**PREPARING A ‘CLASSROOM-READY’ TEACHER: THE CHALLENGE FOR TEACHER EDUCATORS**

John Buchanan

University of Technology Sydney

Sandy Schuck

University of Technology Sydney

**Abstract**

In Australia, a government report on teacher education has recently been published (Teacher Education Ministerial Advisory Group 2015). This report is regarded as highly influential in directing change in teacher education programs nationally. Its key premise is a requirement for teacher education programs to prepare ‘classroom-ready’ teachers. In this chapter, we critique the notion of classroom-ready: we investigate what such teachers may look like, what attributes, skills and knowledges they may possess, and how teacher education programs may provide appropriate preparation, experiences and environments most likely to lead to this outcome. We use current thinking from the relevant literature and policy documents to develop a schema of attributes deemed most important for classroom-ready teachers. We also examine teacher education reviews and policy documents since the turn of the century to investigate whether any new attributes are suggested in the quest for classroom-ready teachers. We critically evaluate past and current recommendations for the development of attributes deemed desirable, and interrogate the potential of teacher education programs to support their development in student teachers. We examine different models of teacher preparation to critically evaluate their ability to produce classroom-ready teachers in current contexts, including fiscal constraints, international mobility, competitive testing regimes and changing attitudes to and uses of emerging technologies. Recommendations for teacher education programs and for future research on this topic are provided.

**Introduction**

Teacher education has undergone numerous reviews in many countries in recent decades. These reviews have suggested changes to the structure, content and approaches in teacher education. However, little change seems to occur as a result of these reviews. In our discussion below, we will examine why it is that these reviews have not met with success, and, focusing in particular on the most recent teacher education review in Australia, investigate whether its call for change is feasible or whether it will suffer the same fate as earlier reviews.

The starting point for our discussion, therefore, is a recently published Australian initiative to improve the quality of teachers and teaching, the *Action Now: Classroom Ready Teachers* Report (Teacher Education Ministerial Advisory Group (TEMAG) 2015). We compare this with a selection of other current and recent initiatives, focusing on the Australian context as an illustrative example. We investigate what the “classroom ready teachers” of the report’s title may look like and consider what attributes, skills and knowledge such teachers need and how teacher education programs may support the development of these constructs. As becomes clear, teaching is profoundly complex work, at odds with corresponding popular and romantic conceptions, and with compelling yet insubstantial political slogans, such as “No Child Left Behind” (US Public Law 2002). The TEMAG Report defers to the Australian Institute for Teaching and School Leadership (2014) standards for graduate teachers (discussed further below), and is otherwise sparse on details as to what attributes a classroom ready teacher might possess, but it does suggest that it is the task of initial teacher education providers to prepare student teachers to be such teachers, claiming that beginning teachers typically “felt underprepared in knowing how to teach and assess students” (p. 35).

**Reviews of teacher education**

Teacher education has in recent times become the (possibly unwelcome) object of scrutiny by policy makers. It currently is facing existential challenges that are unprecedented internationally. These challenges arise from external pressures on autonomy, concerns about quality, and the increased importance of market forces (Bullough 2014; Darling-Hammond 2010a; Grossman and McDonald 2008). There have been numerous reviews of teacher education over the past several decades. However, the impact of these reviews has been slight (Smith 2000). In Australia, the government has recently issued a discussion paper on teacher education, and made a number of recommendations for teacher education (TEMAG 2015). The recommendations regarding the structure and nature of teacher education are not proposing radical change, either in this report, or in the many other reviews that have preceded it over the years. The paucity of change in teacher education structures is surprising given the increased requirements for teacher education to respond to social, political and international pressures. It appears that changed techno-social and political contexts have had minimal impact on design of teacher education programs. One argument for this lack of impact is the compartmentalisation of educational research on teaching, on teacher education and on policy implementation (Grossman and McDonald 2008). These authors further suggest that it is important to understand how changes to higher education might impact the subset of higher education that is teacher education, and how variations in the pathways for teacher education can help identify the most powerful features of teacher education. Grossman and McDonald argue that it is pointless to set up a dichotomy between traditional and alternative structures for teacher education, as the difference between these structures becomes blurred in current views of teacher education.

Some critics of teacher education programs indicate that the system is becoming irrelevant and unable to produce teachers of quality (Royle, Stager, and Traxler 2014). Such criticisms are contentious, particularly when they arise as a result of competing agenda that emphasise market forces at the cost of teacher educator autonomy and educational coursework (Darling-Hammond 2010a). However, in a context of cost-cutting in education, debates about the need for specialised content knowledge and lack of recognition of the importance of teacher education for preparing teachers of quality, teacher education programs do need to reassess their structures and designs to ensure they remain relevant and support quality teaching, and that they are able to provide counter-examples and counter-narratives to their critics (Bullough 2014). There is a need for teacher educators to engage in conversation with external policy makers and to debate the consequences of the suggested agenda (Pérez 2008). In addition, teacher educators need to be aware of the aspects of education that matter to teachers and consider the relational aspects of teaching (Grossman and McDonald 2008).

It is essential to recognise the policy context, the social environment and the cost of teacher education programs so that programs stay in tune with the ways that student teachers experience the world, and are relevant, sustainable and able to support the development of quality teachers. Darling-Hammond (2010a) indicates that attrition rates for teachers who have been provided with substantial initial preparation are much lower than for those who have experienced short courses. Consequently, we contend that teacher education programs have a vital role to play in supporting new teachers’ preparedness, effectiveness and retention (Bullough 2014; Darling-Hammond 2010a).

Student learning outcomes are, naturally enough, regularly used as a proxy for teacher effectiveness. In turn, teacher effectiveness is used as a proxy for teacher education effectiveness, with the underlying assumption that pre-service teacher education makes a difference to teaching quality. Darling-Hammond, Holtzman, Gatlin, and Heilig (2005) provide evidence for this assumption in a study comparing teachers who had entered the profession with extensive, as opposed to little or no pre-service preparation. That such a comparison is necessary at all, is potentially startling to those in jurisdictions where pre-service preparation and relevant qualifications are the *sine qua non* of teaching. Yet the literature is not completely clear on the value of teacher education in preparing quality teachers. Darling-Hammond et al. (2005) found that by the end of three years’ service, the gap had virtually disappeared, with certified and non-certified teachers effecting similar student outcomes. By this time, however, most non-certified teachers had left the profession. One is left to wonder at the fate of the students of non-certified teachers during the early part of that three-year period. Moreover, the small size of this remaining non-certified cohort raises questions over the reliability of related figures, and the randomness of the sample, as opposed to the results derived from the larger cohort on entry.

Hill, Blazar, and Lynch (forthcoming) could attribute little difference in teacher effectiveness to teacher preparation and experience, while Ingersoll (2007) drew tentative yet positive conclusions about the effects of pre-service teacher education. He conceded (p. 3) that, “accurately isolating and capturing the effects of a teacher’s qualifications on their students’ achievement is difficult, and, not surprisingly, the results of such research are, at times, mixed and contradictory”. Mincu (2013, 9) observes the multifaceted nature of learning outcomes, asserting that, “teachers’ gains are cognitive, attitudinal, self-conceptual and interpersonal in their relationships with their students”. We accept, therefore, that ascertaining quality teacher attributes, and the contributions of pre-service education to them, is not a straightforward matter. Naturally, pre-service preparation is part of a broader scheme of teacher professional support and development. Mincu (2013, 5) notes that, “the highest-achieving countries across the world … prepare their teachers extensively, pay them well in relation to competing occupations and provide them with lots of time for professional learning”. He underlines the point that teacher education is just one component of the suite of conditions that lead to quality teachers.

The above discussion suggests that the development of classroom ready teachers occurs as a result of a variety of factors, including effective teacher education programs, supportive school environments, and sympathetic policies regarding teaching. To consider what might be the contributions of teacher education programs to this development, it is necessary to ascertain what characteristics are deemed important for classroom ready teachers. We now turn our attention to the identification of such characteristics.

**What are the characteristics of classroom ready teachers?**

Australia’s TEMAG Report (2015) on classroom-ready teachers, which provided the impetus for this chapter, provokes the following questions: What might a classroom-ready teacher look like, and is such an entity possible?

Various jurisdictions have grappled with the issue of classroom readiness. When making international comparisons of teachers and their readiness to teach, it may be fruitful to ask if the ‘competitors’ have an equal starting point. The esteem in which teachers are held appears to correlate to teacher morale and efficacy. Cause and effect is more difficult to determine, but in places where teachers appear to be held in high esteem, such as Finland, and some Asian countries, teacher efficacy and morale appear to be higher than in places such as the United States, where teacher esteem is lower. Returning to the question of the starting point, it may be useful to ask about the origins of high teacher esteem, and the extent to which, and ways in which, if at all, this can be generated, and whether this factor contributes to or helps pave the way for classroom readiness.

While esteem may be an important contributing factor in deriving the best from teachers, conversely it is also usually a result of an impressively qualified and expert teaching force. However, esteem for expert teachers seems more elusive within the school culture than in other professions. Wilkins and Comber (2015) examined the responses of elite second-career teachers, and found that while they generally demonstrated high levels of resilience in teaching, they also reported frustrations in terms of the levels of acknowledgment and esteem they received from their colleagues and supervisors. This suggests that the teaching profession has less capacity and/or will to affirm its own, or particularly its newcomers, than do other professions, which seems ironic, given the efforts many teachers devote to encouraging their students to strive. It is also plausible, though, that teachers have little encouragement left in reserve for their peers, having spent a day prodding their students to achieve higher things. Or this may be a symptom of a profession characterized by competition and professional jealousy rather than collaboration. Potentially, the second-career teachers in Wilkins and Comber’s (2015) study entered teaching with unrealistically high expectations of peer esteem, having been at the top of their previous fields. It would seem that failure to capitalize on the skills, abilities and experiences of elite entrants to the teaching force compromises the benefits that such teachers can bring to the force. It may be, though, that skills developed elsewhere do not translate readily to teaching. Darling-Hammond et al. (2005) found evidence that pedagogical knowledge precedes content knowledge in terms of teacher effectiveness, which may put in doubt programs attracting elite second-career teacher entrants, and providing them with minimal pedagogical preparation. Such programs have typically been adopted as cost-saving measures, and as emergency responses to teacher shortages. It may be, then, that asking such teachers to ‘fix the profession’ as well as serving as placeholders, is placing an unrealistic burden on this sub-cohort.

The above discussion highlights the importance of professional esteem for teachers. If esteem is linked to morale, then it would seem sensible to consider issues of esteem, both within and outside the profession. However, it is not clear how teacher education programs can improve the esteem with which teachers are viewed, by the public and by teacher colleagues. The report on classroom readiness (TEMAG 2015), which was the stimulus for this chapter, addresses this through a number of recommendations.

The Australian report (2015) provides 38 recommendations, which correspond to five themes: stronger quality assurance of teacher education courses; rigorous entry selection to teacher education courses; improved, structured practical experience for teacher education students; robust assessment of graduates to ensure classroom readiness; and national research and workforce planning capabilities. We use this as a starting point to discuss the contributions of teacher education programs to the suite of teacher attributes deemed essential to make a teacher classroom-ready. As its title suggests, the Report discusses readying or preparing teachers for the classroom. It appears to speak more of a process than of a product, which might be seen as being at odds with much educational assessment, which focuses on end-products, in the form of demonstrable learning outcomes. The report’s recommendations include tightening standards as well as the establishment of more rigorous accreditation processes for initial teacher education, including the establishment of a national initial teacher regulator, and according more authority to existing regulatory bodies.

While some of the recommendations can be seen as supportive of the pre-service teacher, such as collaboration between schools and universities to “assist pre-service teachers to develop and collect sophisticated evidence of their teaching ability” (Recommendation 28), many appear remedial in their intent. Other recommendations might be seen as commonsense in nature, such as provision of a thorough understanding of literacy and numeracy pedagogies. These recommendations set out a clear indication of required directions for teacher education programs. However, it is far from certain that implementing all these recommendations will indeed produce a classroom-ready teacher. Below, we discuss some of the attributes that are commensurate with this status, but we also critique the notion of a classroom-ready teacher arising as a product of a teacher education program. Teaching is a multifaceted enterprise, encompassing, among others: working with colleagues, parents and the community, as well as with students; sound pedagogical and content knowledges; high interpersonal and communication skills; and deep reserves of personal and professional resilience (Aubusson and Schuck 2006; Schuck, Aubusson, Buchanan, and Russell 2012). We concede that despite our best efforts, or because of our attempts to portray teaching positively, teacher graduates appear to enter the classroom nursing romantic and arguably naïve visions of their work (Buchanan 2015).

International comparisons of teacher preparation programs and graduate expectations can be instructive. Ingersoll (2007) compared seven educational jurisdictions (China, Hong Kong, Japan, Singapore, South Korea, Thailand and the USA), and found that all seven required both content and pedagogical knowledge for entry into the profession, as well as supervised practice. Four of the six jurisdictions imposed an examination for teachers either during pre-service education or as a requisite for entry into service. The public status of teachers tends to rise commensurately with the age of the students they teach, according to Ingersoll, who also found that professional entry requirements tended to be higher for secondary than primary school teachers. Whether there is an associative or causal link between entry requirements and esteem, and if the latter, where the cause might originate, can only be speculated upon. Ingersoll noted that in many Asian countries, respect for teachers is high. All six jurisdictions against which Ingersoll compared the USA system are in Asia. Nevertheless, he noted that the esteem accruing to teaching and teachers, from within and beyond the profession, is not consistent across the Asian jurisdictions he studied. Variables included salary rates. Salary is an alternative to, or perhaps a proxy for, academic standards in terms of increasing the competitiveness and exclusivity of teaching, and, arguably, raising the quality of the cohort entering teacher preparation. Perhaps ironically, a more educated public is more likely to be sceptical and cynical with regard to teachers, their work and their profession, and are more likely to challenge or disregard teachers’ authority and esteem, and to blame teachers for society’s ills. In the United Kingdom, two programs, School Direct (UK Government 2015) and Teach First (2015), locate much pre-service education within schools, on an implicit assumption that this will make them more classroom ready.

Frameworks and statements of attainment are one means to capture classroom-ready teacher attributes. Loeb, Miller, and Wyckoff (2014, 3) cite the New York City teacher tenure criterion of: “significant professional skill and a meaningful, positive impact on student learning”. As asserted above, in the context of the many variables that contribute to student learning, ‘meaningful impact’ from teachers may prove difficult to isolate and use as a basis on which to assess and compare teachers. Even ‘teacher skill’ may prove difficult to evaluate, other than by means of perceived impact on students. The Danielson Framework (The Danielson Group 2013) is a commercially produced rubric for assessing teacher effectiveness according to a number of attributes. It lists attributes in four domains, encompassing a total of 22 subsets: planning and preparation; classroom environment; instruction; and professional responsibilities.

One attribute that we believe is essential for the classroom-ready teacher is a capacity for ongoing learning. This view is supported by many, and it is often couched in various terms, such as capacity to research, including undertaking action research of one’s own and/or of others’ teaching (OECD 2012), or reflective practice (Schön 1983; Zeichner and Liston 2014). Mincu (2013, 9) asserts the importance of “forms of social capital – such as collaboration, networking and knowledge sharing” as elements of both teacher and school improvement, and of “engaging as (and with) leaders and researchers” in that regard. If Hattie’s (2012, 22) argument holds true that “the biggest effects on student learning occur when … students become their own teachers”, then surely this applies to teachers-as-learner/researchers as well.

**Classroom ready for which classroom?**

The TEMAG Report acknowledges the importance of support, mentoring and induction in the early years of in-service. This indicates an understanding that classroom readiness is not necessarily fully accomplished by the end of the teacher education program. It also appears likely that different classrooms will need different levels of readiness. Therefore, we now raise the question as to the kinds of classrooms for which beginning teachers might be expected to be ready. We now examine this from two aspects: teaching in educationally disadvantaged contexts, and out-of-field teaching, that is, teaching outside the discipline area in which the teacher is qualified or professionally prepared.

While definitions of classroom-ready teachers and their attributes manifest some differences, one outcome commonly attributed to effective teachers is their ability to diminish the gap between high-achieving students and those deemed at risk (Darling-Hammond et al. 2005; Ingersoll 2007; Goldhaber, Lavery, and Theobold 2015; Marshall, 2013). In a study of New York teachers, Loeb, Miller, and Wyckoff (2014) found that teachers in schools with relatively higher proportions of black students were less likely to meet the requirements for tenure. This raises questions as to whether such teachers might be more effective in different circumstances. It also raises the question of whether less effective teachers are more likely to be employed in ‘difficult-to-staff’ schools, on the plausible assumption that less enabled schools might be less competitive in attracting new teachers. The situation potentially removes from the profession early career teachers who might be more effective in different circumstances and serves to maintain the disadvantages experienced by the students in these schools. The question then becomes classroom-ready for which classroom? We recommend against the unfortunate practice of assigning the most difficult classes, in the most difficult schools, to inexperienced teachers (Buchanan Prescott, Schuck, Aubusson, Burke, & Louviere 2013). It stands to reason that the majority of beginning teachers may be unready for classrooms such as these.

Similarly, Darling-Hammond (2010b) and others (for example, Goldhaber, Lavery, and Theobold 2015; Ingersoll 2007) observed internationally a preponderance of less qualified teachers in rural and poor urban areas. This process may serve as a rather brutal, Darwinian rejection of those teachers least fit for the job, in that they may be most likely to resign from the service through frustration, disillusionment, or perceived or real inability to make a difference, potentially saving the indignity and unpleasantness of their being dismissed from teaching. It may be, though, that at least some of these teachers are not as ineffective as their circumstances might suggest to them and others, and that some effective and inspiring teachers are thus lost to the profession. As intimated above, it seems unhealthy for the profession to deploy its ‘young’ and its most inexperienced, to the most difficult, high-needs, challenging and, possibly, resistant contexts. As observed above, such a system appears to work effectively at maintaining the high/low socioeconomic gap in terms of learner outcomes, and at frustrating the attempts of the teaching force corporately to surmount this, ultimately for the benefit of those students who need it most. At classroom level, differentiating the curriculum to cater for each student is a key means of improving learning outcomes (Mincu 2013) and minimizing the achievement gap. Class sizes, as well the complexity and diversity of students’ learning and other needs are surely among the factors that mediate a teacher’s capacity, particularly that of a beginning teacher, to achieve this.

In an Australian context, the achievement gap is characterized by multiculturalism, a multiplicity of language backgrounds, and an Indigenous population that is often viewed as marginalised and alienated from education, and with a worldview vastly different from the now dominant European one. This offers particular challenges in terms of narrowing the achievement outcome gap in Australia. Lewthwaite et al. (2015) argue that few of the proposals to address the gap take account of the diversity of learners’ cultural backgrounds. They are somewhat critical of John Hattie’s approaches to educational achievement, which they see as being “applied in isolation from the cultural and social context” (p. 133), or perhaps, we add, in the context of particular socio-cultural assumptions that drive pedagogy and differentially ascribe worth to various starting points, approaches and outcomes. If the main measure of educational outcomes remains basic skills testing, this may tend to ‘whitewash’ cultural difference. Lewthwaite et al.’s (2015) recommendations for effective education in Indigenous contexts do not strike us as diverging from much ‘commonsense’ pedagogy more broadly. They advocate: student support in navigating school literacy and numeracy; less teacher talk, but acknowledgment of learner contributions; caring, high expectations and challenge; attention to individual students; and learning relevant to students’ lives (p. 135). These align well with the attributes that a classroom-ready teacher might display.

Lewthwaite et al. (2015) refer to “a growing ‘consciousness’ of one’s condition amongst individuals” (p. 136). Five themes emerged from their cross-cultural study: understanding the learner’s background and starting point for learning; helping learners to code-switch between cultures and contexts; listening to and taking into account local communities’ considerations in terms of what might be most effective for their children’s education; a holistic approach that recognizes more than academic achievement alone; and acknowledging the knowledge and experience that the learner brings to the classroom (One of Lewthwaite et al.’s Aboriginal parent respondents spoke of “the basic skills of making someone feel ‘welcome’” at school (p. 141)). Lewthwaite et al. devised seven recommendations for teacher and institution responses to these issues. These include working to develop positive relationships; listening to student voices; clear and negotiated learning outcomes; accommodation of student diversity; a variety of teaching and learning approaches; and supporting and monitoring student behavior.

A second aspect of the discussion regarding the type of classroom teacher education needs to prepare graduates for, is the discussion surrounding teachers teaching outside their field of expertise and pre-service education. One impediment to, and potential ‘masking agent’ of teacher quality and efficacy, is teachers’ deployment outside their field of subject area expertise. Ingersoll (2007) noted that an otherwise qualified teacher becomes highly unqualified when teaching out-of-field, and observed the prevalence of such teaching in the USA, particularly in English and mathematics, the two fields most often subjected to testing, and, thereby, to international comparisons of teacher effectiveness and quality. Moreover, out-of-field teaching appeared to predominate in less wealthy schools, potentially further prising open the student achievement gap. While it is difficult to determine if it is the new, inexperienced teachers who are most likely to find themselves in such a situation, this may well be the case. Ingersoll also notes that the definition of ‘out-of-field’ teaching differs among jurisdictions. Teaching branches of science that do not correspond to a teacher’s major, may count as out-of-field teaching in some jurisdictions, but not in others. Ingersoll empathises with school administrators facing with difficult fiscal and operational trade-offs in terms of deploying their staff. He adds, though, that such choices are not educationally cost-free. We add in passing that these dynamics are corrosive to beginning teacher morale, and detrimental to learners, particularly those who face, or resist facing, the greatest challenges in learning.

While teacher education exercises little, if any, control over the classrooms in which graduates might find themselves, there are characteristics of classroom ready teachers which are regarded as being the responsibilities of teacher education programs. We now discuss the expectations of teacher education as indicated in the TEMAG report and other policy documents.

**The role of teacher education in preparing classroom ready teachers.**

The TEMAG Report (2015) observes that, “the expertise and experience of those delivering initial teacher education will be necessary to maximise the impact of the proposed reforms on student learning” (p. 55). The report also appears to lay much of the responsibility for classroom-unready teachers at the feet of initial teacher education providers. The report expresses concern that some supervising teachers tend to pass inadequate student teachers during professional experience. It also comments that teachers are generally unready for contemporary classrooms, suggesting that pre-service teacher education programs need to offer their students support in using emerging educational technologies appropriately and effectively in their teaching.

One problem the TEMAG Report identifies with the current system is the completion of an approved teacher education course being accepted as a proxy for classroom readiness. According to the report, such an approach “can prioritise on-campus learning over in-school assessment” (p. 34). While it is true that teacher education providers have limited scope to mimic the conditions of school, it is curious that graduating teachers report a lack of confidence in assessing students. A related implication is the inclusion of more professional experience time. And yet, it may be that a more judicious use of existing professional experience is needed. The best if not only opportunity for assessing student work in context is during professional experience. It is left to conjecture as to how regularly and rigorously this is currently being done while pre-service teachers are in schools, and what supervising teacher input the process of student assessment enjoys.

The recommendations and descriptions of desirable teaching attributes and actions discussed by Lewthwaite and others would appear to be highly desirable for our classroom-ready teachers, no matter what classroom they eventually teach in. However, what is not clear is how attainable these attributes are for early career teachers recently graduated from teacher education programs, nor what role teacher education programs are expected to play in the development of these attributes. Further, we cannot expect the development of such attributes and actions to arise merely from students’ teacher education programs; as in any educational situation, there are other factors at play.

One such factor might be entry-level qualifications. Ingersoll (2007) notes that it is difficult to compare the quality or fitness for purpose of nominally equivalent qualifications, such as bachelor’s degrees, across nations. Nevertheless, jurisdictions such as Finland (Finnish National Board of Education n.d.b), attribute part of their success to the attainment of a master’s level qualification prior to entry into service.

Another factor influencing the production of classroom ready teachers is the curriculum teachers are required to implement. Again, we use an Australian example here. Under the recently produced Australian Curriculum, primary school teachers (Years K–6) are expected to teach (if they are working with older classes in the primary sector) the following 11 subject areas: Arts, English, Health and Physical Education; Civics and Citizenship; Economics and Business; History; Geography; Languages; Mathematics; Science; and Technologies. A twelfth subject, Work Studies, commences in Year 9 (ACARA 2013a). Primary teachers are also expected to assist their students in developing the following seven curricular ‘general capabilities’: literacy, numeracy, information and communication technology capability, critical and creative thinking, personal and social capability, ethical understanding, and intercultural understanding (ACARA 2013b). In addition, their teaching needs to attend to the Curriculum’s three cross-curriculum priorities: Aboriginal and Torres Strait Island histories and cultures; Asia and Australia’s engagement with Asia; and sustainability (ACARA 2013c). While most would agree that this is a demanding set of requirements, it is only one small aspect of the full range of teacher responsibilities and skills, which include informal counseling, conflict resolution, behavior management, assessment and reporting, differentiating the curriculum, catering to special needs, and teaching English as a second language, to name just some. These examples illustrate the vast complexity of teaching, particularly with those students whose needs are greatest. Evaluating teacher effectiveness or classroom readiness is commensurately complex (Berk 2005).

The Australian Institute for Teaching and School Leadership’s (AITSL 2014) report sets out a total of 37 professional standards for teachers, in categories such as knowing students and how they learn, knowing content, planning, assessing and reporting. Each of these operates at four levels: graduate, proficient, highly accomplished and lead. The AITSL report asserts that classroom readiness needs to be evident at the graduate level and to develop further from there. Teacher education programs bear responsibility for ensuring that early career teachers meet these standards at graduate level.

Given this complexity, Tatto (2015) suggests that it is a diverse suite of teacher education approaches, or features thereof, that may contribute most effectively to improving teacher quality. This is not at all inconsistent with what is known about good school pedagogy. Some of these broad position statement requirements are outlined in documents such as the NSW Government’s (2013) *Great Teaching Inspired Learning* document, which includes teachers’ capacity for building students’ confidence in learning, analytical and problem-solving abilities, interpersonal and communicative skills, technical knowhow, creativity, critical literacy and sense of ethics. The NSW Department of Education and Communities’ (2006) *Quality Teaching Program* focuses on teaching imbued with significance and intellectual quality, in a quality learning environment. However, production of such lists or statements of teacher qualities that describe classroom readiness may have limited value, other than helping aspiring and beginning teachers to develop a more sophisticated, complete, and arguably intimidating image of what a good teacher looks like and does.

Teacher preparation programs need to take account of their circumstances. Malik and Behlol (2014) found that preparation programs devised in developed nations do not necessarily translate to developing nation contexts. Moreover, such ‘developed’ programs regularly attract criticism in their own contexts. In their survey of 480 Pakistani teacher educators, they found that ‘admission requirements’ were the most important factor, confirming the assertion that pre-service education makes a difference, followed by skills in literacy and mathematics, followed by knowledge of student variability and exceptionality.

We now move to another key element of teacher development: the notion of the teacher-ready school. School and system attributes are also important components in determining the readiness of a new teacher. Moving into a school that does not support its newcomers may leave them feeling unprepared and unable to manage their new careers, and needing to ‘fight for their readiness’ on new and unanticipated fronts. By contrast, schools which mentor and welcome their newcomers add to the new teachers’ feelings of readiness. Mincu (2013, 2) speaks of “the determination of senior and middle leaders to create and sustain an organisational climate in which a culture of reflection, self-evaluation and professional development thrives”. This strikes us as being consistent with quality teaching.

Mincu (2013) identifies three major components of improved teacher quality: the quality of teacher education; a school environment conducive to high teacher and learner morale; and the need for all school improvement initiatives to be evidence- and research-based. Mincu concedes that terms such as ‘quality’ are slippery in nature. Similarly, Ingersoll (2007) declined to delineate what constitutes a qualified teacher, and, thereby, a quality preparation program. It seems, therefore, that the preparation of a classroom-ready teacher, that is, a teacher who is able to work in effective ways with students, colleagues and parents, is not up to teacher education programs alone. Teacher education must partner with schools, and together these stakeholders should support new teachers in research-based ways towards and into the workplace.

**Conclusions and recommendations**

It is necessary to add some cautionary words to this discussion. We have shown that no matter what occurs in a teacher education program, there are a number of other factors that play an important part in teacher development. These factors include what student teachers bring into the program, the ways that society and, indeed, teachers’ own colleagues, view new teachers, and the diversity of school, classroom and student environments. These factors are likely to influence the new teacher’s readiness as much as their teacher education program. The phenomenon of “praxis shock” (Kelchtermans and Ballet 2002, 105) is a barrier to teachers’ readiness and suggests that teacher education programs should consider ways of supporting the building of resilience and of foregrounding and making better use of in-school components of their courses; systems should ensure teachers are teaching in their areas of expertise; and schools should consider how to promote environments that are supportive, welcoming and encouraging.

We finish by outlining some of the factors that need consideration in the quest for classroom readiness.

Control versus influence

A feature of the TEMAG list cited above is increased control. By contrast, the Finnish system (Finnish National Board of Education, n.d.a), which is so successful in international testing performances, appears to exercise less control. It speaks of “learning rather than testing”, of devolution of authority, decentralization, and autonomy for schools and universities. Fullan (2007) argues that capacity-building is more productive and effective than tightening control in terms of improving teacher effectiveness and learning outcomes. If learner motivation is beneficial and productive, then it stands to reason that teacher-as-learner motivation is equally beneficial. It may be wise, as Senese (2004, 47) suggests, “to relinquish control to gain influence”, and to adopt a more learner-centred approach to teacher (-as-learner) professional learning. If we want teachers to foster meta-cognition, to help students monitor their own learning, and have command of a wide range of teaching strategies (Mincu, 2013) then presumably we want teachers’ own professional learning to be embedded similarly. Indeed, Mincu advocates increased confidence, a stronger self-efficacy, and a commitment to innovation and experimentation among teachers. Goldhaber (2015) argues that the effects of high-stakes testing on teacher value-adding might result in unintended consequences with regard to improving teacher quality. It is worth considering whether such approaches are, or are seen to be, punitive, remedial or supportive. Returning to Lewthwaite et al.’s (2015) Indigenous parent’s comment cited above, what might the basic skills of making a newcomer feel welcome in the teaching force look like?

Entry requirements

There is one notable exception to Finland’s relatively low application of control, and that is its entry requirements for teacher education. In Finland, entry scores into teacher education programs, teacher qualifications, and teacher salaries are all high. According to the Finnish National Board of Education (n.d.b) high entry requirements are a prerequisite for according teachers such professional autonomy. By contrast, the relatively easy and open pathways into teaching in the USA led Ingersoll (2007) to describe teaching as a vocation in which “individuals choose the profession, not vice versa” (p. 3). It is difficult to determine cause and effect here. One result, though, is that teaching is a highly sought-after and esteemed profession in places such as Finland. This is likely to affect the culture of schools, including the respect students might have for their teachers, and for learning, which, in turn, is likely to have a further positive educational impact.

Means and ends

The TEMAG Report focuses on the process of preparing teachers. Crucial though this is, the report does seem to be sparse in terms of a process for achieving this. As in much good teaching, a process of backward mapping (Elmore, 1980) would seem appropriate. This might require a closer examination of what a beginning teacher looks like and does, followed by a determination of the best teacher education entry requirements and attributes, and from there, the best pathways to refine and value-add to these. If slogans such as ‘no child left behind’ and ‘great teaching inspired learning’ and even the report’s ‘action now’ are to be anything more than vacuous, teachers need to be chosen from among the best and helped along the way to be their best, in optimal circumstances. We concede that all of these ‘best’ terms resist definition. Clearly, though, some features of some systems appear to be doing this better, and in more ‘learning-healthy’ and ‘people-healthy’ ways.

While we have argued that teacher education cannot create classroom ready teachers in isolation, we recognise that there is a critical challenge for teacher education programs to address in this area. Teacher education needs to work with student teachers in developing classroom ready attributes such as discipline and pedagogical knowledge, and resilience. In partnership with schools and educational systems, teacher education can work productively to ensure their graduates are in a good place to embark on their teaching journeys and undertake the next series of challenges in their professional learning.

References

ACARA. 2013a. *Learning Areas/Subjects*. http://www.acara.edu.au/curriculum/cross\_curriculum\_priorities.html

ACARA. 2013b. *General Capabilities*. http://www.acara.edu.au/curriculum/general\_capabilities.html

ACARA. 2013c. *Cross-curriculum Priorities*. http://www.acara.edu.au/curriculum/cross\_curriculum\_priorities.html

Aubusson, P., and S. Schuck, eds. 2006. *Teacher Learning and Development: The Mirror Maze*. Amsterdam: Kluwer/Springer.

Australian Institute for Teaching and School Leadership. 2014. *Australian Professional Standards for Teachers*.

http://www.aitsl.edu.au/australian-professional-standards-for-teachers/standards/list

Berk, R. 2005. “Survey of 12 strategies to measure teaching effectiveness.” *International Journal of Teaching and Learning in Higher Education* 17(1):48-62.

Buchanan, J. 2015. “Metaphors as Two-way Mirrors: Illuminating Pre-service to In-service Teacher Identity Development.” *Australian Journal of Teacher Education* 40(10): 33–50.

Buchanan, J. Prescott, A., Schuck, S., Aubusson, P., Burke, P., & Louviere, J. (2013). Teachers and attrition: Views of early career teachers. *Australian Journal of Teacher Education, 38(*3), article 8. <http://ro.ecu.edu.au/ajte/vol38/iss3/8/>

Bullough, R. 2014. “Toward Reconstructing the Narrative of Teacher Education: A Rhetorical Analysis of *Preparing Teachers.*” *Journal of Teacher Education* 65(3): 185–194.

The Danielson Group 2013. *The Framework*. https://danielsongroup.org/framework/

Darling-Hammond, L. 2010a. “Teacher Education and the American Future.” *Journal of Teacher Education* 61(1–2): 35–47.

Darling-Hammond, L. 2010b. “Teaching and Educational Transformation.” In *Second International Handbook of Educational Change,* edited by A. Hargreaves, A. Lieberman, M. Fullan, and D. Hopkins, 505–520. Dordrecht: Springer.

Darling-Hammond, L., D. Holtzman, S. Gatlin, and J. Heilig. 2005. *Does Teacher Preparation Matter? Evidence about Teacher Certification, Teach for America, and Teacher Effectiveness.* doi: http://dx.doi.org/10.14507/epaa.v13n42.2005

Elmore, R. 1980. “Backward Mapping: Implementation and Policy Decisions.” *Political Science Quarterly* 94(4): 601–616.

Finnish National Board of Education. n.d.a. *Education System*. http://www.oph.fi/english/education\_system

Finnish National Board of Education. n.d.b. *Teacher Education*. http://www.oph.fi/english/education\_system/teacher\_education

Fullan, M. 2007. *The New Meaning of Educational Change.* 4th ed. New York: Routledge.

Goldhaber, D. 2015. “Exploring the Potential of Value-added Performance Measures to Affect the Quality of the Teacher Workforce.” *Educational Researcher* 44:138–141.

Goldhaber, D., L. Lavery, and R. Theobold. 2015. “Uneven Playing Field? Assessing the Teacher Quality Gap between Advantaged and Disadvantaged Students.” *Educational Researcher* 44(5): 293–307.

Grossman, P., and M. McDonald. 2008. “Back to the Future: Directions for Research in Teaching and Teacher Education.” *American Educational Research Journal* 45(1): 184–205.

Hattie, J. 2012. *Visible Learning for Teachers: Maximizing Impact on Learning*. Abingdon, UK: Routledge.

Hill, H., D. Blazar and K. Lynch. Forthcoming. “Resources for teaching: Examining personal and institutional predictors of high-quality instruction.” http://scholar.harvard.edu/files/david\_blazar/files/hill\_blazar\_and\_lynch\_resources\_for\_teaching\_working\_paper.pdf

Ingersoll, R. 2007. *A Comparative Study of Teacher Preparation and Qualifications in Six Nations.* University of Pennsylvania Scholarly Commons. http://repository.upenn.edu/cgi/viewcontent.cgi?article=1145&context=gse\_pubs

Kelchtermans, G., and K. Ballet. 2002. “The Micropolitics of Teacher Induction: A Narrative-biographical Study on Teacher Education.” *Teaching and Teacher Education* 18(1):105–120.

Lewthwaite, B., B. Osborne, N. Lloyd, L. Llewellyn, T. Webber, G. Laffin, M. Harrison, C. Day, C. Kemp, and J. Wills. 2015. “Seeking a Pedagogy of Difference: What Aboriginal Students and Their Parents in North Queensland Say about Teaching and Their Learning.” *Australian Journal of Teacher Education* 40(5): 132–159.

Loeb, S., L. Miller, and J. Wyckoff. 2014. *Performance Screens for School Improvement: The Case of Teacher Tenure Reform in New York City*. https://cepa.stanford.edu/sites/default/files/NYCTenure%20brief%20FINAL.pdf

Malik, A., and M. Behlol. 2014. “Identification of the Factors of Quality Teacher Training and Development of a Model Program in Pakistan.” *VFAST Transactions on Education and Social Sciences* 5(2):1–15.

Marshall, K. 2013. *Rethinking Teacher Supervision and Evaluation*. 2nd ed. San Francisco: Jossey-Bass.

Mincu, M. 2013. *Teacher Quality and School Improvement: What is the Role of Research?* Research and Teacher education: The BERA:RSA Inquiry.

http://bera-test.soapboxserver.co.uk/wp-content/uploads/2013/12/BERA-Paper-6-Teacher-Quality-and-School-Improvement.pdf

NSW Department of Education and Communities. 2006. *Quality Teaching Program* (2006). Sydney: NSW Department of Education and Communities. https://www.det.nsw.edu.au/proflearn/areas/qt/

NSW Government. 2013. *Great Teaching Inspired Learning.* Sydney: NSW Government. http://www.schools.nsw.edu.au/media/downloads/news/greatteaching/gtil\_blueprint.pdf

OECD. 2012. *Equity and Quality in Education. Supporting Disadvantaged Students and Schools*. Paris: OECD Publishing. http://dx.doi.org/10.1787/9789264130852-en

Pérez, D. 2008. “Teacher Education and Research: Imagining Teacher Education between Past and Future.” *American Educational History Journal* 35(1/2):19–40.

Royle, K., S. Stager, and J. Traxler. 2014. “Teacher Development with Mobiles: Comparative Critical Factors.” *Prospects* 44: 29–42. doi: 2010.1007/s11125-013-9292-8

Schön, D. 1983. *The Reflective Practitioner: How Professionals Think in Action*. New York: Basic Books.

Schuck, S., P. Aubusson, J. Buchanan, and T. Russell. 2012. *Becoming a Teacher: Stories from the Classroom*. Dordrecht: Springer.

Senese, J. 2004. “What I learned about being a classroom teacher by being a teacher educator.” In *Improving Teacher Education Practice through Self-study*, edited by J. Loughran and T. Russell, 43–55. London: RoutledgeFalmer.

Smith, R. 2000. “The Future of Teacher Education: Principles and Prospects.” *Asia-Pacific Journal of Teacher Education* 28(1):7–28.

Tatto, M. 2015. “The Role of Research in the Policy and Practice of Quality Teacher Education: An International Review.” *Oxford Review of Education* 41(2):171–201.

Teach First 2015. TeachFirst. Retrieved from http://www.teachfirst.org.uk/

Teacher Education Ministerial Advisory Group (TEMAG). 2015. *Action Now, Classroom Ready Teachers Report*. Australian Department of Education and Training.

http://www.studentsfirst.gov.au/teacher-education-ministerial-advisory-group

UK Government 2015. Policy paper: 2010 to 2015 Government policy: Teaching and school leadership. Retrieved from https://www.gov.uk/government/publications/2010-to-2015-government-policy-teaching-and-school-leadership/2010-to-2015-government-policy-teaching-and-school-leadership

US Public Law. 2002. *No Child Left Behind Act of 2001*. http://www2.ed.gov/policy/elsec/leg/esea02/107-110.pdf

Wilkins, C., and C. Comber. 2015. “‘Elite’ Career-Changers in the Teaching Profession: Impact and Challenges.” *British Education Research Journal* doi: 10.1002/berj.3183

Zeichner, K., and D. Liston. 2014. *Reflective Teaching: An Introduction*. 2nd ed. New York: Routledge.