attractive' positions at 'easier' schools within government school systems.

The ETDS program, funded by Social Ventures Australia (SVA), ² identifies the highest-achieving education students at the end of their second year of study, combines this with data about student teachers' initial attitudes, dispositions, academic record, and social history, and then selects the top 5-10% for invitation into the program (Lampert & Burnett, 2011). Mostly, GPA determines whether an invitation is issued.

Entry to the program provides participants with a specialised curriculum and practicum, partnering with low-SES schools, for part of their teacher education program, which otherwise is identical to that of their non-ETDS peers. Focus groups and interviews are conducted throughout the program to explore participants' perspectives and understandings of the impact on their teaching practice. As these 'exceptional' pre-service teachers finish their initial teacher education program, they are encouraged to pursue employment in low-SES schools. Designed to address both the distribution of 'effective' teachers in low-SES schools and the attrition of early career teachers/preservice teachers from those contexts through better preparation, ETDS offers extra support for working in disadvantaged contexts through focussed content in a cohort-based tutorial and extra academic visits and phone contact while on practicum.

According to SVA, three barriers to transformational social change on the scale required are addressed through the ETDS program: a lack of capital, experienced talent, and evidence to prove what works (Social Ventures Australia, 2015). Pitched as offering solutions to equity and workforce issues, ETDS is careful to avoid a 'missionary' or deficit model (Flessa, 2007; Labaree, 2010), instead emphasising academic excellence.

Tracking of the ETDS program, now with its fourth cohort of graduating students at QUT, is evaluating graduates' employment destinations, retention data, and performance. Preliminary data indicate a higher employment rate for ETDS graduates (from 85% in 2011 to ~93% in 2014) and a significantly increased proportion of EDTS graduates working in low-SES schools (from 35% in 2011 to 88% in 2014). Initial analysis by the program pioneers has suggested: student teachers in the program must have a passion for teaching in disadvantaged schools; they must have knowledge of low-SES contexts; and, although personal qualities such as resilience are desirable, a high grade point average is a strong measure of success (Lampert & Burnett, 2011). A question Lampert and Burnett (2011) seek to explore through ETDS is the capacity of the program to 'teach' social justice.

The early successes of the program, particularly in terms of employment destinations of graduates, has led to its expansion to other states and universities in the form of the 'National' Exceptional Teachers for Disadvantaged Schools (NETDS)

² SVA is a non-profit organisation that describes itself as "leading practitioners of venture philanthropy in Australia" (Social Ventures Australia, 2015).

J.M. Gore

program. Given its strong performance in equity with 27% of students from low-SES backgrounds (well above the sector average of 16%), the largest 'enabling' program in the country (University of Newcastle, 2016), and around 23% of the nation's Aboriginal teachers despite being one of 40 universities in Australia (Lester, Heitmeyer, Gore, & Ford, 2013), Newcastle was invited to be one of the first two universities to participate in this wider implementation of ETDS. The first cohort of 34 students was identified late in 2013 and commenced the program in 2014, the third year of their teacher education. Characteristics of the Newcastle cohort include 26% who attended low-SES high schools themselves (ICSEA³ <1000), with 14 of the 31 for whom we have information the first in their family to attend university. The age of participants ranges from 19 to 47 years, with 65% of the cohort 'mature age' (over 25 years of age). The average GPA of the cohort is 5.88 (maximum possible is 7). As these students graduate, important comparisons with the Queensland and other cohorts will provide stronger evidence of the program's impact.

2.1 The Case for Reform

How far does NETDS take us in the reform or reconceptualisation of teacher education? To what extent does it address public and political calls for reform? In what ways does it move beyond traditional approaches to teacher preparation? What challenges does it face?

The program clearly responds to enduring concerns for the quality of teachers and quality of teaching, particularly for their role in improving outcomes for students from low-SES schools and communities. Unlike programs like Teach for Australia, which seek to attract graduates from any relevant degree program into teaching, NETDS builds on an existing vocational commitment to teaching as a career by targeting students in their second year of an undergraduate teacher education program. This is an important distinction with potential benefits in terms of satisfaction with, and retention in, teaching as a career.

By identifying and supporting high-achieving education students with additional academic content and additional contact with academic staff while on practicum in low-SES schools, the program also addresses concerns about the readiness of graduates, especially for more challenging teaching environments (TEMAG, 2014), thus setting them up for greater success. The numbers of ETDS graduates accepting employment in low-SES schools certainly suggests a level of confidence, potentially attributable to the program.

While providing extra support for the highest achieving teacher education students might be an effective strategy for delivering more equitable outcomes in

³ICSEA is the Index of Community Socio-Educational Advantage created by the Australian Curriculum, Assessment and Reporting Authority (ACARA), which enables meaningful comparisons of NAPLAN test achievement by students in schools across Australia. See http://www.myschool.edu.au/AboutUs/Glossary/glossaryLink for more details

schools, it raises questions about equity within the teacher education program itself. The extra support provided to a cohort of already high-achieving students is made possible through the special funding attached to the program. A more substantial reconceptualisation of teacher education, would require finding ways to make such support available for all teacher education students, not only for the chosen cohort.

Another limitation of NETDS might be the use of high academic achievement in the first two years of the teacher education program as a proxy for quality. Are these students 'exceptional teachers' or will they become 'exceptional' teachers? The international evidence of a relationship between academic achievement and success as a teacher is weak at present, although most studies have used academic achievement on entry to teacher education as the key measure. In the Republic of Ireland, admission to teacher education is highly selective (Department of Education and Skills, 2012) yet the country's performance on PISA in 2009 was indistinguishable from that of the United Kingdom, who maintain broader admission to teacher education. In Shanghai, teachers typically do not have high educational qualifications, but are given extremely high quality training both before and during their careers (Wiliam, 2014). In Sweden, higher university entry scores are not associated with higher performance by school students on standardised tests (Grönqvist & Vlachos, 2008). These findings, together with current debates about the adequacy of academic performance measures in the selection of teacher candidates (Bowles, Hattie, Dinham, Scull, & Clinton, 2014), raise questions about using academic performance as the key criterion for selection into the NETDS program.

There is also a risk that a program such as NETDS which encourages commitment to teaching in low-SES schools can err on the side of indoctrination, dogmatically exerting moral pressure on these high achieving students to make career choices with potentially negative consequences for some of its graduates. That is, if some of these exceptional teachers enter schools where they struggle to achieve their 'mission' of achieving good outcomes for students from low-SES backgrounds, attrition from teaching might even be greater. This 'social reconstruction' orientation of some teacher education programs (Zeichner, 1993) is particularly vulnerable to setting students up to fail unless they also have strong practical knowledge and support (Gore, 2001, 2015b). A 'reconceptualised' teacher education program would ensure the support provided includes practical know-how as well as deep theoretical underpinnings for understanding disadvantage, poverty, equity, and social justice.

Acknowledging these challenges is not to undermine the potential value of NETDS to those students who participate or the students they subsequently teach. They may well be better positioned to make a greater difference in low-SES schooling than graduates without this experience, delivering the high quality teaching and more equitable outcomes advocated across political, academic, and public discourses. As a model for the reconceptualisation of teacher education however, NETDS appears to face some substantial limitations.

Nonetheless in its reclamation of ideologically-driven government initiatives to ensure talented students are employed in the disadvantaged schools where ostensibly they are needed most by recruiting such students from within Education rather

24 J.M. Gore

than without (as in the case of Teach for Australia) and to position NETDS within a teacher education program that conforms to all accreditation requirements, NETDS skilfully creates a more professionally defensible way of achieving the same kinds of goals. This defensibility of the NETDS program structure, at least from the perspective of the vast majority of teacher educators, sits in stark contrast to the abbreviated preparation of Teach for Australia candidates.

2.2 Summary

In short, NETDS represents a reconceptualisation of existing teacher education programs in a number of ways. It unapologetically identifies and supports the highest achieving students and encourages them away from the 'cushy' jobs they would easily win into more challenging and arguably more rewarding teaching careers in disadvantaged schools. This commitment interrupts traditional employment pathways whereby the 'best' students typically end up with the 'best' jobs and in so doing responds to national concerns about the quality of teaching in schools and equity of outcomes, particularly for groups that have traditionally not fared well in Australian schools (Indigenous and poor students). NETDS also reconceptualises the responsibility of the higher education provider to prepare graduates who will succeed and be sustained in some of the toughest schools. Addressing national levels of attrition by preparing graduates with the knowledge, skills, and experience to thrive in low-SES schools takes seriously this aspect of teacher education and begins to demonstrate what might be needed to prepare more teacher education candidates for success, wherever they may teach.

3 Case Study 2. The Master of Teaching Program at the University of Newcastle

The Master of Teaching program at the University of Newcastle was explicitly designed to address the quality of teaching.⁴ It aims to develop beginning teachers who are not only well prepared when they arrive in schools, but are also adaptive and resilient learners and leaders. The MTeach ambitiously seeks to re-vision teacher education in ways that respond to enduring concerns about the quality and unique theory-practice nexus of teacher education. In so doing, it directly addresses the views encapsulated in various contemporary policy statements on teachers and teaching (such as the NSW Government's *Great Teaching, Inspired Learning* and AITSL's *Australian Teacher Performance and Development Framework*). It utilises knowledge derived from our own research into Quality Teaching and Quality

⁴The redesign of the existing Master of Teaching program at Newcastle took place in 2013 and 2014, with the first cohort enrolling in the revised program in 2015.

Teaching Rounds (see for example: Bowe & Gore, in press; Gore, 2014b; Gore & Bowe, 2015; Gore, Griffiths, & Ladwig, 2004; Gore, Ladwig, & King, 2004; Gore et al., 2015; Ladwig, 2007; Ladwig, Smith, Gore, Amosa, & Griffiths, 2007). It operationalises its aims through the following deliberate moves: the use of a specific pedagogical model to frame knowledge and analysis of practice; the explicit integration of course components; an emphasis on teaching as clinical practice; and specific engagement with local schools. Each of these innovations is outlined below.

3.1 The Knowledge Base for Teaching

A perennial problem of teacher education is the lack of an agreed knowledge base for understanding teaching practice (Shulman, 1986), which results in weak teacher education program effects (Zeichner & Tabachnick, 1981) and relatively poor student satisfaction (Gore, Griffiths, et al., 2004), with graduates lacking confidence in their abilities and unsure of how well prepared they are (McKenzie, Weldon, Rowley, Murphy, & McMillan, 2014). While some Australian universities have moved to initial teacher education programs that incorporate either an inquiry-based or clinical approach (most publicly The University of Melbourne) in order to strengthen the knowledge base for teaching, the MTeach at Newcastle draws on its 'signature' pedagogical framework, Quality Teaching, an empirically-tested model of good teaching developed by University of Newcastle academics (Ladwig and Gore).

This three-dimensional pedagogical framework,⁵ Quality Teaching (NSW Department of Education and Training [NSW DET], 2003a, 2003b), has been the focus of more than a decade of research in schools with practising teachers. The studies have demonstrated positive impacts of the framework on teaching quality, teacher satisfaction, and student outcomes, whilst also narrowing achievement gaps for Aboriginal students and students from low-SES backgrounds (Gore, 2014a, 2014b; Gore & Bowe, 2015; Gore, Griffiths, et al., 2004, Gore, et al. 2015; Ladwig et al., 2007). All of these outcomes align precisely with the kinds of improvements sought by governments wanting to improve Australian schooling and so respond directly to the concerns of critics and reformers. Replicating these kinds of effects on the quality of teaching produced by preservice, rather than inservice, teachers is a major goal of the program. The framework itself, while seen as foundational in providing a firmer knowledge base for teaching, is only part of the MTeach program design. How the framework is used within the program is also critical, as elaborated below.

⁵The model focuses on intellectual quality, a quality learning environment, and significance.

3.2 Program Coherence

The MTeach program was designed to address longstanding criticisms of the fragmentation of knowledge in teacher education (Liston & Zeichner, 1991) which is seen to weaken the knowledge base and reduce students' confidence in their readiness to teach. The MTeach seeks to strengthen program coherence by using the Quality Teaching framework as a lens through which to analyse, interrogate, synthesise and evaluate other aspects of the teacher education program. Because the framework itself draws attention to what, how and who is being taught, it provides a lens with which to consider psychological, sociological, philosophical, historical, and policy perspectives on teaching and schooling. Moreover, it provides a framework for organising the discrete pieces of information that students typically encounter in teacher education.

In order to make this integration of knowledge explicit the program includes 'conferences' at the beginning of each semester and 'showcases' at the end, in which the various subjects studied during the semester are brought together. The conferences are intended to provide students with an overview of their studies for the semester and help them to see the relationship between discrete subjects. The showcases provide a forum for students to demonstrate their learning, with aspects of their assessment requiring integration of knowledge gained during the semester.

Essential to the success of this aspect of the program is a shared conceptual framework among the teacher educators involved and an agreed vision of what constitutes good quality teaching. In this respect, the Quality Teaching framework becomes a means of helping students to integrate the various components of their teacher education program, including its most theoretical and most practical components.

3.3 Clinical Practice

Another key component of the MTeach is its specific form of clinical work, designed to produce teachers who have superior diagnostic and strategic capacities for analysing and improving practice, reporting their impact on student learning, and leading their colleagues in continuous improvement. Other 'clinical' approaches to initial teacher education tend to focus either on diagnosing the needs of individual learners (e.g., Melbourne Graduate School of Education (MGSE) [MGSE], 2016) or on discrete teaching skills (as per approaches derived from 'clinical supervision' models (Glickman, 1981; Goldhammer, 1969)). The MTeach goes beyond such 'atomistic' approaches emphasising instead that professional practice requires neophyte teachers to draw on a full range of skills and insights to create meaningful learning experiences for whole classes of students within the complex multidimensional, unpredictable, simultaneous environments of classrooms (Jackson, 1968; Doyle, 1977).

Drawing on the University's research into teacher development and specifically its work on Quality Teaching Rounds as a way of effectively implementing the Quality Teaching model in schools (Bowe & Gore, in press; Gore, 2014a, 2014b; Gore & Bowe, 2015; Gore et al., 2015), the MTeach seeks to prepare knowledgeable and confident graduates with the clinical skills to help them deliver high quality teaching to students in all contexts and to continuously refine their practice in collaboration with colleagues. MTeach students thus work in 'professional learning communities' in which traditional conceptions of teachers working in relative isolation in their own classrooms are supplanted by extensive experience in approaching teaching problems in collaboration with colleagues.

3.4 School-University Alignment

Another feature of the MTeach lies in its alignment with goals of both the NSW Department of Education (NSW Government, 2013) and NSW Catholic school systems to identify clusters of schools as showcase environments for high quality professional experiences for pre-service teachers. Both organisations have articulated commitments to enhancing this core component of teacher education. Leveraging existing strong relationships with local schools built through the federal government's National Partnerships (Low SES, Teacher Quality, and Literacy and Numeracy) program, and other research relationships, the MTeach is partnering with a group of schools where there is a shared interest in Quality Teaching and willingness to work with student teachers in undertaking Quality Teaching Rounds. This university-school alignment in both substance (Quality Teaching) and process (Quality Teaching Rounds) lays the foundation for a smooth transition of graduates to employment and ongoing professional learning.

3.5 Possible Limitations

One challenge of the MTeach relates to the logistics for students, especially in finding times to meet with their PLCs outside of class. This is of particular concern when many of the students are mature aged with busy lives and families. Buy-in among teacher education colleagues could also impact on the program's delivery if, after agreeing to the program at the point of conceptualisation, some feel less supportive when the program requires changes to their own practice, integrating Quality Teaching or the new processes that characterise the program (professional learning communities, conferences and showcases). Such potential resistance would echo broader contestation throughout the field of teacher education over what constitutes and how to judge good teaching, and good teacher education. Arguably such contestation, manifest in longstanding paradigmatic differences (Gore, 2001; Zeichner, 1983), is a major impediment to the reform and success of teacher education and

contributes to an ongoing mistrust of teacher education evident in the endless cycle of review, reform and government intervention – a topic for another paper.

3.6 Summary

The MTeach program seeks to overcome fragmentation of knowledge through its curriculum structure (conferences, showcases) and embedded use of the Quality Teaching framework. It seeks to prepare graduates for collaborative/inquiry-oriented/problem-solving professional practice through Quality Teaching Rounds and the experience of working in PLCs. It directly addresses the knowledge base for teaching through its theory/practice integration (Darling-Hammond, Hammerness, Grossman, Rust, & Shulman, 2005) and school/university continuity, and it develops productive relationships with partner schools through common understanding and shared practices (Quality Teaching Rounds/PLCs). Strongly aligned with pedagogical policy reform in schools (NSW Government, 2013), the program is well-positioned to support graduates in making a smooth transition between university teacher education and professional practice in schools.

While grounded more in our own research than in ideologically-driven government initiatives, the MTeach shares espoused government commitments to improving the quality of both teaching and teacher education, and addressing high levels of teacher attrition (Gore & Bowe, 2015; McKinnon, 2016). In this way, the MTeach offers a strong exemplar for the reform of teacher education; an exemplar that is professionally defensible through its basis in academic research on teaching and teacher education. The capacity of the newly-established program to deliver these outcomes remains to be seen.

In terms of reconceptualising teacher education, the MTeach confronts the knowledge base for teaching, the theory-practice nexus, and the preparation for ongoing learning about teaching through collaboration with colleagues. While none of these represent new concerns or practices among teacher educators, the MTeach brings them together in ways that offer new hope of genuine improvement. The recent success of the Quality Teaching Rounds approach for producing significant improvement in the quality of teaching among practising teachers (effect size 0.3–0.4) in the context of a randomised controlled trial (Gore et al., 2015) makes this hope seem tangible.

4 Discussion

Considerable commonality is evident, broadly speaking, in approaches to the reform of teacher education in Australia, both at the level of policy and at the level of teacher education program design and implementation. As the two case studies

illustrate, efforts to improve teacher education remain centred on the quality of entrants, enhancement of teacher education programs, and a revised role of schools.

The NETDS program takes a new tack on the quality of teacher education students, not at the point of recruitment into teacher education, but by selecting the best performing students who are already enrolled and enhancing their preparation in a way that seeks to increase the likelihood that some of the best quality teachers will be successfully employed in low-SES schools. As a postgraduate program, the MTeach indirectly addresses the quality of entrants. Program enhancements for the NETDS focus on providing, for the selected cohort, a deeper understanding of the lives and learning needs of students from disadvantaged communities and additional support for students to practise teaching in schools in these areas. These enhancements respond directly to concerns about the adequacy of preparation and teacher attrition, particularly in these contexts. The MTeach takes a whole of program focus on coherence built through a shared vision and pedagogical knowledge base. The program enhancements are embedded in all aspects of the teacher education program. As a result, the potential benefits, for whole cohorts of graduates and their students, are far-reaching. Both the NETDS and the MTeach programs rely on the involvement of schools where there is a shared vision of and commitment to the specific program goals. Such continuity between schools and universities promises a substantial shift away from perceptions of teacher education programs as irrelevant to the realities of contemporary schools and classrooms.

The purported goals of nearly all reform in teacher education have consistently been to enhance the quality of teaching in order to improve outcomes, including (and sometimes especially) equity outcomes. These goals appear to encapsulate the discursive underpinnings of nearly all teacher education reform, despite varying political and professional agendas. The goals themselves are enduring and defensible. However, defining what counts as quality teaching and what counts as student outcomes remains contested and problematic. The strong evidence-based views of education academics are crucial to debates about such fundamental issues.

At this critical juncture, the future of teacher education appears poised to rely heavily on stronger evidence of program impact. New and more robust forms of research, including experimental studies, are being advocated from all quarters (AITSL, 2015b; Louden, 2015; Nuttall, Murray, Seddon, & Mitchell, 2006). Unless teacher educators can rise to this challenge, we may find ourselves stuck in a downward spiral of reform imposed externally, or left with the kind of serial fatigue that comes as (questionably) 'good' ideas are tried for a time and abandoned or replaced by the next good idea, following the next government review.

While high level policy rhetoric remains important in legitimating new policies in the political arena, the two case studies provided above demonstrate that teacher educators are able to occupy the space the reforms offer to reconceptualise our own practice in ways that go beyond (the sometimes simplistic) policy responses. Of course, robust evidence of the effects of these programs, as cohorts of students compete their studies, will strengthen the capacity of such innovations to play a role in pushing back against blunt reform initiatives. Nonetheless, what should be striking to policy makers about our case studies is that teacher educators are clearly grap-

pling with issues of the quality of classroom practice and quality of teacher education, regardless of the overall reform ideology. These and other case studies (Darling-Hammond, 2006), including others provided in this volume, provide a helpful basis for professional discussion among stakeholders about the best way of fostering excellent teaching in diverse settings across Australia and further afield.

References

- Aspland, T. (2006). Changing patterns of teacher education in Australia. *Education Research and Perspectives*, 33(2), 140–163.
- Australian Council of Deans of Education. (ACDE). (1998). *Preparing a profession: Report of the national standards and guidelines for initial teacher education project*. Canberra, Australia: Australian Council of Deans of Education.
- Australian Government Department of Education and Training. (2014a). *Higher education statistics: 2013 Special courses*. Retrieved from http://education.gov.au/higher-education-statistics.
- Australian Government Department of Education and Training. (2014b). Selected higher education statistics: 2013 Student data. Retrieved from http://education.gov.au/higher-education-statistics.
- Australian Government Department of Education and Training. (2015a). Selected higher education statistics: 2014 All student load. Retrieved from http://docs.education.gov.au/system/files/doc/other/2014_all_student_load_0.xls.
- Australian Government Department of Education and Training. (2015b). Selected higher education statistics: 2014 Appendix 3 Academic organisational units. Retrieved from http://docs.education.gov.au/system/files/doc/other/2014_appendix_3.xls.
- Australian Institute of Teaching and School Leadership. (AITSL). (2011). *Australian Professional Standards for Teachers*. Retrieved from http://www.aitsl.edu.au/docs/default-source/apst-resources/australian_professional_standard_for_teachers_final.pdf.
- Australian Institute for Teaching and School Leadership. (AITSL). (2014). *Initial teacher education: Data report 2014*. Melbourne, Australia: Australian Institute for Teaching and School Leadership. (AITSL).
- Australian Institute for Teaching and School Leadership. (AITSL). (2015a). *ITE reform: What is classroom ready?* Retrieved from http://www.aitsl.edu.au/initial-teacher-education/ite-reform-strengthened-accreditation/ite-reform-what-is-classroom-ready.
- Australian Institute for Teaching and School Leadership. (AITSL). (2015b). Research agenda for initial teacher education in Australia. Retrieved from http://www.aitsl.edu.au/docs/default-source/aitsl-research/ITE-research-agenda.pdf?sfvrsn=4.
- Barber, M., & Mourshed, M. (2007). How the world's best-performing schools come out on top. Retrieved from McKinsey & Company website: http://mckinseyonsociety.com/downloads/reports/Education/Worlds_School_Systems_Final.pdf.
- Bowe, J. M., & Gore, J. M. (in press). Reassembling teacher professional development: The case for Quality Teaching Rounds. *Teachers and Teaching: Theory and Practice*.
- Bowles, T., Hattie, J., Dinham, S., Scull, J., & Clinton, J. (2014). Proposing a comprehensive model for identifying teaching candidates. *The Australian Educational Researcher*, 41(4), 365–380.
- Bradley, D., Noonan, P., Nugent, H., & Scales, B. (2008). *Review of Australian higher education:* Final report. Canberra, Australia: Department of Education, Employment and Workplace Relations. Retrieved from http://www.mq.edu.au/pubstatic/public/download.jsp?id=111997.
- Centre for Education Statistics and Evaluation. (2014). What works best: Evidence-based practices to help improve NSW student performance. Sydney, Australia: NSW Department of Education and Communities.

- Cochran-Smith, M., Davis, D., & Fries, K. (2004). Multicultural teacher education. In J. A. Banks & C. A. M. Banks (Eds.), *Handbook of research on multicultural education* (2nd ed., pp. 931–975). San Francisco: Jossey-Bass.
- Darling-Hammond, L. (2006). *Powerful teacher education: Lessons from exemplary programs*. San Francisco: Jossey-Bass.
- Darling-Hammond, L. (2015). Can value added add value to teacher evaluation? *Educational Researcher*, 44(2), 132–137. doi:10.3102/0013189x15575346
- Darling-Hammond, L., Hammerness, K., Grossman, P. L., Rust, F., & Shulman, L. (2005). *The design of teacher education programs. Preparing teachers for a changing world: What teachers should learn and be able to do.* San Francisco: Jossey-Bass.
- Department of Education and Skills. (2012). Report of the international review panel on the structure of initial teacher education provision in Ireland. Retrieved from https://www.education.ie/en/Press-Events/Press-Releases/2012-Press-Releases/Report-of-the-International-Review-Panel-on-the-Structure-of-Initial-Teacher-Education-Provision-in-Ireland.pdf.
- Department of Education and Training. (2015). \$16.9 million to help lift teacher quality (Media release). Retrieved from https://ministers.education.gov.au/pyne/169-million-help-lift-teacher-quality.
- Dinham, S. (2015). Issues and perspectives relevant to the development of an approach to the accreditation of initial teacher education in Australia based on evidence of impact. A paper prepared for the Australian Institute for Teaching and School Leadership. Retrieved from http://www.aitsl.edu.au/docs/default-source/initial-teacher-education-resources/ite-reform-stimulus-paper-03-dinham.pdf.
- Doyle, W. (1977). Learning the classroom environment: An ecological analysis. *Journal of Teacher Education*, 28(6), 51–55. doi:10.1177/002248717702800616
- Dyson, M. (2005). Australian teacher education: Although reviewed to the eyeball is there evidence of significant change and where to now? *Australian Journal of Teacher Education*, 30(1), 37–54.
- Flessa, J. (2007). *Poverty and education: Towards effective action. A review of the literature*. Toronto, Canada: Ontario Institute for Studies in Education.
- Gannon, S. (2012). Changing lives and standardising teachers: The possibilities and limits of professional standards. *English Teaching: Practice and Critique*, 11(3), 59–77.
- Glickman, C. D. (1981). Developmental supervision: Alternative practices for helping teachers improve instruction. Alexandria, VA: Association for Supervision and Curriculum Development.
- Goldhaber, D. (2015). Exploring the potential of value-added performance measures to affect the quality of the teacher workforce. *Educational Researcher*, 44(2), 87–95. doi:10.3102/0013189x15574905
- Goldhammer, R. (1969). Clinical supervision: Special methods for the supervision of teachers. New York: Holt, Rinehart and Winston.
- Goldring, E., Grissom, J. A., Rubin, M., Neumerski, C. M., Cannata, M., & Drake, T. (2015). Make room value added: Principals' human capital decisions and the emergence of teacher observation data. *Educational Researcher*, 44(2), 96–104. doi:10.3102/0013189x15575031
- Gore, J. M. (2001). Beyond our differences: A reassembling of what matters in teacher education. *Journal of Teacher Education*, 52(2), 124–135.
- Gore, J. M. (2014a). Effective implementation of pedagogical reform through Quality Teaching Rounds. In *Proceedings of the annual national conference of the Australian College of Educators (ACE). What counts as quality in education?* (pp. 16–21). Melbourne, Australia:
- Gore, J. M. (2014b). Towards quality and equity: The case for Quality Teaching Rounds. In *Proceedings of the Australian Council for Educational Research (ACER) research conference.* Quality and equity: What does research tell us? (pp. 86–91). Melbourne, Australia: ACER.
- Gore, J. (2015a). My struggle for pedagogy. In D. Ford & B. Porfilio (Eds.), *Leaders in critical pedagogy: Narratives for understanding and solidarity* (pp. 81–92). Rotterdam, The Netherlands: Sense.

- Gore, J. (2015a). Evidence of impact of teacher education programs: A focus on classroom observations. A paper prepared for the Australian Institute for Teaching and School Leadership. Retrieved from http://www.aitsl.edu.au/docs/default-source/initial-teacher-education-resources/ite-reform-stimulus-paper-2-gore.pdf.
- Gore, J. M., & Bowe, J. M. (2015). Interrupting attrition? Re-shaping the transition from preservice to inservice teaching through Quality Teaching Rounds. *International Journal of Educational Research*, 73, 77–88. doi:10.1016/j.ijer.2015.05.006
- Gore, J. M., Griffiths, T. G., & Ladwig, J. G. (2004). Towards better teaching: Productive pedagogy as a framework for teacher education. *Teaching and Teacher Education*, 20, 375–387. doi:10.1016/j.tate.2004.02.010
- Gore, J. M., Ladwig, J. G., & King, B. (2004). *Professional learning, pedagogical improvement, and the circulation of power*. Paper presented at the annual conference for the Australian Association for Research in Education, Melbourne, Australia.
- Gore, J., Smith, M., Bowe, J., Ellis, H., Lloyd, A., & Lubans, D. (2015). Quality Teaching Rounds as a professional development intervention for enhancing the quality of teaching: Rationale and study protocol for a cluster randomised controlled trial. *International Journal of Educational Research*, 74, 82–95. doi:10.1016/j.ijer.2015.08.002
- Grönqvist, E., & Vlachos, J. (2008). One size fits all? The effects of teacher cognitive and non-cognitive abilities on student achievement (Working Paper 2008:25 for the Institute for Labour Market Policy Evaluation). Retrieved from http://www.ifau.se/upload/pdf/se/2008/wp08-25.pdf.
- Jackson, P. W. (1968). Life in classrooms. New York: Holt, Rinehart and Winston.
- Knott, M. (2014, February 19). Christopher Pyne turns spotlight on teacher training. *Sydney Morning Herald*. Retrieved from http://www.smh.com.au/federal-politics/political-news/christopher-pyne-turns-spotlight-on-teacher-training-20140218-32ykx.html.
- Labaree, D. (2010). Teach for America and teacher ed: Heads they win, tails we lose. *Journal of Teacher Education*, 61(48), 48–55.
- Ladwig, J. G. (2007). Modelling pedagogy in Australian school reform. *Pedagogies: An International Journal*, 2(2), 57–76.
- Ladwig, J. G., Smith, M., Gore, J. M., Amosa, W., & Griffiths, T. (2007). Quality of pedagogy and student achievement: Multi-level replication of authentic pedagogy. Paper presented at the annual conference for the Australian Association for Educational Research, Fremantle, Australia. Retrieved from http://www.aare.edu.au/data/publications/2007/lad07283.pdf.
- Lampert, J., & Burnett, B. M. (2011). Exceptional teachers for disadvantaged schools. *Curriculum Leadership*, 9(17). Retrieved from http://eprints.qut.edu.au/48419/2/48419.pdf.
- Lester, J., Heitmeyer, D., Gore, J. M., & Ford, M. (2013). Creating and sustaining meaningful partnerships for supporting indigenous teacher education. *Journal of Australian Indigenous Issues*, 16(4), 3–18.
- Liston, D. P., & Zeichner, K. M. (1991). *Teacher education and the social conditions of schooling*. New York: Routledge.
- Louden, W. (2008). 101 Damnations: The persistence of criticism and the absence of evidence about teacher education in Australia. *Teachers and Teaching: Theory and Practice*, 14(4), 357–368.
- Louden, W. (2015). Standardised assessment of initial teacher education: Environmental scan and case studies. A paper prepared for the Australian Institute for Teaching and School Leadership.

 Retrieved from http://www.aitsl.edu.au/docs/default-source/initial-teacher-education-resources/standardised-assessment-of-ite_environmental-scan-and-case-studies.pdf.
- Lovat, T., & McLeod, J. (2006). Fully professionalised teacher education: An Australian study in persistence. *Asia-Pacific Journal of Teacher Education*, 34(3), 287–300. doi:10.1080/13598660600927174
- Mayer, D. (2014). Forty years of teacher education in Australia: 1974–2014. *Journal of Education for Teaching: International Research and Pedagogy*, 40(5), 461–473.

- Mayer, D. (2015). An approach to the accreditation of initial teacher education programs based on evidence of the impact impact of learning teaching. A paper prepared for the Australian Institute for Teaching and School Leadership. Retrieved from http://www.aitsl.edu.au/docs/default-source/initial-teacher-education-resources/ite-reform-stimulus-paper-1-mayer.pdf.
- McKenzie, P., Weldon, P., Rowley, G., Murphy, M., & McMillan, J. (2014, April). *Staff in Australia's Schools 2013: Main report on the survey*. Retrieved from https://docs.education.gov.au/system/files/doc/other/sias_2013_main_report.pdf.
- McKinnon, M. (2016, January 11). Teachers are leaving the profession Here's how to make them stay. *The Conversation*. Retrieved from https://theconversation.com/teachers-are-leaving-the-profession-heres-how-to-make-them-stay-52697.
- Melbourne Graduate School of Education. (MGSE). (2016). *Clinical teaching*. Retrieved from http://education.unimelb.edu.au/about_us/clinical_teaching.
- Mockler, N. (2015, February 15). EduResearch matters: More measuring, few solutions for teacher education under recommendations to Abbott Govt [Blog post]. Retrieved from Australian Association for Research in Education website: http://www.aare.edu.au/blog/?p=903.
- National Inquiry into the Teaching of Literacy. (2005). *Teaching reading: Report and recommendations*. Canberra, Australia: Australian Government Department of Education, Science and Training. Retrieved from http://research.acer.edu.au/tll_misc/5/
- NSW Department of Education and Training. (NSW DET). (2003a). *Quality teaching in NSW public schools: An annotated bibliography*. Sydney, Australia: NSW Department of Education and Training/Professional Support and Curriculum Directorate.
- NSW Department of Education and Training. (NSW DET). (2003b). *Quality teaching in NSW public schools: An annotated bibliography*. Sydney, Australia: NSW Department of Education and Training/Professional Support and Curriculum Directorate.
- NSW Government. (2013, March). *Great teaching, inspired learning: A blueprint for action*. Retrieved from http://www.schools.nsw.edu.au/media/downloads/news/greatteaching/gtil_blueprint.pdf.
- Nuttall, J., Murray, S., Seddon, T., & Mitchell, J. (2006). Changing research contexts in teacher education in Australia: Charting new directions. *Asia-Pacific Journal of Teacher Education*, 34(3), 321–332.
- Organisation for Economic Co-operation and Development. (OECD). (2005). Teachers matter: Attracting, developing and retaining effective teachers. Paris, France: OECD.
- Parliament of Victoria. (2005). Step up, step in, step out: Final report on the inquiry into the suitability of pre-service teacher training in Victoria. Melbourne, Australia: Education and Training Committee.
- Rice, S. (2008). Getting good teachers into challenging schools. *Curriculum and Leadership Journal*, 6(14). Retrieved from http://www.curriculum.edu.au/leader/getting_good_teachers_into_challenging_schools,23264.html?issueID=11431.
- Riddle, S. (2015, April 1). Teachers learn over many years in the job Not just at university. *The Conversation*. Retrieved from https://theconversation.com/teachers-learn-over-many-years-in-the-job-not-just-at-university-39486.
- Roberts-Hull, K., Jensen, B., & Cooper, S. (2015). *A new approach: Teacher education reform.*Melbourne, Australia: Learning First. Retrieved from http://static1.squarespace.com/static/531fd05ee4b00a4fbb7b1c67/t/55150cf0e4b0932ce9c67096/1427442928401/A+new+approach.pdf.
- Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. *Educational Researcher*, *15*(2), 4–14. Retrieved from http://www.jstor.org/stable/1175860.
- Social Ventures Australia. (2015). Social Ventures Australia. Retrieved from http://socialventures.com.au/
- Teacher Education Ministerial Advisory Group. (TEMAG). (2014). *Action now: Classroom ready teachers*. Retrieved from https://docs.education.gov.au/system/files/doc/other/action_now_classroom_ready_teachers_accessible.pdf.

- Teachers College Columbia University. (2015, April 2). Sachs lecture series. David Berliner: Evaluating teacher education and teachers using student assessments [Video file]. Retrieved from https://youtu.be/lQkSnpFvbcs.
- Tertiary Education Quality and Standards Agency. (TEQSA). (2014). *TEQSA snapshot May 2014*. Retrieved from http://www.teqsa.gov.au/sites/default/files/TEQSAsnapshotMay2014.pdf.
- Tuinamuana, K. (2011). Teacher professional standards, accountability, and ideology: Alternative discourses. *Australian Journal of Teacher Education*, 36(12), 72–82. doi: 10.14221/ajte.2011v36n12.8
- University of Newcastle. (2016). *Equity and excellence*. Retrieved from http://www.newcastle.edu.au/about-uon/our-university/equity-and-excellence.
- Victorian Department of Education and Early Childhood Development. (2013). From new directions to action: World-class teaching and school leadership. Melbourne, Australia: Victorian Department of Education and Early Childhood Development. http://www.education.vic.gov.au/Documents/about/department/teachingprofession.pdf.
- Weldon, P. R. (2015, March). The teacher workforce in Australia: Supply, demand and data issues (Policy Insights, Issue #2). Retrieved from Australian Council for Educational Research website: http://research.acer.edu.au/policyinsights/2/
- Wiliam, D. (2014). *The formative evaluation of teaching performance* (Occasional Paper No. 137). Melbourne, Australia: Centre for Strategic Education. Retrieved from http://www.dylanwiliam.org/Dylan_Wiliams_website/Publications_files/The%20formative%20evaluation%20 of%20teaching%20performance%20(CSE%202014)%20secure.pdf.
- Wilson, R., Dalton, B., & Baumann, C. (2015, March 16). Six ways Australia's education system is failing our kids. *The Conversation*. Retrieved from https://theconversation.com/six-ways-australias-education-system-is-failing-our-kids-32958.
- Zeichner, K. M. (1983). Alternative paradigms of teacher education. *Journal of Teacher Education*, 34(3), 3–9.
- Zeichner, K. M. (1993). Traditions of practice in U.S. preservice teacher education programs. *Teaching and Teacher Education*, 9(1), 1–13.
- Zeichner, K. M., & Tabachnick, B. R. (1981). Are the effects of university teacher education "washed out" by school experiences? *Journal of Teacher Education*, 32(2), 7–11.