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## Teacher Education in Australia

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## Summary and Keywords

The past decade has seen increasing federal intervention in teacher education in Australia, and like many other countries, more attention on teacher education as a policy problem. The current policy context calls for graduates from initial teacher education programs to be classroom ready and for teacher education programs to provide evidence of their effectiveness and their impact on student learning. It is suggested that teacher educators currently lack sufficient evidence and response to criticisms of effectiveness and impact. However, examination of the relevant literature and analysis of the discourses informing current policy demonstrate that it is the issue of how effectiveness is understood and framed, and what constitutes evidence of effectiveness, that needs closer examination by both teacher educators and policymakers before evidence of impact can be usefully claimed—or not.

Keywords: Australia, initial teacher education, effectiveness, classroom readiness, evidence of impact

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## Introduction

This article examines the current policy context of initial teacher education in Australia and addresses the claims that there is little to no evidence of the impact and value of teacher education. First, we provide a brief overview of the current provision of initial teacher education across Australia, and then we outline the policy context since 2009. We selected this year because it represents the beginning of significant federal intervention in teacher education in Australia and coincides with increasing claims about the problem of teacher education (Cochran-Smith, 2008) and the impact of neoliberal policy borrowing worldwide. We examine the current policy context, with its calls for classroom-ready teachers and evidence of the effectiveness and impact of teacher preparation (TEMAG,

2014). Next, we examine the challenge that teacher education research provides no adequate response. We have undertaken a systematic literature review of relevant research as a way of exploring these claims, and as a complementary critique, we also have analyzed the discourses informing current policy.

Through these complementary processes, we have established how the evidence of teacher education effectiveness is being framed. Therefore, in this article, it is our aim to provide readers not only with a comprehensive picture of teacher education in Australia, but also some considerations and possible directions for teacher education researchers in order that they might be able to address current policy with research evidence that counts. For ease of reading, when we use the term *teacher education* in this article, we are referring to initial teacher education. (Of course, we acknowledge that teacher education is much broader than initial teacher education.)

## Teacher Education in Australia

In comparison with many other countries, Australia has a relatively small population of 24.2 million people and a student population of 3.8 million (Australian Bureau of Statistics, 2017A, 2017B). Primary schools provide schooling for ages 5–12 years and secondary schools for ages 13–18 years (school attendance is compulsory to 16–17 years of age). In 2016, there were 276,329 teachers in schools across the country (Australian Bureau of Statistics, 2017B). The teaching workforce is predominantly female. For example, in the 2013 Staff in Australia's Schools Survey (SiAS), 81% of primary teacher respondents and 58% of secondary teacher respondents were female (McKenzie, Weldon, Rowley, Murphy, & McMillan, 2014).

Teachers are usually prepared in multiple study pathways at universities including four-year bachelor's degrees (e.g., Bachelor of Education); double bachelor's degrees (e.g., Bachelor of Arts/Bachelor of Education, Bachelor of Science/Bachelor of Education), these being pathways to secondary teaching; and master's level degrees (e.g., Master of Teaching) for those with a first noneducation bachelor's degree. In 2014, 66% of teacher education programs were at the undergraduate level and 34% at the postgraduate level (AITSL, 2016).

In terms of structure, the programs usually comprise professional studies, curriculum studies, and professional experience or practicum, as well as discipline or content study for relevant teaching areas where entrants have no first degree in the discipline. Professional experience or practicum comprises a series of supervised experiences in schools during most years of the program, totaling 12–20 weeks depending on the length of the program. Secondary teachers are usually prepared to teach two subject areas, and primary teachers to teach across a number of subject areas, including the arts, English,

health and physical education, humanities and social sciences, languages, mathematics, science, and technologies.

In 2014, 367 initial teacher education programs were offered by 48 providers at 89 different locations across Australia with 81,397 enrolled preservice teachers; 68% of the cohort was enrolled in on-campus internal modes of study. In that year, 18,488 preservice teachers completed teacher education programs (AITSL, 2016).

Funding from the Australian government is allocated to higher-education providers under the Commonwealth Grant Scheme (CGS), which subsidizes students' tuition costs. Students pay a portion of the total course fee, which can be paid to the government up front or deferred through the Higher Education Loan Program (HELP) as an income contingent loan to students. The 2008 review of Australia's higher-education system (Australian Government, 2008) led to major reforms—specifically for our purpose, the uncapping of the allocation of domestic undergraduate university places through a demand-driven system. This has not been implemented for postgraduate CGS places, so the impact on teacher education, which provides both undergraduate and graduate pathways to teaching, means increasing undergraduate pathway numbers and somewhat stable graduate pathway numbers. The Commonwealth government provides additional funding for practicum supervision to higher-education institutions, which then contract directly with individual schools to provide supervision of preservice teachers.

In 2014, teacher education bachelor graduates had a slightly higher full-time employment rate (70%) than other bachelor graduates (68%) (AITSL, 2016). However, studies have shown that more than 70% of employed teacher education graduates usually work at fixed-term contracts or casual appointments in their first year of teaching (e.g., Mayer et al., 2017).

Historically, schooling and teachers' work in Australia have been the jurisdiction of the states and territories, and higher education has been the jurisdiction of the Commonwealth. Not surprisingly, this has resulted in tensions at times, particularly when the political party in government at the federal level is different from that in each state and territory. However, since 2008–2009, the Commonwealth has made moves to increase its influence over schooling and teachers' work, and subsequently teacher education. It is that history that we now examine as a way of understanding the current policy for teacher education in Australia and the calls for evidence of its effectiveness.

## Teacher Quality Reforms and Teacher Education Since 2009: A National Solution

In 2009, the Australian government's Smarter Schools—Improving Teacher Quality National Partnership (TQNP) program was established and \$550 million allocated over five years to address specific areas for reform, including:

- Attracting the best graduates to teaching through additional pathways
- Improving the quality of teacher education
- Developing national standards and teacher registration
- Improving retention by rewarding high-quality teachers and school leaders
- Building knowledge of teachers and school leaders through their careers

As a result of the investment and political will around these reforms, the teacher education landscape across Australia has seen significant changes since 2010. For the purposes of this article and our focus on teacher education, we examine the first three agendas listed here and how they have played out over the past seven years. Like teacher education in the United States (Cochran-Smith, 2008), Australian teacher education was, and is, positioned as a policy problem. When this happens, rather than building trust in the professional judgment of teachers as doing intellectual work, policymakers aim to control, change, and reform various dimensions of teaching and teacher education that they believe are most likely to improve teacher quality. In Australia's case, the policy spotlight was directed toward pathways into teaching, as well as increasing the regulation associated with teaching and teacher education. In addition, an increasingly noisy political discourse emerged, claiming that the so-called problems of Australian teacher education could be fixed only through government intervention and national solutions (cf. Cochran-Smith, Piazza, & Power, 2013). Later in the article, we discuss competing accountability discourses that illustrate the ensuing entanglement of disparate policy agendas characterizing teacher education in Australia.

### Alternative Pathways into Teaching

As noted in the previous section, pathways into teaching in Australia are regularly university-based-degree teacher education programs. However, the TQNP reforms set out to support additional pathways. As a result, Teach for Australia was established and commenced operations in 2010. Like Teach First in the United Kingdom and Teach for America in the United States, Teach for Australia aimed to recruit outstanding university graduates from all noneducation disciplines to teach in socioeconomically disadvantaged secondary schools and provide an alternative pathway into the profession by bypassing the teacher preparation programs in higher-education institutions. Teach for Australia Associates complete an intensive six-week teacher training program and then teach for two years, during which time they are supported by mentors and work with business partners while completing a school-based teacher education program. Full course costs are funded for Teach for Australia Associates by the Commonwealth government. A 2013 evaluation by the Australian Council for Educational Research found that Teach for Australia “continues to show considerable promise, with all participating schools indicating that they would take another Teacher for Australia Associate if they had an available vacancy: a strong endorsement of the quality of the Associates” (Weldon, McKenzie, Kleinhenz, & Reid, 2013, p. xi). This evaluation concluded that the recruitment process was a major strength attracting high-quality graduates, some of whom otherwise may not have considered teaching. But it also found that the cost of the program was high relative to other pathways into teaching, especially given the small numbers involved; there were 43 Associates in cohort 1, 42 in cohort 2, 39 in cohort 3, and 50 in cohort 4 in 2013. As part of the 2016 midyear Economic and Fiscal Outlook, the Australian government confirmed investment of a further \$20.5 million in the Teach for Australia program for 2016–2017 to 2020–2021.

While alternative pathways into the profession, like Teach for Australia, usually attract only small cohorts, they have been symbolically significant in destabilizing other models of initial teacher education. In Britain, for example, while less than 8% of the allocation of initial teacher education numbers for the 2014–2015 academic year was for totally school-based routes, a British Educational Research Association (BERA, 2014) inquiry noted that the School Direct program had forced the closure of some university courses across the country. To date, no such impact is evident on traditional teacher education programs in Australia.

### A National Framework and Increasing Regulation

To address the second and third listed reform areas, the Commonwealth government funded the establishment of the Australian Institute for Teaching and School Leadership (AITSL) in January 2010, with a brief to provide national leadership for the federal and state/territory governments in “promoting excellence in the profession of teaching and school leadership.” (AITSL, 2011). The letter of expectation, dated December 14, 2009, from the then-Minister for Education and Deputy Prime Minister, Julia Gillard, on behalf of the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA), set out the role for the institute as follows:

- Developing and maintaining rigorous national professional standards for teachers and school leaders
- Fostering and driving high-quality professional development for teachers and school leaders
- Working collaboratively across jurisdictions and engaging with key professional bodies

Until the establishment of AITSL, each state and territory took responsibility for regulating the profession in their jurisdiction, with, not surprisingly, varying approaches and levels of maturity in the systems. An earlier attempt was made to nationalize teacher regulation with the formation of Teaching Australia in 2005, but a strong national political push did not really emerge until the establishment of AITSL.

In its early years, AITSL developed national professional standards for teachers and processes for accrediting initial teacher education programs—first in 2011 and then updated in 2015 (AITSL, 2011, 2015). The professional standards for teachers are grouped into three domains of teaching (Professional Knowledge, Professional Practice, and Professional Engagement), and include descriptors of four professional career stages (Graduate, Proficient, Highly Accomplished, and Lead). The Graduate and Proficient levels are used for teacher-credentialing purposes in determining provisional registration after the completion of an accredited teacher education program and full registration after a period of induction into the profession. The relevant state and territory authorities continue to manage program accreditation, but they now do this using the new national graduate teacher and program standards and the endorsed national accreditation processes. The goal is a nationally consistent system for credentialing teachers. However, as might be expected, state and territory governments and their regulatory authorities strive to maintain their distinctiveness by adding their own state and territory elaborations to the national program standards.

In many parts of the world, teacher education governance has been characterized by an increasing focus on outcomes, particularly student learning outcomes and whether teacher education makes a difference to student learning in classrooms. This focus on

student learning and graduating teachers being classroom ready was taken up in earnest in Australia in 2014.

### 2014—Preparing Classroom Ready Teachers

In early 2014, the Federal Minister for Education established the Teacher Education Ministerial Advisory Group (TEMAG) to “make recommendations on how initial teacher education in Australia could be improved to better prepare new teachers with the practical skills needed for the classroom” (TEMAG, 2014, p. ix). The report compiled from the review concluded that while there were examples of excellent teacher education practice in Australia, significant improvement to the content and delivery of teacher education programs was needed (TEMAG, 2014). The Australian government’s response to the report (Australian Government, 2015) promised swift and decisive action to ensure the following:

- Stronger quality assurance of teacher education courses
- Rigorous selection for entry to teacher education courses
- Improved and structured practical experience for teacher education students
- Robust assessment of graduates to ensure classroom readiness
- National research and workforce planning capabilities

Teacher educators across the country, as well as the bureaucrats in the state and territory regulatory authorities, now have to turn their attention to two significant outcomes of the TEMAG review and the subsequent changes to program accreditation requirements: (a) measures of program effectiveness as part of a stronger quality assurance system, and (b) capstone teacher performance assessments linked to the *Australian Professional Standards for Teachers* at the Graduate career stage to respond to the requirement for “robust assessment of graduates to ensure classroom readiness” (Mayer, 2015, p. 1). Evidence of impact has become the new mantra. The first of these requirements is explored next by investigating the ways in which teacher educators currently provide evidence of program effectiveness with their research.

## Discourses Informing the Current Policy Moment

Acknowledging the ideological influences at play in policy spaces, and in order to reveal “culturally based and politically administered” influences on teacher education (Brock & Alexiadou, 2013, p. 1), we undertook a discourse analysis of key state and federal policy documents in Australia since 2010, including:

- *Review of Teacher Education and School Induction* (Caldwell & Sutton, 2010)
- *Schools Workforce* (Productivity Commission, 2012)
- *Great Teaching, Inspired Learning* (NSW Department of Education and Communities, 2013)
- *Action Now: Classroom Ready Teachers* (TEMAG, 2014)
- *Action Now: Classroom Ready Teachers, Australian Government Response* (Australian Government, 2015)

Analysis of these documents shows how discursive practices frame differing conceptualizations of effectiveness. Cochran-Smith tracked the development of approaches to teacher effectiveness in the United States over time, noting how attitudes to the profession ranged from relating teacher efficiency to personal character traits, thence to scientifically observable teacher behaviors, and more recently to accountability of teacher effectiveness through a “policy turn” (Cochran-Smith, 2016, p. 97). Analysis of the Australian context reveals similar conflicting discourses existing in current education policy, national professional standards, and state-based amendments/additional requirements. These sometimes-oppositional perspectives lead to variations in judgments of effectiveness, impact, and classroom readiness.

Analysis of the *Review of Teacher Education and School Induction* (Caldwell & Sutton, 2010), for example, reveals the exploratory tone of commentary from the start of our focus period. The discourse influences emerging in this document refer to the need for evidence-based assessment with a focus on what trainee teachers learn and can do (Darling-Hammond & Bransford, 2005). The call for research to underpin what is known about teaching seems productive, though there is little clarity about what evidence would be accepted and a strong link to work readiness as the justification for program design. In contrast, the Productivity Commission (2012) report launches into a negative evaluation of the education context in Australia, stating right at the start that Australian schools “generally deliver good student outcomes at reasonable cost, but improvements are required” (p. 2). The proposed package of reforms is couched in problem-solving language, such as *raising* quality, *reducing* teacher shortages, and *ameliorating* educational disadvantage. This word set and statements referring to “the widely held perception that the status of teachers has declined” (2012, p. 3) and the need for “an improvement in the effectiveness and efficiency of teachers” (2012, p. 3) indicate a negative appraisal of teachers. However, another discursive thread runs through the report that encourages affirmative action. The Productivity Commission notes that disengagement of policymakers and researchers is a systemic problem. In response, collaboration is recommended between policymakers and educators as a way of *strengthening* the use of evaluation and research workforce planning and ensuring that “the policies adopted . . . are suitable for their intended purpose” (2012, p. 293).



In the 2013 NSW policy document *Great Teaching, Inspired Learning* (NSW Department of Education and Communities, 2013), the call for a strong evidence base continues. Yet a tension exists in the current Australian context. The intended goals of the policy imperative to control input measures via the quality of entrants run counter to the focus of teacher education on graduate outcomes.

Analysis of *Action Now: Classroom Ready Teachers*, the highly influential TEMAG report, for instance, reveals the discourses that have been influencing policy in the last two years. The semantic loading that underpins the report supports what Rowan and colleagues call the “crisis discourse” (Rowan, Mayer, Kline, Kostogriz, & Walker-Gibbs, 2015, p. 276). It proposes low public confidence in initial teacher education, which could be addressed through consistent quality assurance processes that would transform teacher education (TEMAG, 2014). However, as one of the key recommendations from the TEMAG report, the establishment of a national teacher education regulator, was not taken up. This left the space for various state and territory regulators to proliferate local variations of national standards and their state/territory-based elaborations. For example, the state of New South Wales has an interpretation of the requirement for primary teachers to develop curriculum specializations that is different to other states.

In response to the TEMAG report, the Australian government drew up a list of five imperatives that would inform future targeted actions and provide a guarantee of classroom readiness. The directives include comparative adjectives that signify lack of satisfaction with existing processes of quality assurance as each phrase seeks increased power in terms such as stronger quality assurance, rigorous selection, and robust assessment. A brief examination of corollary terms reveals the report writers’ deliberate shaping of strong boundaries around teacher education: *rigor* as opposed to *haphazard*—implying need for control; *robust* as opposed to *weak*—implying need for reliability; and *quality* as opposed to *inferior*—implying a cline that is better than good, better, best. The list could be continued to include other terms that are commonly used now in discussions of teacher education, such as *classroom ready* as opposed to *still learning*—implying need for accomplished capacity.

The expression of guiding principles using this kind of language supports a deficit view of teacher education and constructs the official position that “the accreditation of courses is currently not sufficiently rigorous or evidence-based” (Australian Government, 2015, p. 4). Not only that, while the focus in policy remains on regulation of input by controlled entry criteria and program content rather than outcomes of teacher education, professional accountability of the value of graduation continues to erode. Reading over a variety of policy documents released in the last three years, these messages become repetitive. However, they are not completely consistent, as woven into the accountability discourse are competing discourses that speak of agency, complexity, continued professional development, and other topics.

# Effectiveness of Teacher Education in Australia —a Systematic Review of the Research Literature

Despite all the variations and discursive framings that exist in Australian policy, two clear messages are emerging—the value placed on evidence-based verification of readiness for classroom teaching and the need for a national focus on research into the effectiveness of teacher education. In Australia, as in many other countries, reviews of teacher education research have regularly concluded that it is underdeveloped, often undertheorized, fragmentary, and somewhat parochial (e.g., Menter, Hulme, Elliot, & Lewin, 2010; Murray, Nuttall, & Mitchell, 2008; Sleeter, 2014). As the Productivity Commission (2012) report noted, this is often due to the relatively small amounts of research funding available for teacher education research, and therefore individual teacher educator researchers decide to investigate their own programs, given their easy access to participants, and focus their attention on what they think might improve their own teacher education programs and practices.

But does this research tell us anything, in any sort of aggregated way, about the effectiveness of teacher education? As we have noted previously, various claims would suggest not, so we have set out to review the current research literature in Australia to understand how researchers have investigated the effectiveness of teacher preparation post-TEMAG, the scale of these studies, what methods are being used, and especially how effectiveness is being interpreted in the framing of the studies. To do that, we undertook a systematic review of research literature focusing on teacher education programs in Australia that has been published since the December 2014 TEMAG report.

## Identification of Studies

As this research field is still developing, and as there is a lack of robust quantitative research, a meta-analysis was not feasible. Consequently, we utilized a systematic literature review to synthesize themes relating to effectiveness of teacher education. In March 2017, a systematic search was undertaken, focusing on the nine journals aligned with relevant professional teacher education associations:

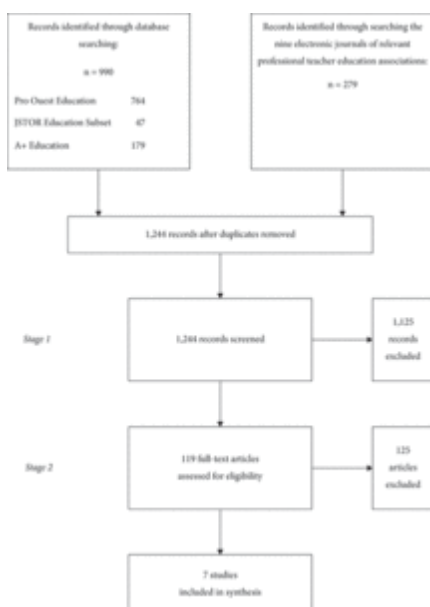
- *Asia-Pacific Journal of Teacher Education*
- *Australian Educational Researcher*
- *British Educational Research Journal*
- *Educational Researcher*
- *European Journal of Teacher Education*

- *Journal of Teacher Education*
- *Teachers and Teaching: Theory and Practice*
- *Teaching and Teacher Education*
- *Teaching Education*

We also conducted a similar search using ProQuest Education, JSTOR Education Subset, and A+ Education databases. These searches utilized the following terms: Australia\* AND “Teacher Education” AND “evidence” OR “impact” OR “effectiveness” OR “readiness,” these being terms currently circulating in the policy context. This search was limited to peer-reviewed articles written in English and published between February 1, 2015, and March 1, 2017. The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement (Moher, Liberati, Tetzlaff, & Altman, 2009) guided the review process.

### Inclusion Criteria

The initial search uncovered 1,269 potential sources. Decisions were made about the inclusion of articles in two stages. In stage 1, one author scanned the titles and abstracts for relevance (i.e., did they focus on effectiveness of initial teacher education in an Australian context?). This resulted in a subgroup of 119 remaining articles. In stage 2, full-text versions of the remaining articles were reviewed by the other two authors, again to see if they had a focus on the effectiveness of initial teacher education in an Australian context and to ascertain if they had a clearly outlined and robust method. Figure 1 shows a diagrammatic overview of the review process.



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Figure 1. Flow of information through the different phases of the systematic review.

### Limitations

While every effort was made to reveal all studies investigating the effectiveness of Australian teacher education, our selected search terms may have missed some articles. There also may have been a time lag related to the indexing of articles, possibly resulting in applicable articles not being identified. Likewise, relevant studies reported in only refereed conference papers may have been omitted from our search.

### Synthesis

The process of selection outlined in Figure 1 resulted in seven articles being included in the synthesis (Lang, Neal, Karvouni, & Chandler, 2015; O'Neill, 2016; Peralta, O'Connor, Cotton, & Bennie, 2016; Salazar Noguera & McCluskey, 2017; Sharma & Nuttal, 2016; Sharma & Sokal, 2015; Simpson, 2016). It is not our intention here to discuss each article individually, nor make any comparative comments about their robustness and validity (either among this group of identified studies or in relation to the body of research more broadly). Rather, our purpose is to provide an aggregated overview of the studies that we selected in relation to the research foci, the research methods used, the scales of the study, and who the participants were, the data collection and data analysis procedures, and especially how the researchers seemed to define and interpret effectiveness.

As noted in the introduction, the major purposes for this systematic review were (i) to interrogate the challenge that there is little or no evidence of the effectiveness of teacher education in Australia, and (ii) to establish a sense of how evidence of teacher education effectiveness is being framed. Accordingly, we analyzed each article and then developed the following brief synthesis of the seven studies.

Most of these studies focused on a component of a teacher education program (i.e., a unit of study or a smaller component within a unit of study) rather than on the whole program in preparing a graduate teacher—an outcomes focus. A majority focused on professional experience or practicum, and especially partnerships with schools. In many instances, the studies were investigations or evaluations of piloting an approach that the teacher-educators considered should be in a teacher education program, constituted good teacher education practice, or both.

The research methods implemented in the seven studies included mixed methods, only quantitative or only qualitative, with data collected at various times and intervals. The sample sizes ranged from 8 to 55 preservice teachers. The trend in the studies was to collect data from participants as final-year preservice teachers or otherwise late in their program. One study included data collected from graduated teachers up to three years after initial employment. Data collection usually occurred over no more than one semester, and the minimum number of data points was one. Six studies used multiple data points. For example, surveys were used either prelearning and postlearning

experience or prelearning, during-learning, and postlearning experience. There was an inverse relationship between data points and types of data collected. Higher amounts of quantitative data were collected in studies with low data points, and higher amounts of qualitative data were collected in studies with multiple data points.

The most-used tool was a survey of participants, with some studies using interviews and focus groups as additional data collection strategies. Basically, data collection was designed to capture the experiences and opinions of the participants, who were usually preservice teachers and sometimes included mentor teachers and school principals as well. Competency, efficacy, or attitudinal scales also were used in some studies.

In the seven studies, program effectiveness was most often interpreted as change in the preservice teachers' attitudes, skills, confidence, and knowledge, and this was usually determined by collecting preservice teachers' perceptions of their own effectiveness. Only two cases interpreted program effectiveness as preservice teachers having an impact on school student learning, as measured through implementation of teaching practices in real-life demonstrations of teaching capacity. In these two studies, the preservice teachers exercised autonomous thought and judgment following the structure of planning, explicit instruction and practice, assessment, and reflection on their learning and teaching.

## Interpreting Effectiveness for Australian Teacher Education Research

This review has revealed that probably nothing much has changed in terms of the research on, about, and for teacher education in Australia in the past two years. From this review, which aimed to examine whether the research seems to address the questions being asked of teacher education about evidence of its effectiveness, and utilized the systematic review process outlined here, the studies selected for synthesis were mainly performed on a small scale, often focused on a component of teacher education programs, and relied mainly on self-reporting and perceptions or opinions. Our findings mirror those of a recent review of survey-based teacher education research published in refereed journals from 1995 to 2015, wherein Australian preservice teachers were the respondents (Stephenson, 2017). This study found that the studies in which the surveys were used were often small scale, with respondents most likely to be elementary-school preservice teachers. Stephenson also reported that most surveys addressed attitudes, perceptions, or beliefs, but less frequently discussed skills and knowledge.

One response is to follow the usual line of argument that stems from these sorts of reviews and conclude that teacher education research needs to include larger-scale and longitudinal studies, and that the smaller studies like those that we have described here should ensure that they both emerge from the current knowledge base in the field and

add to that knowledge base (e.g., Sleeter, 2014; Zeichner, 2005, 2007). We are not denying that these are indeed useful points of departure. The need for “longitudinal studies that follow students into their first years of teaching, with a clear demonstration of the ways in which reflective approaches are being retained, developed, or lost” (Hatton & Smith, 1995, p. 36) was raised as an imperative by researchers who had tracked research in teacher education over the years 1995–2004 (Murray, Nuttall, & Mitchell, 2008).

More recently, the call for research recommended an investigation of best practice principles for programs that effectively support successful transition from pre-service to effective practice after graduation (Ingvarson et al., 2014). Yet the TEMAG report in 2014 noted that funding for such research was poor and recommended that the Australian government should work closely with higher-education providers and the Australian Research Council to ensure that grants would be awarded for research to support the development of a strong evidence base. In 2012, the Commonwealth government’s Productivity Commission highlighted the need for an evidence base to evaluate teacher preparation and track the subsequent performance of graduating teachers (Productivity Commission, 2012). However, few of these types of studies have been conducted in Australia (Louden, Heldsinger, House, Humphry, & Darryl Fitzgerald, 2010; Mayer et al., 2015).

These comments and calls to action for larger-scale and longitudinal research, as well as more joined-up case studies, are still valid. However, we suggest that it is even more important for teacher education researchers to clearly determine how effectiveness is (and should be) interpreted and understood, and for what purpose. Many would argue, and few disagree, that the goal of teacher education is to prepare beginning teachers to be able to take up the job of teaching in ways that positively affect student learning. As a consequence, it is often argued that the most appropriate way to determine the effectiveness of teacher education is to look at the effectiveness of the teachers that it graduates, as evaluated by various achievement measures of the students that they are teaching (usually standardized test scores).

While there is a seductive logic to this line of argument, we know from various critiques that using standardized test scores to make judgments about teachers, and therefore their teacher education programs, is at best a tenuous link. Moreover, this measure conflates teacher/teaching effectiveness with teacher education effectiveness. Of course, both are inextricably linked, but they are not one and the same thing.

A recent review of teacher effectiveness systems, frameworks, and measures prepared for the Australian government (Clinton et al., 2016) provides a comprehensive overview of international policies and practices regarding teacher evaluation and teacher effectiveness measures, including classroom observation, teaching performance portfolios, teacher interviews, performance and development interviews, peer ratings, and student ratings. The report suggests that teacher evaluation occurs at multiple points along a continuum of reliable and valid teacher performance measures, from initial

teacher education to recognition of advanced expertise. It also restates the conclusions of Kennedy, Ahn, and Choi (2008) about there being a weak link between qualifications and subsequent teacher effectiveness.

In Australia, the Professional Standards for Teaching at the Graduate level purport to set out what graduating teachers should know and be able to do. Teacher education programs are accredited in relation to how well accreditation panels judge they can likely do this. Increasingly, capstone teacher performance assessments are being implemented in teacher education programs as ways of providing opportunities for soon-to-be graduates to demonstrate how they use their professional knowledge, professional practice, and sometimes professional engagement in enhancing student learning. In seeking to determine the effectiveness of teacher education through various research agendas, we argue that the whole program must be the focus, and that this probably should be looked at over time.

In addition, it must be acknowledged that teacher education programs are informed by the various missions and visions of the institutions, which sometimes capture desirable knowledge, skills, and attributes of graduate teachers beyond what might be articulated in a set of standards. So, to return to our initial goal of providing some possible directions for research into teacher education that counts in terms of policy, we suggest a careful reconsideration of what effectiveness could and should encompass.

As the analyses of the recent policy documents have shown, associated discursive practices frame different conceptualizations of effectiveness, sometimes in oppositional ways. Therefore, in order to capture the intellectual work of teachers in research that would contribute usefully to the debate, teacher educators should state their intent in terms of defining goals for effectiveness and then set about reporting how they measure the success of their programs at meeting those goals through evidence. In the long term, this could lead to a shared research agenda with a common understanding of what effectiveness means in teacher education, and also hopefully inform policy discussions and ultimately the enacted accountability mechanisms.

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