MINISTRY OF EDUCATION
Te Tāhuhu o te Mātauranga

Initial Teacher Education Outcomes: standards for graduating teachers

A paper for discussion

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Standards for Graduating Teachers

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Contents

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Introduction

This paper and its companion, Learning to Practise (2013), are designed to inform policy and promote discussion on programme development for initial teacher education and the mentoring of beginning teachers. The papers are among a number of initiatives to improve the quality of teaching in ways that raise outcomes for learners, particularly those not deriving fair benefit from the current system.

This paper proposes expectations for teacher candidates at the point of graduation and entry into the profession: what they should be able to do, and the knowledge, competencies, dispositions, ethical principles, and commitment to social justice that they should possess. We refer to these expectations as 'standards' but we use the term synonymously with 'graduate profile', acknowledging that institutions, particularly universities, may describe profiles that encompass more general characteristics consistent with their obligations under the Education Act.

We begin by outlining the challenges involved in writing standards for initial teacher education. We then examine the current international and New Zealand contexts with the aim of understanding how best to design standards that will support quality teaching. This leads us to propose an inquiry-oriented model for graduate teaching – the Teaching for Better Learning model – together with related standards.

The standards we propose are structured around a series of inquiries designed to establish learning priorities and teaching strategies, examine the enactment of strategies and their impact, determine professional learning priorities, and critique the education system. In making these inquiries, teacher candidates draw on as resources education's body of knowledge, competencies, dispositions, ethical principles, and their own commitment to social justice. The standards emphasise the context-dependent nature of effective teaching and, therefore, adaptive expertise as the hallmark of a professional teacher. We conclude by raising some implications of inquiry-oriented standards for a graduate profile and teacher education curricula.

In its vision for the teaching profession, the Education Workforce Advisory Group Report outlines four key system characteristics. Our proposed standards most strongly connect with the first and third of these characteristics: "clear and high professional standards at entry and induction to the profession so that high quality, capable people enter the profession" and "[a system that has at its heart] ongoing professional learning and development" (New Zealand Government, 2010, p. 5).

The standards proposed in this paper are designed not only to define the qualities and capabilities of graduates entering the profession, but also the competencies required by teachers to continue learning, developing and improving the effectiveness of their teaching.

The companion paper identifies and discusses the kinds of teacher education experiences that will support teacher candidates to meet the proposed standards.

What this paper is and is not

This paper *is* a background paper designed to inform discussion and the formulation of policy. It:

- seeks to identify limitations in current approaches to graduating teacher standards

- proposes a model, Teaching for Better Learning, as a basis for standards that address those limitations

- proposes a set of standards from which a graduate profile can be developed.

It *is not* a policy paper; nor is it a literature review, though it is informed by the literature on standards, effective teaching, inquiry, and teacher education.

1. Graduating teacher standards: The context

For at least the last twenty years there has been an ongoing discourse around standards for teaching and teacher education. Calls for quality teachers, quality outcomes, and quality schools have become mantras for politicians, leading to numerous reports on teaching, teacher education, and the profession (Cumming & Jasman, 2003). Many of these take the view that standards are essential for the professionalisation of teaching, so standards have become a regular feature of the initial teacher education and teaching landscape.

But standards-based approaches to teacher education have also been widely criticised as fragmented, overly specific and prescriptive, and impeding teachers' practice. Opponents view them as yet another layer of state regulation that draws attention and resources away from actual teaching (for example, Yinger & Hendricks-Lee, 2000). Standards are also seen to promote reductionist teaching and to define teaching in such a way that it does not easily accommodate a diversity of philosophies and approaches (for example, Delandshere & Arens, 2001). Where standards are said to reflect research on teaching and learning, the claim is usually based on the flawed assumption that a particular teaching approach necessarily improves student learning and that teachers should therefore be held accountable for using it. A related concern is that enforcing prescribed standards impedes the ongoing transformation and improvement of practice by preventing consideration of alternative approaches. This, as Delandshere and Arens (2001) point out, is contrary to the notion of inquiry. Critics also identify an unnecessary and perilous separation of performance and formalised knowledge in many standards-based approaches and reject the notion that the one can be considered independently of the other.

In the New Zealand context, and for similar reasons, Thrupp (2006) argues against the introduction of specified (as distinct from generic) standards, saying that specified standards (i) control teachers by asserting the perspective of the standard setter over that of the practitioner, resulting in a loss of pedagogical autonomy by teachers, (ii) intensify teachers' workloads and push teachers towards impression management, (iii) do not reflect the complexities of teaching, and (iv) could assume unwarranted importance in New Zealand due to the distinctive nature of our education policy and practice. For these reasons, he contends that any standards should be framed more generally so as not to impede teachers' autonomy and the authenticity of teaching.

Advocates of standards say that, if well written, they have a lot to offer. Yinger & Hendricks-Lee (2000) argue that standards do not necessarily impede teachers' practice or stifle improvement, and that they can be a powerful tool for teaching, learning, and ongoing professional development. They suggest that, by naming and encouraging reflection on specific classroom interactions, standards establish a basis for professional discourse; also, standards can serve as a conceptual framework and a platform for debate and improvement:

> … standards function as parameters and guidelines for conducting professional work. They can define effective practice in terms of desired outcomes and in terms of preferred procedures and performance. Standards can prescribe the inquiry frameworks that are used for assessing and creating new knowledge and practice. Standards also can become the basis for establishing training and continuing education parameters. (Yinger & Hendricks-Lee, 2000, p. 97)

Several studies have demonstrated that standards can serve as a powerful tool for teacher learning (Ingvarson, 2002; Kleinhenz & Ingvarson, 2007). Darling-Hammond (2010, 2012) argues that, used formatively, standards-based teacher evaluation systems enhance professional learning because they enable teachers to engage actively in self-directed inquiry. Using the historic professionalisation of medicine as a comparison, she argues that teaching will not move forward as a profession until there is a common curriculum and clear

fundamentals about what teachers should have the opportunity to learn and how they should learn it. Case studies of effective teacher education programmes (e.g. Darling-Hammond, 2006; Zeichner, 1993) have found that they teach candidates to turn analysis into action, applying what they learn to curriculum plans, classroom teaching, and performance assessments organised around professional standards. Similarly, in a framework for thinking about teacher candidates' learning, Feiman-Nemser (2001, 2003) repeatedly emphasises the importance of professional standards.

In this paper we outline findings from an analysis of graduating teacher standards in Australia, the United Kingdom (UK), North America, and New Zealand. As we found some of the concerns voiced by critics to be justified by these frameworks, we then go on to propose a model that aims to address these concerns.

The international context

For the purpose of this paper, we reviewed and analysed standards documents from Australia (national, New South Wales, Queensland, Victoria and the Northern Territory), the UK (England, Scotland[1], Northern Ireland, and Wales), and North America (national US and the Canadian states Ontario and British Columbia). In some jurisdictions, standards for graduating teachers are derived from standards for experienced teachers, modified to reflect a reduced level of expectation. In other jurisdictions, documents locate graduating teachers at one end of a continuum, where different standards apply to teachers at different stages in their career. Our analysis is confined to documents that explicitly include or address graduating teacher standards, and to standards or descriptors that apply to graduating teachers.

Standards for different purposes

The driver for graduating teacher standards may be either a developmental, capacity-building vision for the profession or a desire for benchmarks against which to measure performance and approve registration.

The standards of Ontario and the US come with aspirational purpose statements:

> The Standards of Practice for the Teaching Profession provide a framework of principles that describes the knowledge, skills, and values inherent in Ontario's teaching profession. These standards articulate the goals and aspirations of the profession. (Ontario College of Teachers, 2010, p. 11)

> The purpose [of the standards] is to describe a new vision of teaching to which we aspire as we work to transform our education system to meet the needs of today's learners. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, p. 7)

By contrast, the standards documents of Scotland, Wales, and New South Wales make their accountability purpose clear:

> The Standard for Initial Teacher Education (SITE) specifies what is expected of a student teacher at the end of Initial Teacher Education, seeking provisional registration with the General Teaching Council for Scotland. (The General Teaching Council for Scotland, 2006, p. 1)

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1   Our analysis was based on the current standards document. Since then, a new draft set of standards has been released for consultation. See http://www.gtcs.org.uk/web/FILES/about-gtcs/standards-for-registration-draft-august-2012.pdf

The QTS [Qualified Teacher Status] Standards are outcome statements which set out what trainees must know, understand and be able to do at the end of an ITT course or employment based programme to gain QTS. (Welsh Government, 2009, p. 3)

The Framework of Professional Teaching Standards describe what teachers need to know, understand and be able to do […]. The Framework describes clear benchmarks for identifying and describing effective teaching. (New Institute of Teachers, 2005, p. 2)

Given the different purposes, standards can be worded in subtly different ways. Most are strongly prescriptive in tone but others are more tentative, implying room for discretion.

The strongest regulatory statements are found in the standards documents of Queensland, England, and Northern Ireland:

At a minimum graduates of approved preservice teacher education programmes will be able to: … (Queensland College of Teachers, 2009, introduction to the 'practice dimension' of each standard)

A teacher must: … (Department of Education, 2012, introductory stem for standards)

Teachers will have developed … (General Teaching Council for Northern Ireland, 2011, introductory stem for standards)

The standards of Ontario and the Northern Territory are framed in more discretionary terms:

Members strive to be current in their professional knowledge and recognize its relationship to practice. (Ontario College of Teachers, 2010, Standard: Professional Knowledge)

Graduate teachers begin to build … (Teacher Registration Board of the Northern Territory, 2006, introductory stem for several descriptors)

The language in which standards are expressed varies in specificity from general and abstract to highly specific and contextualised. A number of documents have generic statements that are then broken down into specific descriptors or sublevel standards. The scope and detail also varies greatly. At one end is Ontario with five standards, each accompanied by a short narrative descriptor, all contained within a compact document (Ontario College of Teachers, 2010). At the other is Northern Ireland with 27 professional competencies, each with up to six separate descriptors (General Teaching Council for Northern Ireland, 2011).

Standards that are generic in nature tend to reflect common principles and broad definitions of practice, while specific standards often prescribe particular teaching actions. Examples of generic standards include:

Educators have a broad knowledge base and understand the subject areas they teach. (Ministry of Education British Columbia, 2012, Standard 6)

Teachers know the content they teach. (Victorian Institute of Teaching, 2007, Standard 2)

Demonstrate knowledge of students' different approaches to learning. (New Institute of Teachers, 2005, Standard 2.1.3)

Use teaching strategies – Include a range of teaching strategies. (Australian Institute for Teaching and School Leadership, 2011, Standard 3.3)

Acquire a knowledge and understanding of the relevant area(s) of pre-school, primary or secondary school curriculum. (The General Teaching Council for Scotland, 2006, Standard 1.1.1)

These examples of more specific standards come from Queensland, Northern Ireland, and the US:

Design and implement learning experiences that develop language, literacy and numeracy. (Queensland College of Teachers, 2009, Standard 2)

Seek opportunities to assist with school visits and field work. (General Teaching Council for Northern Ireland, 2011 Professional Competence 17)

Application of Content – The teacher understands how to connect concepts and use differing perspectives to engage learners in critical thinking, creativity, and collaborative problem solving related to authentic local and global issues. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, Standard 5)

The shortcomings of standards

When analysing standards from the different jurisdictions, we identified six serious shortcomings: their non-active and non-applied nature; an emphasis on knowledge rather than practice; their separate treatment of professional practice, knowledge, and dispositions or values; their opaque, deficit, and non-responsive treatment of diversity and culture; their detached positioning of values and ethical considerations; and a career progression focus at the expense of expectations on graduating teachers.

Their non-active and non-applied nature

Standards are most often expressed in a passive, non-applied manner. This is particularly true of knowledge, which is usually treated as something graduating teachers need to acquire or demonstrate rather than something they need to integrate with practice. Some sets of standards emphasise conceptual knowledge of teaching strategies, content knowledge, or pedagogical content knowledge. For example:

Understand how students learn – Demonstrate knowledge and understanding of research into how students learn and the implications for teaching. (Australian Institute for Teaching and School Leadership, 2011, Standard 1.3)

Demonstrate good subject and curriculum knowledge – have a secure knowledge of the relevant subject(s) and curriculum areas, foster and maintain pupils' interest in the subject, and address misunderstandings. (Department of Education, 2012, Standard 3)

Know and understand the nature and purposes of education as examined by key figures in the Twentieth Century and some contemporary debates. (General Teaching Council for Northern Ireland, 2011 Professional Competence 2)

Other sets of standards emphasise procedural knowledge (knowledge about how to do something) without requiring graduating teachers to demonstrate its application in practice situations.

These examples are from Australia's Northern Territory and Scotland:

Graduate teachers know their students – Graduate teachers know how to assess the learning capabilities of their students and are aware of the factors that can influence their learning. (Teacher Registration Board of the Northern Territory, 2006, Standard 3.1)

Acquire an understanding of research and its contribution to education – Know how to access and apply relevant findings from educational research. Know how to engage appropriately in the

systematic investigation of practice. (The General Teaching Council for Scotland, 2006, Standard 1.3.2)

An emphasis on knowledge at the expense of practice

Even where standards do signal the importance of integrating knowledge and practice, almost always it is the knowledge aspect that is emphasised, not the practice. While this may seem a subtle distinction, the result is a deeply embedded message that knowledge (for example, its use in planning, assessing, or reflecting on practice) is more important than practice (for example, planning, assessing, or reflecting on practice using relevant knowledge). An emphasis on acquiring knowledge for subsequent application can be seen in these standards:

Educators understand and apply knowledge of student growth and development – Educators are knowledgeable about how children develop as learners and as social beings, and demonstrate an understanding of individual learning differences and special needs. This knowledge is used to assist educators in making decisions about curriculum, instruction, assessment and classroom management. (Ministry of Education British Columbia, 2012, Standard 3).

Acquire the knowledge and understanding to enable them to plan coherent and progressive teaching programmes, and justify what they teach. (The General Teaching Council for Scotland, 2006, Standard 1.1.3)

Where standards do integrate practice and knowledge, only occasionally do they foreground the practice aspect. For example:

Plan, structure and sequence learning programs – Plan lesson sequences using knowledge of student learning, content and effective teaching strategies. (Australian Institute for Teaching and School Leadership, 2011, Standard 3.2)

They set challenging teaching and learning objectives which are relevant to all learners in their classes. They base these on their knowledge of: (a) the learners; (b) evidence of their past and current achievement; (c) the expected standards for learners of the relevant age range; and (d) the range and content of work relevant to learners in that age range. (Welsh Government, 2009, Standard 3.1.1)

Their separate treatment of professional practice, knowledge, and dispositions or values

Most sets of standards are organised around the domains of professional knowledge, professional practice, and professional engagement or values (e.g. Australian Institute for Teaching and School Leadership, 2011; Department of Education, 2012; General Teaching Council for Northern Ireland, 2011; New Institute of Teachers, 2005; Teacher Registration Board of the Northern Territory, 2006; The General Teaching Council for Scotland, 2006; Welsh Government, 2009). Some documents group the descriptors under each standard in these domains (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011; Queensland College of Teachers, 2009). In most cases the documents treat the domains as separate dimensions, ignoring their interconnectedness in teaching practice.

Only a few standards documents attempt to highlight this interconnectedness and the integrative complexity of teaching practice. This is usually done in a high-level statement such as the following:

The Standards are interconnected, interdependent and overlapping. The Standards are grouped into three domains of teaching: Professional Knowledge, Professional Practice and Professional Engagement. In practice, teaching draws on aspects of all three domains. (Australian Institute for Teaching and School Leadership, 2011, p. 3 'Organisation of the Standards')

The reader of these standards should keep in mind that while each standard emphasizes a discrete aspect of teaching, teaching and learning are dynamic, integrated and reciprocal processes. Thus, of necessity, the standards overlap and must be taken as a whole in order to convey a complete picture of the acts of teaching and learning. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, p. 6 'about these standards')

Notwithstanding these important signals, design limitations inhibit the standards being viewed as 'interconnected' or 'taken as a whole'. Statements that highlight the interconnectedness of domains are typically situated well away from the elements that are supposed to be interconnected, and there are no visual cues to reinforce the linkage. For example, the reader may read on page 3 that knowledge, practice, and values cannot be separated; then, beginning on page 16, find they are – into separate sets of standards for knowledge, practice, and values. If (as we argue) these domains are to be understood as interconnected, design must convey this message to readers.

Their opaque, deficit, and non-responsive treatment of diversity and culture

Given the diversity of today's classrooms, there is urgent interest in educational practices that are responsive to the needs of heterogeneous learners. This is reflected internationally in standards documents for graduating teachers, but as a rule they treat diversity in the most general terms and expect little in the way of applied practice.

Most sets of standards contain only brief reference to diversity, or they mention diverse learners in some areas and overlook their needs in others. For example, the Northern Territory standards contain this lone reference to diversity:

Graduate teachers recognise and are responsive to the social, cultural, historical and religious backgrounds of the students they teach, and value their diversity. (Teacher Registration Board of the Northern Territory, 2006, Standard 3.2)

The document offers no unpacking of what inclusive teaching of students with diverse learning needs might entail.

Rather better, this statement from Scotland's standards expresses the clear expectation that graduating teachers will be responsive to the diverse backgrounds of their learners:

Employ a range of teaching strategies and justify their approach – Demonstrate the ability to respond appropriately to gender, social, cultural, religious and linguistic differences among pupils. (The General Teaching Council for Scotland, 2006, Standard 2.1.3)

Graduating teachers are however often only expected to demonstrate knowledge of responsive strategies with regard to limited aspects of student diversity. Most standards place little emphasis on responsive, active practice and signal low expectations of graduating teachers in terms of their capacity to work with diverse learners. The wording of standards often reflects a theory-to-practice gap, as is illustrated by these examples from Australia and Northern Ireland:

Demonstrate knowledge of teaching strategies that are responsive to the learning strengths and needs of students from diverse linguistic, cultural, religious and socioeconomic backgrounds. (Australian Institute for Teaching and School Leadership, 2011, Standard 1.3)

Know and understand the principles underpinning the teaching of children with special educational needs and the key aspects of, and teachers' responsibilities under, current legislation and guidance – Teach pupils with special educational needs under the guidance of the class teacher (General Teaching Council for Northern Ireland, 2011, Professional Competence 9).

Most sets of standards still use a categorical model of diversity in which different aspects of diversity are named and learners grouped according to those aspects. For example, the Australian Professional Standards for Teachers (Australian Institute for Teaching and School Leadership, 2011) differentiate between students with diverse linguistic, cultural, religious and socioeconomic backgrounds (standard 1.3), students from an indigenous background (standard 1.4), students with specific learning needs (standard 1.5) and students with disabilities (standard 1.6) (Australian Institute for Teaching and School Leadership, 2011). Other standards documents additionally include gifted students (Queensland College of Teachers, 2009), non-English speaking students, students who exhibit challenging behaviour (New Institute of Teachers, 2005), and students with diverse dialects (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011). While the naming-and-grouping approach draws attention to multiple aspects of diversity it is not inclusive because it inevitably excludes other aspects of diversity and fails to recognise the true heterogeneity of learners.

Especially when applied to special needs learners, the categorical model of diversity has been criticised on the grounds that it emphasises deficits and impairments. In contrast, contemporary perspectives emphasise inclusive educational practice, where the teacher is responsible for valuing, respecting and teaching *all* learners (European Agency for Development in Special Needs Education, 2010; Florian & Rouse, 2009; Manins & Hardie, 2009). In the documents we reviewed, we encountered this broader perspective only in the Scotland standards:

Set expectations and a pace of work which make appropriate demands on all pupils. (The General Teaching Council for Scotland, 2006, Standard 2.1.4)

While the term 'diversity' is often used with reference to student learners, it is equally applicable to teachers and how they see themselves. This can in turn influence how teachers view their learners. Yet only one standard – from the US – recognised this:

The teacher is committed to deepening understanding of his/her own frames of reference (e.g. culture, gender, language, abilities, ways of knowing), the potential biases in these frames, and their impact on expectations for and relationships with learners and their families. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, Standard 9m)

Their detached positioning of values and ethical considerations

Almost all graduating teacher standards acknowledge that teaching involves more than professional knowledge and skills, and they often highlight the importance of the values that underpin teachers' practice and/or of ethical conduct. But standards are usually framed as outcomes, and it is difficult to similarly frame these less tangible aspects. Most standards documents try to resolve the issue by drawing attention to values

and dispositions in a third domain, often called 'professional engagement'. There is however considerable variation in the role given them and the weight placed on them compared with teaching practice.

Exceptionally, the New South Wales standards document does not refer to professional values or ethical conduct either in the commentary or in the descriptors that unpack the standards (New Institute of Teachers, 2005).

Some documents note that teachers must to adhere to professional values, but refer the reader elsewhere for descriptions of those values. For example:

Meet professional ethics and responsibilities – Understand and apply the key principles described in codes of ethics and conduct for the teaching profession. (Australian Institute for Teaching and School Leadership, 2011, Standard 7.1)

Teachers should demonstrate that they understand and uphold the core values and commitments enshrined in the Council's Code of Values and Professional Practice. (General Teaching Council for Northern Ireland, 2011, Professional Competence 1)

Professional Learning and Ethical Practice […] The teacher understands the expectations of the profession including codes of ethics, professional standards of practice, and relevant law and policy. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, Standard 9)

Yet other standards documents include a separate section in which values and ethical conduct are described in broad terms or as 'standards' not expressed as outcomes. The England standards document includes a section with four short narrative paragraphs that "define the behaviour and attitudes which set the required standard for conduct" (Department of Education, 2012, p. 8). The Ontario document defines a set of ethical standards without expressing them as standards (Ontario College of Teachers, 2010). The Northern Territory document includes a statement that indicates "in broad terms the core values that underlie the professional standards" (Teacher Registration Board of the Northern Territory, 2006, p. 3).

Even though it is widely acknowledged that values underpin teaching practice, only the British Columbia, Scotland and Wales standards documents address the normative dimension of values within the standards themselves or highlight their embedded nature.

1. Educators value and care for all students and act in their best interests. 2. Educators are role models who act ethically and honestly. (Ministry of Education British Columbia, 2012, Standard 1 and Standard 2)

3. Professional Values and Personal Commitment 3.1 Value and demonstrate a commitment to social justice, inclusion and protecting and caring for children. 3.2 Value themselves as growing professionals by taking responsibility for their professional learning and development. 3.3 Value, respect and show commitment to the communities in which they work. (The General Teaching Council for Scotland, 2006, Standard 3)

They demonstrate the professionalism to ensure that relationships with learners are built on mutual trust and respect and to recognise that this will help maximise their learning potential. (Welsh Government, 2009, Standard 1.2)

Where values are disconnected from standards (often located in separate documents or stand-alone sections), graduating teachers could be excused for failing to appreciate the interwoven relationship that exists between values, ethical principles, professional knowledge and teaching practices.

Where values are made explicit they generally refer to moral dispositions: care, respect, trust and integrity (Ontario College of Teachers, 2010, p. 7-9), tolerance, dignity, respect and individual liberty (Department of Education, 2012, p. 8), a commitment to learners, to the profession and the community (Teacher Registration Board of the Northern Territory, 2006, ethics statement). In some jurisdictions values are not named but are implicit in dimensions such as society, politics and ethics. For example, in Victoria:

> Understand the social, political and ethical dimensions of education and within that framework can articulate a vision or philosophy of the role of a teacher generally, and of their work specifically; understand the professional behaviour and ethical conduct expected of a teacher and demonstrate attitudes which support professional behavior. (Victorian Institute of Teaching, 2007, descriptor of Standard 8)

Similarly, Wales' standards refer to "a combination of professional characteristics":

> They demonstrate combinations of professional characteristics which aim to motivate and inspire learners and secure their intellectual and personal development. (Welsh Government, 2009, Standard 1.3)

In contrast, the US integrates a set of critical dispositions with each of its standards. These dispositions mention values and ethical conduct as well as professional attitudes and behaviours. For example:

> The teacher is a thoughtful and responsive listener and observer. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, Standard 3r)

> The teacher values flexibility and reciprocity in the teaching process as necessary for adapting instruction to learner responses, ideas, and needs. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, Standard 8s)

> The teacher respects families' beliefs, norms, and expectations and seeks to work collaboratively with learners and families in setting and meeting challenging goals. (CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC), 2011, Standard 10g)

Queensland refers to dispositions alongside each standard, using the same statement each time. But readers have to go elsewhere for details:

> Values: The development of elements of knowledge and practice through the preservice program should acknowledge the importance of appropriate values and dispositions for teaching, and lead towards development of the values described in the Professional Standards for Queensland Teachers. (Queensland College of Teachers, 2009, values statement for each standard)

A career progression focus at the expense of expectations on graduating teachers

In several jurisdictions, standards for graduating teachers are found alongside those for registered and experienced teachers. A feature of standards organised in this way is that they tend to hold back on expectations for graduating teachers. For example, while experienced teachers are expected to apply knowledge, graduating teachers may only be expected to acquire it. We see this as a shortcoming, since the

students of newly graduated teachers are entitled to the same high-quality teaching as those of more experienced teachers.

The New Zealand context

A graduate profile for initial teacher education, expressed in the form of standards, emerged in the mid-1990s as part of unit standards development (QUALSET) by the New Zealand Qualifications Authority (NZQA) (see Aitken & McDonald, 1996; Gibbs & Aitken, 1995; Gibbs & Munro, 1993). While recognising that there had always been standards for teaching, the then principal of Auckland College of Education said he believed the new standards would make the goals of teacher education more transparent. Also, he saw them as recognition that setting expectations for new teachers is a responsibility that teacher educators must share with schools and community. He expressed the hope that the standards would assist colleges of education in "riding the waves" of poorly informed criticism (McGrath, 1996).

The QUALSET initiative went through three iterations, culminating in approval by the Teacher Education Advisory Group of 23 standards (Aitken & McDonald, 1996) grouped in five dimensions:

- assessing planning and supporting student learning

- demonstrating and applying knowledge of the curriculum statements associated with subject specialism

- relating knowledge of human development and learning, cultural and linguistic diversity and policy to teaching

- demonstrating knowledge of te reo and tikanga in teaching

- critical reflection.

While the authors were keen to avoid over-specifying at the level of competency or skill (Gibbs & Aitken, 1996) the standards had to conform to NZQA's unit standards format, so in the end they comprised no fewer than 58 separate elements. As it turned out they never gained much traction because, about the same time, most colleges of education merged with universities, where qualifications were not determined by NZQA criteria.

In a second major initiative, the New Zealand Teachers Council (NZTC) developed a graduate profile for initial teacher education (New Zealand Teachers Council, 2007). These standards are framed as benchmarks for performance and approval and lack the developmental, capacity building orientation of the Ontario and INTASC standards. They are both descriptive and prescriptive: descriptive in that they describe what teachers at the point of graduation will know, understand, and be able to do, and prescriptive in that they provide a basis for Council approval of initial teacher education programmes:

> From 2008, teacher education institutions will provide evidence to the Council ... that will give confidence and assurance that the Graduating Teacher Standards have been met by all graduates.

The Council explicitly links the standards and the graduate profile, stating that it expects all providers of teacher education to align their profiles to the Graduating Teacher Standards.

Compared with the earlier QUALSET version, the NZTC standards are much refined in that they comprise just 7 standards and 29 elements. They share many of the characteristics of the standards from other countries described in the previous section. While some elements reflect the interaction of knowledge and skills (for example, "draw upon knowledge ... when planning, teaching and evaluating") and active and systematic

inquiry is clearly envisaged (for example, "systematically and critically engage with evidence to reflect on and refine their practice; and gather, analyse and use assessment information to improve learning and inform planning") many elements describe what graduating teachers are expected to 'have'. Eleven of the 29 elements are about knowledge of the curriculum; for example, "have content knowledge appropriate to ...", "have knowledge of the relevant curriculum", "have an understanding of ..." and three are 'know how' elements. Like the international standards we analysed, the NZTC standards are organised in three discrete domains – professional knowledge, professional practice, and professional values and relationships – reinforcing a disconnect between what teachers need to know and what they need to do.

When it comes to diversity, the standards are patchy. The Treaty of Waitangi features prominently in the preface ("These standards recognise that the Treaty of Waitangi extends equal status and rights to Māori and Pakeha alike"), and English as an Additional Language (EAL) learners get a mention, but for the most part the standards refer generically to 'learners'. 'Diverse learners' appears only twice, in relation to metacognition and promoting a learning culture; 'all learners' appears only once. In the version of the standards that appears in the NZTC Approval, Review and Monitoring document (n.d., NZTC), an appendix requires graduating teachers to develop knowledge, attitudes and practice in special (inclusive) education. Consistent with what we found in our analysis of other sets of standards, it says nothing about the need for graduating teachers to challenge their own (potentially deficit) views of diversity.

Though lacking the status of standards, the competencies described in *Tātaiako: Cultural Competencies for Teachers of Māori Learners,* developed as part of the Ka Hikitia strategy, complement the Graduating Teacher Standards (New Zealand Ministry of Education, 2011). The Tātaiako competencies are positioned towards the developmental end of the standards continuum and aligned with career progression. They are based on the premise that "identity and language count" and that "effective teaching and learning depends on the relationship between teachers and students and students' active engagement" (p. 4). The document argues that graduating teachers need to develop an understanding of their own identity, language and culture, and of the relevance of culture in education. They also need to develop an understanding of and openness to Māori knowledge and expertise.

While these statements do not explicitly connect knowledge and practice, each competency (wānanga, whanaungatanga, manaaakitanga, tangata whenuatanga, and ako) is linked to specific Graduating Teacher Standards, and student and whānau voice used to describe outcomes that have direct implications for teachers' practice and students' experience of learning. For example, the somewhat static competency, "Know how to support effective teaching interactions, co-construction and cooperative learner-focused activities" is given meaning by the student-voice statements, "My teacher talks with me about my learning" and "My teacher cares about what we think". This additional element gives an otherwise static competency a strong practice orientation.

In common with sets of standards from elsewhere, Te Tātaiako puts reduced expectations on beginning teachers, as can be seen from this statement:

> For people entering initial teacher education, and for *graduating teachers*, the focus is mārama:
> developing an *understanding* of one's own identity, language and culture; developing an
> *understanding* of the relevance of culture in New Zealand education; and developing an
> *understanding* of and openness to Māori knowledge and expertise. For *registered teachers*, the focus
> is mōhio: knowing how to validate and affirm Māori and iwi culture, and *applying that knowledge*.

For school and ECE service leaders, the focus is mātau: being able to lead and engage others in validating and affirming Māori and iwi culture. (New Zealand Ministry of Education, 2011, p. 4 emphasis added)

Given the responsibilities that beginning teachers have towards the students they teach, we are not convinced that standards should require only understanding from graduating teachers, reserving application for registered teachers.

2. Towards inquiry and practice-oriented standards

Our challenge in this paper is to try and frame standards in a way that avoids passivity, fragmentation, specificity and instrumentalism; and that captures the complex, context-bound, active nature of teaching.

To provide an appropriate basis for practice-oriented standards, we begin by presenting an inquiry-based model of teaching that is informed by the discourse about standards and our analysis of standards for graduating teachers. Our model draws extensively on the *New Zealand Curriculum* model of Teaching as Inquiry (Aitken & Sinnema, 2008, p. 52), which is derived in turn from the *Effective pedagogy in social sciences/Tikanga a iwi: Best Evidence Synthesis* (Aitken & Sinnema, 2008) and the inquiry into professional learning needs and priorities model in the *Teacher professional learning and development: Best Evidence Synthesis* (Timperley, Wilson, Barrar, & Fung, 2007).

Teaching as inquiry offers a suitable starting point for considering graduating teacher standards, because like action research it involves a cycle of problem solving, data gathering and analysis, and action. It emphasises altering curriculum and disrupting typical or habitual practices that may not be serving students as effectively as aternatives might. It also has a stronger focus on engaging with outcomes-linked research evidence than most action research models.

Teaching as inquiry also has social justice concerns at its heart. Many teacher research efforts "work for social justice by using inquiry to ensure educational opportunity, access, and equity for all students" (Cochran-Smith & Lytle, 2009, p. 40). Equity concerns were similarly at the heart of the Iterative Best Evidence Synthesis programme, which generated the teaching as inquiry model. This programme positioned difference as salient, putting it at the centre of a knowledge-building strategy, and worked through a responsiveness-to-diversity framework (Timperley & Alton-Lee, 2008). The teaching as inquiry model provides a tool for such responsiveness, resonating with the historical roots of practitioner inquiry in critical social action.

Central to teaching as inquiry is the notion of teachers engaged simultaneously in practice and research, generating knowledge in and for their own contexts in the service of improved outcomes for learners. The model rejects the 'knowledge-critique', 'science critique' and 'methods critique' commonly raised in relation to practitioner inquiry (Cochran-Smith & Lytle, 2009). Teaching as inquiry explicitly privileges whatever methods of data gathering and analysis are most suited to addressing educational priorities determined by teachers in their own contexts. While rigour and systematic approaches are encouraged, the criteria are not necessarily the same as for academic contexts. What matters most is that teachers engage with the evidence about effective teaching and don't take the value of any approach for granted: "knowledge is not based on unchallengeable rock-solid foundations – it is conjectural" (Phillips & Burbules, 2000, p. 26), or as Black and Wiliam explain:

> Practice in a classroom is formative to the extent that evidence about student achievement is elicited, interpreted, and used by teachers, learners, or their peers, to make decisions about the next steps in instruction that are likely to be better, or better founded, than the decisions they would have taken in the absence of the evidence that was elicited.(Black & Wiliam, 2009, p. 9)

For this reason teachers need to be engaged in a continual process of learning about themselves, their students, and how to improve engagement and success in their own particular context. It is this sense of

curiosity, open-mindedness and persistence that is at the heart of our model, Teaching for Better Learning, and underpins the standards that we derive from it.

The Teaching for Better Learning model

The Teaching for Better Learning model is presented in Figure 1. It structures the teaching and learning process around six 'inquiry elements':

- deciding on learning priorities

- deciding on teaching strategies

- enacting teaching strategies

- examining impact

- deciding on and actioning professional learning priorities

- critiquing the education system.

The inquiries are informed by five sets of 'resources', aimed at strengthening the quality of inquiry and practice:

- *education's body of knowledge* about all learners, learning, society and culture, content, pedagogy, content pedagogy, curriculum and assessment and *knowledge* of te reo me ona tikanga

- cultural**,** intellectual, critical, relational and technical *competencies* and, in particular, the cultural competencies outlined in *Tātaiako*, namely: wānanga, whanaungatanga, manaakitanga, tangata whenuatanga and ako

- *dispositions* of open-mindedness, fallibility, discernment, and agency

- *ethical principles* and commitment to learners, families/whānau, the profession and society

- commitment to *social justice* by challenging racism, inequity, deficit thinking, disparity and injustice.

In the model, the Resources are positioned behind each of the Inquiry Elements to reflect their continuous integration into all parts of the teaching process and to reflect our argument that they are resources that graduating teachers need to know about *and use* (not just know about). It is by using them in the service of quality inquiry and practice that highly effective graduates distinguish themselves from less effective graduates.

Six graduating teacher standards (Figure 2) emerge from the model. Each standard reflects a particular Inquiry Element and incorporates the Resources the graduating teacher will need to carry out an effective inquiry. The wording of the standards (in which one element calls to another) reflects the iterative nature of the model.

So what we are proposing here are graduating teacher standards that are inquiry-oriented, active, applied, and directly connected to students' engagement and learning. Simply possessing particular knowledge, skills or dispositions is not enough. What is wanted is quality inquiry – something much closer to the learner's experience – that draws on education's body of knowledge, and knowledge of te reo, competencies, dispositions, ethical principles, and commitment to social justice.

Body of Knowledge
Competencies
Dispositions
Ethical Principles
Social Justice

**Deciding on
Learning Priorities**

*What learning is most important next
given where each of my learners is at?
How much time is appropriate to allocate
to that learning?*

Body of Knowledge
Competencies
Dispositions
Ethical Principles
Social Justice

**Examining
Impact**

*What happened?
Have I made
enough of a difference
for each of my learners?*

**Deciding on and Actioning
Professional Learning
Priorities**

*What is most important for me, the
teacher, to learn and do so that I can
make a bigger difference for my
learners?*

Body of Knowledge - Competencies
Dispositions - Ethical Principles - Social Justice

**Deciding on
Teaching Strategies**

*What evidence- informed
teaching strategies will help me
connect with each of my learners,
and are most likely to help them
learn this?*

Body of Knowledge
Competencies
Dispositions
Ethical Principles
Social Justice

**Enacting
Teaching Strategies**

*How well am I enacting the strategies?
How are each of my learners experiencing
their learning? What are the interactions,
and relationships with each of my
learners like?*

Body of Knowledge
Competencies
Dispositions
Ethical Principles
Social Justice

drawing on **education's body of
knowledge** about all learners,
learning, society and culture,
content, pedagogy,
content pedagogy,
curriculum and assessment and
knowledge of te reo me ona tikanga

using cultural**,**
intellectual,
critical,
relational and
technical
competencies

demonstrating
dispositions
including open-
mindedness,
fallibility,
discernment and
agency

applying **ethical
principles** and
demonstrating
commitment to
learners, families/
whānau, the
profession and
society

*demonstrating
commitment* to
social justice by
challenging
racism, inequity,
deficit thinking,
disparity and
injustice

Resources

Critiquing the Education System

*How are education system, structures and policies influencing the effectiveness
of teaching and the quality of outcomes for learners? How might the system be transformed?*

Key: Inquiry Elements Resources

Figure 1: Teaching for Better Learning model

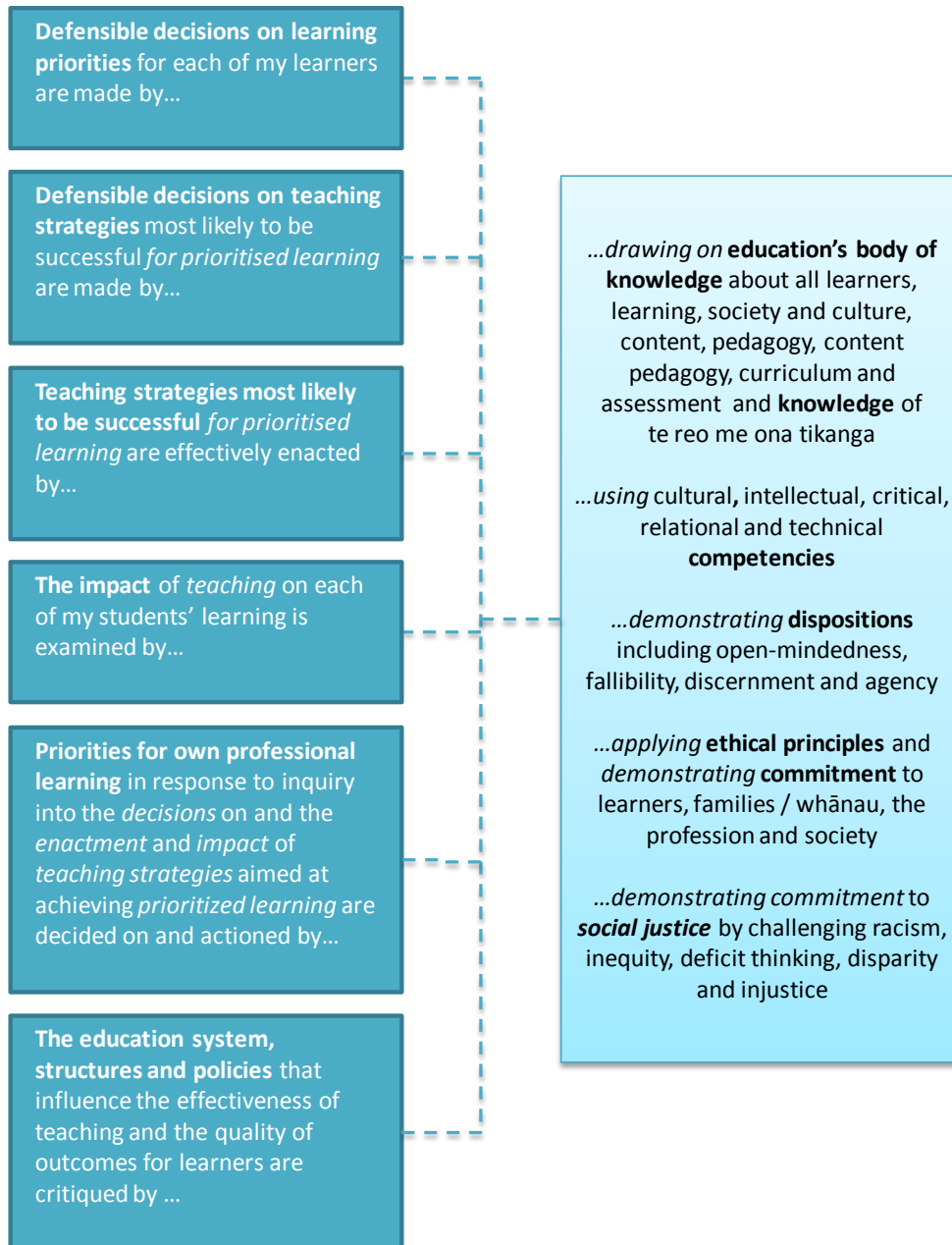|	
Defensible decisions on learning priorities for each of my learners are made by…	
Defensible decisions on teaching strategies most likely to be successful *for prioritised learning* are made by…	*…drawing on* **education's body of knowledge** about all learners, learning, society and culture, content, pedagogy, content pedagogy, curriculum and assessment and **knowledge** of te reo me ona tikanga
Teaching strategies most likely to be successful *for prioritised learning* are effectively enacted by…	*…using* cultural**,** intellectual, critical, relational and technical **competencies**
The impact of *teaching* on each of my students' learning is examined by…	*…demonstrating* **dispositions** including open-mindedness, fallibility, discernment and agency
Priorities for own professional learning in response to inquiry into the *decisions* on and the *enactment* and *impact* of *teaching strategies* aimed at achieving *prioritized learning* are decided on and actioned by…	*…applying* **ethical principles** and *demonstrating* **commitment** to learners, families / whānau, the profession and society
The education system, structures and policies that influence the effectiveness of teaching and the quality of outcomes for learners are critiqued by …	*…demonstrating commitment* to ***social justice*** by challenging racism, inequity, deficit thinking, disparity and injustice

Figure 2: Teaching for Better Learning standards

Features of the model

In developing the Teaching for Better Learning model careful attention has been given to language and design. Key considerations are explained in the annotated version below. The same elements are found in the Teaching for Better Learning standards.
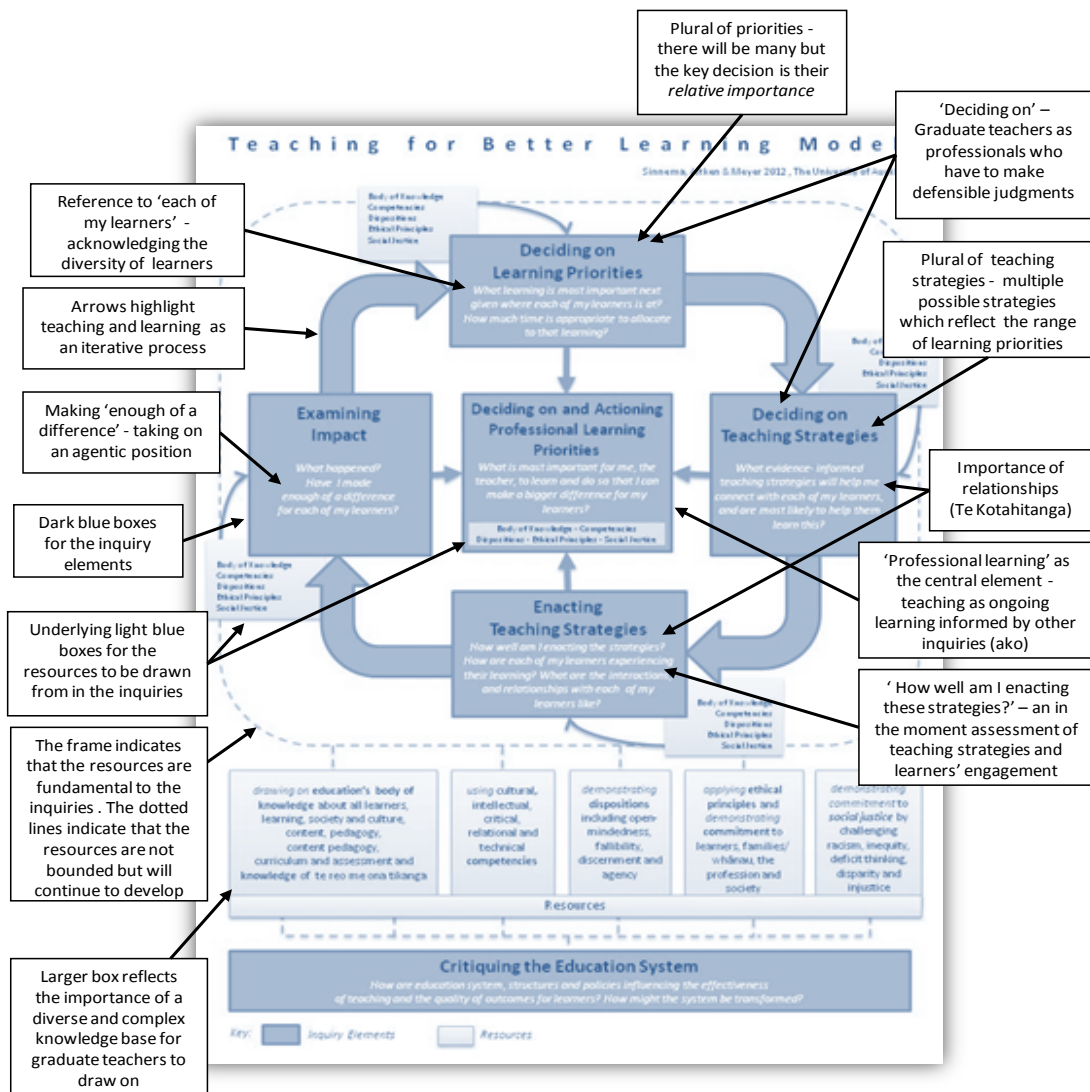

Figure 3: Annotated version of model highlighting features

The inquiry elements

Learning priorities

The purpose of the learning priorities inquiry element is to determine direction. Given that time is limited and that learners need multiple opportunities to engage with the content of new learning, priorities need to be established. The issue to be resolved is not so much 'what is important' for each student to learn but 'what is *relatively* most important'. Decisions about relative importance and using time well are the focus of this phase of the cycle. Central to this inquiry element is the question, 'What is most important and therefore worth spending time on?' Note that the 'each' in the questions is important since collective priorities need to be addressed alongside priorities for each and every learner.

Teaching strategies

The purpose of the teaching strategies inquiry element is to identify strategies that are most likely to help learners achieve the outcomes that have been prioritised. The graduating teacher's decisions about strategies are informed by evidence from outcomes-linked research and from practitioner experience. Central to this inquiry are the questions 'What could I try?' and 'How good is the evidence?' which imply a reflective approach to practice and research and the ability to locate and evaluate evidence. This inquiry element encourages graduating teachers to view research as a source not of infallible solutions but of better informed conjectures about what might enhance learning for their students.

Enacting teaching strategies

Graduating teachers need to be able to evaluate their own actions 'in the moment' ('How well am I enacting the strategies I decided on?'), to evaluate how their students are experiencing learning, and to evaluate the quality of learning relationships being developed. This means graduating teachers must be observant of their own and students' interactions and behaviours and intellectual and emotional responses. While the other inquiries may also happen concurrently with teaching and learning, this inquiry in particular requires 'in the moment' attention by the graduating teacher to what they are doing and how each of their students is responding.

Impact

At the heart of the impact inquiry element is the collection and analysis of quality evidence based on two key questions. The first, 'What happened?' prompts examination of the impact of the teaching on each student's learning. But the magnitude of this impact needs to be reviewed in the light of high expectations; so a second question, 'Have I made enough of a difference for each learner?' asks whether the learning was sufficient.

Professional learning

The professional learning inquiry element requires graduates to be metacognitive and self-regulated learners – able and inclined to 'think about their thinking' in relation to the other inquiry elements, and to be "active in using this awareness to initiate, motivate and direct their own efforts to acquire knowledge and skills rather than rely on others as agents of instruction" (Schunk & Zimmerman, 1994, cited in Timperley, 2012). This inquiry element promotes the idea, described in the companion paper, Learning to Practise (Timperley (2013), of graduating teachers becoming their own teachers, increasingly able to learn from and for practice.

The inclusion of this inquiry element strengthens the standards because, as Ingvarson (2003) points out, "if standards for teaching are to have a positive impact on teachers and students, then they must be embedded within a culture committed to professional learning, and the focus must be on the teachers themselves identifying their needs for professional learning" (cited in Grudnoff, Hawe, & Truck, 2005, p. 103).

Education system

While the inquiry elements in the upper part of the model emphasise the graduating teacher and their students, the education system inquiry in the lower part draws attention to the broader context of schooling, teaching, and learning. It positions the graduating teacher as a knowledgeable and critical professional who engages with policy debates on current educational issues and on social, cultural, political and economic influences that have an impact on the educational environment. This inquiry element asserts that graduating teachers (and teachers) have a role to play in moving education-related debates forward and in contributing to system-wide improvement.

Resources

Education's body of knowledge

The Teaching for Better Learning model gives prominence to inquiry that focuses on the practice of teaching and learning. While this positions knowledge in an instrumental way, it also recognises that effective practice needs to draw from a broad and deep knowledge base. This knowledge base draws in turn from multiple disciplinary sources (for example, psychology, history, sociology and philosophy) that often suggest competing interpretations of problems and contrasting solutions. But without the structures, frameworks, and theoretical insights offered by these disciplines, the teacher is reduced to acting from their own limited understanding and experience. Knowledge is a prerequisite for agentic positioning because, as Beck and Young explain, the different disciplines offer "knowledge that permit(s) alternative possibilities to be thought" (Beck & Young, 2005, p. 193).

Because what and how teachers teach is influenced by their orientation to content (Ball, Thames, & Phelps, 2008), they need to understand the structures, paradigms and content of the subjects they teach – what Shulman (1986) describes as "the amount and organization of knowledge per se in the mind of the teacher" (p. 9). Teachers, Shulman argues, need "not only understand that something is so; the teacher must further understand why it is so, on what grounds its warrant can be asserted, and under what circumstances our belief in its justification can be weakened and even denied" (Shulman, 1986, p. 9). When conceptualised from a

practice point of view, content knowledge encompasses not only subject matter for teaching but also pedagogical content knowledge. In other words, "that knowledge which goes beyond knowledge of subject matter per se to the dimension of subject matter knowledge for teaching … the ways of representing and formulating the subject that make it comprehensible to others" (Shulman, 1986, p. 9). This includes knowledge about the relative difficulty of different aspects of the subject, preconceptions and misunderstandings that students may bring to their learning, and typical progressions in skills and understandings.

In a more general pedagogical sense, graduating teachers also need to know practices and alternatives for engaging students and managing classrooms. And they need to understand curriculum, not just as a source of what to teach but as policy. Given that the Teaching for Better Learning model focuses on the impact of teaching on learners, assessment is a crucial component of the graduating teacher's knowledge base. This includes the technical aspects of assessment. As Brown (2008) points out, widespread research findings suggest that "the vast majority of teachers, principals, and administrators have limited understandings of the more technical qualities of assessment information … whether it be derived from their own assessments of students, from external standardized test marks, or from their own in-class performance assessments" (Brown, 2008, p. 286).

The graduating teacher's knowledge of self and their own cultural locatedness is another important resource for participating in teaching and learning interactions. Graduating Teachers need to be knowledgeable about culture, how to create culturally safe learning environments, and how to establish reciprocal relationships based on respect and understanding (MacFarlane, Glynn, Grace, Penetito, & Bateman, 2008). It is only by knowing themselves and their students that they can create learning spaces into which their students can bring "who they are" in complete safety, and find their knowledges "acceptable" and "legitimate" (Bishop, O'Sullivan, & Berryman, 2010).

Competencies

By competencies, we mean enacted knowledge: the ability to draw on and demonstrate, for example, such cultural and relational competencies as:

* wānanga (participating with learners and communities in robust dialogue for the benefit of Māori learners' achievement)

* whanaungatanga (actively engaging in respectful working relationships with Māori learners, parents and whānau, hapū, iwi and the Māori community)

* manaakitanga (demonstrating integrity and sincerity and respect towards Māori beliefs, language and culture)

* tangata whenuatanga (affirming Māori learners as Māori, providing contexts for learning that affirm the language, identity and culture of Māori learners and their whānau)

* ako (taking responsibility for one's own learning and that of Māori learners).

(New Zealand Ministry of Education, 2011).

Brown's comment about assessment (cited above) points to the technical and intellectual resources that need to be brought to bear when, for example, carrying out effective assessment. Parr and Timperley (2008) and Hill et al. (2010) similarly alert us to the skills base that teachers draw on when collecting evidence to evaluate classroom initiatives, constructing or compiling tests, devising tasks, and more generally, when working out how best to elicit revealing and pertinent responses from students.

Dispositions

Dispositions are dominant tendencies or characteristic ways of thinking and acting. The crucial dispositions in the Teaching for Better Learning model are open-mindedness, discernment, fallibility, and agency.

According to Hare (2003a), open-mindedness is "to be critically receptive to alternative possibilities, to be willing to think again despite having formulated a view, and to be concerned to defuse any factors that constrain one's thinking in predetermined ways" (pp. 4–5). It is open-mindedness that enables a graduating teacher to give full consideration to what the various inquiry elements in the model can tell them, unrestrained by a "dogmatic and rigid stance that dismisses reflection and inquiry" … and with "sincere commitment to the pursuit of truth" and "serious consideration of alternative ideas" (Hare, 2009, pp. 37–38). Also, as Spiegel (2012) points out, "open-mindedness is a powerful pedagogical tool. Teachers who display a willingness to consider new ideas and points of view welcome students to do the same" (p. 29).

An open-minded disposition does however carry with it potential risks if not accompanied by a disposition of discernment. Open-mindedness should not be confused with neutrality or permissiveness towards what other people believe. What the model looks for is 'critical receptiveness': "a readiness to consider new ideas together with a commitment to accept only those that pass scrutiny" (Hare, 2003b, p. 79). The intellectual virtues of wisdom and understanding, when used to discern possibilities that arise through open-mindedness, prevent the collapse of open-mindedness into gullibility. With a combination of open-mindedness and discernment, graduating teachers are willing and able to consider alternative teaching goals, approaches and outcomes, knowing that all alternatives may not be equal, so their merits need careful scrutiny.

It is also important for graduating teachers (indeed, as Spiegel says, for everyone), to recognise their fallibility as believers. "It is a virtual certainty," he argues, "that you now hold some, if not very many, false beliefs. And this is so even if you happen to be especially smart, perceptive, and circumspect. There is also the evidence from experience. History has seen countless truth claims which, though once nearly universally accepted, are now rejected or even laughed at by reasonable people" (Spiegel, 2012, p. 33). Graduating teachers are vulnerable to the formation of false beliefs. Any such beliefs influence teaching and learning. For this reason it is important that graduating teachers habitually recognise that the beliefs they currently hold (about, for example, a student, their students, student learning, or the effectiveness of their own teaching practices) may turn out to be untrue.

To be effective, graduating teachers need to develop the strong sense that they are influential in improving the engagement and success of their students. Agentic teachers take responsibility for making changes to their practice in response to ongoing assessment of their students' progress instead of blaming shortcomings in the students and their families (Bishop, 2007). When teachers believe their actions can make a difference and act on this belief, their learners benefit (Phelps, 2006, p. 176). This disposition is closely allied to what Haberman (2004) calls persistence – the "deep and abiding belief" about the potential of "diverse children in poverty" which is itself reflected in taking a "constant responsibility to make the classroom an interesting, engaging

climate which on a daily basis will involve all the (children) in meaningful activities", and in meeting the needs of everyone in the class by constantly searching for "what works" for each student (pp. 132–133).

Ethical principles

It is expected of all professionals that they will uphold high ethical standards, exercising good judgment and putting the interests of those they serve above their own. Like other professionals, teachers inevitably encounter ethical dilemmas as few decisions have equally positive consequences for everyone. Resources such as the Code of Ethics for New Zealand Registered Teachers (New Zealand Teachers Council, 2004) provide guidance in ethical decision making. This code outlines four fundamental principles relating to teachers' commitment to learners, parents/guardians and family/whānau, society, and the profession:

- *autonomy* to treat people with rights that are to be honoured and defended

- *justice* to share power and prevent the abuse of power

- *responsible care* to do good and minimise harm to others

- *truth* to be honest with others and self.

Such principles are included in the resources that graduating teachers need at their fingertips, to be drawn on as they address the different standards identified in the Teaching for Better Learning model. The importance of integrating the principles with the standards is underscored by Reynolds' (2001) observation that "a code of practice dictates what a teacher should do, but a code of ethics refers to how the teacher does it, which is perhaps more crucial" (p. 473).

Commitment to social justice

> Teaching is an intentional, designed act undertaken to influence the minds of others, and to change the world in an intensely intimate, socially responsible manner. Such work brings with it inexorable responsibilities. Having engaged students through an act of instruction, the teacher becomes at least partially responsible for its efficacy. It is unimaginable that a teacher could teach with no concern for whether students had learned, how well they had learned, or whether their learning was appropriate to the field (Shulman, 2002, p. 5).

This resource draws attention to the significant disparities that exist in the distribution of educational opportunities, resources, and achievement, and to the responsibility teachers have to work as educators and activists to reduce inequities in society (Cochran-Smith, Gleeson, & Mitchell, 2010; Ludlow, Enterline, & Cochran-Smith, 2008). Teaching is an act aimed at increasing students' life chances by challenging the inequities of school and society (Cochran-Smith & Lytle, 1999). As Bishop et al. (2007) explain in the context of working with Māori students, this means, "[teachers] explicitly reject[ing] deficit theorising as a means of explaining Māori students' educational achievement levels, and taking an agentic position in their theorising about their practice. That is, practitioners expressing their professional commitment and responsibility to bringing about change in Māori students' educational achievement by accepting professional responsibility for the learning of their students" (Bishop, Berryman, Cavanagh, & Teddy, 2007, p. 1).

Illustrating integration of elements and resources in the model

It is beyond the scope of this paper to detail the complex integration of resources for each inquiry element, but the following example illustrates this integration for the learning priorities inquiry standard.

> **Defensible decisions on learning priorities** for each of my learners are made by *drawing on* **education's body of knowledge** about all learners, learning, society and culture, content, pedagogy, content pedagogy, curriculum and assessment and **knowledge** of te reo me ona tikanga, *using* cultural**,** intellectual, critical, relational and technical **competencies,** *demonstrating* **dispositions** including open-mindedness, fallibility, discernment and agency, *applying* **ethical principles** and *demonstrating* **commitment** to learners, families/whānau, the profession and society, and *demonstrating commitment* to ***social justice*** by challenging racism, inequity, deficit thinking, disparity and injustice.

The learning priorities inquiry standard

The learning priorities inquiry standard requires graduating teachers to identify learning priorities for each student, and to be able to defend these priorities. Defensible decisions on priorities are necessarily founded on a complex knowledge base. Technical data cannot tell the whole story, so reasons need to be sourced in an understanding of the purposes of education and schooling, recognising that these are contested. Without some knowledge of the history and philosophy of education, graduating teachers will struggle to explain why they are teaching what they are teaching.

More at the micro-level, knowledge of human development and typical learning trajectories needs to inform decisions on outcomes; the literature on motivation, to inform what learning is most likely to engage students; and knowledge of curriculum requirements and external benchmarks, to inform entitlements, aspirations, and expectations for learning. It is in a deep and flexible knowledge of the subject – its structures and paradigms – that next steps for students have their derivation.

From their knowledge of learners' backgrounds, interests and prior knowledge, graduating teachers identify the experiences and strengths that their students bring to their learning, areas in need of developing, and community aspirations and priorities. Ka Hikitia puts great stress on these considerations; on "teachers knowing where their students come from, and building on what students bring with them; and on productive partnerships among teachers, Māori learners, whānau, and iwi" (New Zealand Ministry of Education, 2011, p. 4). The term "productive partnerships" strongly implies that prioritising is not solely the responsibility of teachers; rather, it is a relational task in which teachers know, respect and work with Māori learners and their whānau and iwi "so their worldview, aspirations, and knowledge are an integral part of teaching and learning" (New Zealand Ministry of Education, 2011, p. 4).

Graduating teachers also require technical competencies such as the ability to interpret assessment data and to weigh up competing demands on the limited time available for teaching. Teaching would be relatively straightforward but distinctly unsatisfying if outcomes and programmes were predetermined and unable to be changed in response to teachers' own interpretations of assessment data. In New Zealand at least, outcomes are developed by the teacher, working with students, drawing from multiple sources of evidence, and based

on the intelligent balancing of possibilities. All of this requires an open-minded disposition that allows for alternative outcomes to be considered, and discernment to prioritise those outcomes that pass muster as legitimate uses of learning time.

Because this standard is primarily about the relative (rather than absolute) importance of particular outcomes for students, and because graduating teachers are only infrequently able to give individual students undivided attention, there are usually trade-offs that must be made in terms of prioritised outcomes. This normative dimension of decision-making requires graduating teachers to attend to ethical considerations; in particular, they must be able to defend their judgments on the grounds that they are doing good for as many learners as possible while minimising harm, and that they are striving to promote the physical, emotional, social, intellectual and spiritual well-being of all learners.

Perhaps most importantly, a defence of priorities must be embedded in a deep commitment to social justice: a commitment to set expectations high and to avoid basing decisions on deficit thinking. Work in the area of expectations has demonstrated that teachers often seriously underestimate the ability both of individuals and groups of learners. Weinstein (2002) , for example, argues that "low and narrowly construed expectations are at the root of achievement problems", and emphasises that "different beliefs about ability and its nurturance improve and expand desired outcomes for all children" (p. 85). In establishing learning priorities, graduating teachers need to avoid self-fulfilling negative prophecies and promote positive prophecies for all students. Reconsidering possibilities for students, particularly those who have acquired a history of low expectations, requires an open-minded disposition.

Framed in this way, the practice dimension of the standard ('making defensible decisions about learning priorities for each of my learners') is seen to be not a technocratic or simplistic defence of time usage but a complex process in which the relative merits of competing alternatives are weighed and decided, in the full realisation that even the most defensible decisions nevertheless remain contestable.

3. How the Teaching for Better Learning standards address the limitations of existing standards

In section 1 of this paper we identified a number of criticisms that have been levelled at standards. It has been claimed that: standards lead to a loss of pedagogical autonomy by teachers and to increased workload resulting in 'impression management'; they promote a reductionist approach to teaching and separate performance and formalised knowledge; they ignore the complexities of teaching (Delandshere & Arens, 2001; Thrupp, 2006).

In our own analysis of existing graduating teacher standards we identified six key shortcomings: (i) their non-active and non-applied nature; (ii) an emphasis on knowledge at the expense of practice; (iii) the separate treatment of professional practice, knowledge, and dispositions or values; (iv) the opaque, deficit, and non-responsive treatment of diversity and culture; (v) their detached positioning of values and ethical considerations; and (vi) a career progression focus at the expense of expectations on graduating teachers.

The Teaching for Better Learning model and standards presented in this document respond to these critiques and address these shortcomings, envisaging graduating teachers as inquiring professionals who are focused on better learning for themselves and their students. The model foregrounds practice and inquiry and makes it explicit that knowledge, competencies, dispositions, ethical principles and social justice must inform the inquiry elements.

The model and standards address the critiques in three main ways:

First, by positioning graduating teachers as agentic decision-makers, the standards preserve professional autonomy. The graduating teacher is the inquiring professional who decides on learning priorities and teaching strategies, enacts these strategies, and then examines their impact. The outcomes of the overall inquiry process provide a basis for graduating teachers' decisions about their own learning. Our model calls therefore for graduating teachers who are responsive to their particular teaching context, to their learners, and to prioritised outcomes (Aitken & Sinnema, 2008). It also calls for graduating teachers to see themselves as agentic, not only in their own classroom and school, but also in the wider educational system.

Second, our model acknowledges that teaching is a complex undertaking, meaning that it is poorly served by the restricted definitions and reductionist approaches that are characteristic of existing standards. The integrative nature of the Teaching for Better Learning standards properly reflects the complexity of teaching and avoids reducing standards to specific behaviours.

Third, the inquiry elements that make up graduating teacher practice draw on a number of crucial resources. By placing these resources alongside the inquiry elements and embedding them in each standard we aim to highlight the integrated nature of practice and avoid a performance–knowledge dichotomy or separation of standards into discrete domains.

A consequence of our approach is that the proposed standards are complex to read. Given the complexity of the relationships and interconnections – so critical to effective teaching – that the standards aim to represent, we see this as inevitable. In our view you cannot have standards for a complex professional endeavour such as teaching without that complexity being reflected in the standards. To purposefully and successfully inquire, graduating teachers need to draw on more than one approach to teaching, use knowledge of different aspects

of teaching, and continuously consider alternative approaches and interpretations (Zeichner, 1993). This is the path to adaptive expertise (Timperley, 2013).

The Teaching for Better Learning model and standards also address the shortcomings identified in our analysis of existing graduating teacher standards.

First, the wording of the standards is active and applied. Graduating teachers not only have to possess certain knowledge, skills and dispositions, they are required to actively and purposefully use these resources to decide, defend, enact and critique. The inquiry elements emphasise how and for what purpose they should draw on and use these resources in their practice.

Second, the standards are practice-oriented, making it clear that teaching and learning are the graduating teacher's immediate and ongoing focus. Some may object that this positions knowledge in a limited, instrumental relationship with practice. But in an instrumentalist approach, selected 'bits' of knowledge' are disconnected from disciplinary structures and systems of meaning and used in ways that suggest only applied knowledge is important (Wheelahan, 2012). Such approaches limit the ability of graduating teachers to draw on knowledge needed for the new and different contexts that they inevitably encounter. The Teaching for Better Learning model does not, however, privilege or pre-select discrete bits of knowledge based on some applicability criterion. Rather, it emphasises the importance of using a body of educational knowledge as the basis for decisions about complex practice in all manner of different contexts. Knowledge for teaching is not defined by practice, nor is it defined by disciplinary structures. As Table 1 illustrates, it is defined by the deep and flexible understandings that enable quality, defensible decisions about practice.

Table 1. The role of knowledge in preparation of teachers

	Approach			
	Instrumental	Disciplinary	Instrumental and disciplinary (disconnected)	Instrumental and disciplinary (integrated)
Relevant knowledge	Discrete aspects of knowledge selected for their applicability	Disciplinary knowledge structures, broad and deep	A body of knowledge to be acquired	A body of knowledge to be drawn from in the service of practice
Emphasis in standards	Applied knowledge	Depth of knowledge	Knowledge treated separately from practice	Rigorous inquiry and defensible decision-making that draws on a body of knowledge

Third, the model avoids the tightly-defined competencies that characterise much modern professional training, including teacher education, and which, as Beck and Young (2005) argue, institutionalise trainability as a fundamental objective. Competencies are understood not as generic, but as continually requiring adaptation for specific teaching and learning contexts. In this way the model seeks to avoid the pitfalls of genericism, which assumes that key skills apply across subjects, contexts, and levels (see, for example, Bernstein (2000) and Beck & Young (2005)).

Fourth, the Teaching for Better Learning model and standards do not treat professional practice, knowledge, and dispositions or values as unconnected aspects of teaching; rather, they emphasise their integrated nature. Each of the inquiry elements draws on each of the resources (education's body of knowledge, competencies,

dispositions, ethical principles, and commitment to social justice), supporting the graduating teacher to make and enact quality decisions about practice, and then to analyse the impact of those decisions.

Fifth, the model draws attention to diverse learners by consistently referring in the guiding questions to 'each learner' instead of 'all learners' (which can be read as generic and impersonal). This places an expectation on graduating teachers that they will educate for inclusion and ethical practice in each and every aspect of their practice.

Finally, in both the model and the standards, what is expected of graduating teachers is not less than what is expected of experienced teachers. Given their responsibility for the learning of young people, any lowering of expectations is undesirable. It is assumed, however, that graduating teachers are operating in a context that provides support and in conditions that will enable them to reach such rigorous standards.

The inquiry orientation of these standards is applicable to teachers no matter where they are in their careers. The model on which they are based conceives of teaching not as a technical skill to be mastered but as a professional practice that demands continuous learning, which leads in turn to continuous improvement.

4. Considerations for discussion

The intention is that this paper will provide a stimulus for discussion on initial teacher education outcomes, and particularly on standards for graduating teachers in New Zealand. In this final section we alert readers to three issues that require consideration.

Over-assimilation

Many features of the Teaching for Better Learning model and standards may seem somewhat familiar. It is important, therefore, to avoid possible over-assimilation by recognising what is genuinely new and different. As we see it, new insights or aspects include:

- the connectedness of the standards, achieved by basing them on a complex model that highlights the interrelationship of multiple key elements

- the continuous and full integration of resources and inquiry elements into each standard

- avoidance of the temptation to simplify standards and express them as discrete elements

- an uncompromised focus on the learner

- integration of teachers' day-to-day realities with wider educational concerns

- an active, continuous improvement orientation.

Implications for teacher education curricula

If knowledge is to be integrated with practice as we argue it should, this has implications for the organisation of initial teacher education courses. For example, how should a curriculum be structured to reflect the inquiry processes that we advocate? Should courses be organised around core practice issues and understood in relation to the resources identified in the model (a case-based approach)? Or should they be organised around the resources (especially the domains of knowledge identified in the model) and referenced back to the inquiry elements (a more traditional approach)? An even bigger question: Should an initial teacher education curriculum be wholly based on the proposed standards or on a more broadly based liberal education programme that strives for enlightenment as much as it does for more effective practice?

Implications for a graduate profile

For universities, a consideration is how the proposed standards might translate into a graduate profile or articulate with existing graduate profiles. This is a similar issue to the curriculum issue above. Graduate profiles are typically organised around what we refer to as resources – what students will know and be able to do by the end of their studies – but we are recommending that they be organised around a process of inquiry. If this sense of process is lost in graduate profiles, the integration that we see as so crucial for initial teacher education will be compromised.

References

Aitken, G., & McDonald, M. (1996). Initial teacher education: Standards endorsed by the Teacher Education Advisory Group. (unpublished report), New Zealand Qualification Authority. Wellington.

Aitken, G., & Sinnema, C. (2008). Effective pedagogy in social sciences / Tikanga a iwi: Best Evidence Synthesis Iteration. Wellington: Ministry of Education.

Australian Institute for Teaching and School Leadership. (2011). National professional standards for teachers. Carlton South, Australia: Education Services Australia as the legal entity for the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA), February 2011.

Ball, D. L., Thames, M. H., & Phelps, G. (2008). Content knowledge for teaching: What makes it special? Journal of Teacher Education, 59(5), 389-407.

Beck, J., & Young, M. (2005). The assault on the professions and the restructuring of academic and professional identities: A Bernsteinian analysis. British Journal of Sociology of Education, 26(2), 183-197.

Bernstein, B. B. (2000). Pedagogy, symbolic control, and identity: Theory, research, critique. Lanham, Maryland, USA: Rowman & Littlefield.

Bishop, R. (2007). Lessons from Te Kotahitanga for teacher education. In L. F. Deretchin, & C. J. Craig (Eds.), International research on the impact of accountability systems. Teacher education yearbook XV. (pp. 225-239). Lanham, USA: Rowman & Littlefield Education.

Bishop, R., Berryman, M., Cavanagh, T., & Teddy, L. (2007). Te Kōtahitanga Phase 3 Whānaungatanga: Establishing a culturally responsive pedagogy of relations in mainstream secondary school classrooms. Wellington: Ministry of Education.

Bishop, R., O'Sullivan, D., & Berryman, M. A. (2010). Scaling up education reform: Addressing the politics of disparity. Wellington: NZCER Press.

Black, P., & Wiliam, D. (2009). Developing the theory of formative assessment. Educational Assessment, Evaluation and Accountability, 21, 5-31. 10.1007/s11092-008-9068-5

Brown, G. (2008). Assessment literacy training and teachers' conceptions of assessment. In C. M. Rubie-Davies, & C. Rawlinson (Eds.), Challenging thinking about teaching and learning. New York: Nova Science Publishers.

CCSSO's Interstate Teacher Assessment and Support Consortium (InTASC). (2011). InTASC: Model core teaching standards - A resource for state dialogue. Washington, DC.: Council of Chief State School Officers, April 2011.

Cochran-Smith, M., Gleeson, A., & Mitchell, K. (2010). Teacher education for social justice: What's pupil learning got to do with it? Berkeley Review of Education 1(1), 35-61.

Cochran-Smith, M., & Lytle, S. L. (1999). Relationships of knowledge and practice: Teacher learning in communities. Review of Research in Education, 24, 249-305.

Cochran-Smith, M., & Lytle, S. L. (2009). Inquiry as stance: Practioner research for the next generation. New York: Teachers College Press.

Cumming, J., & Jasman, A. M. (2003). Professional teaching standards and quality education. UNESCO: Teacher Status and Qualifications for Education Quality Project.

Darling-Hammond, L. (2006). Securing the right to learn: Policy and practice for powerful teaching and learning. Educational Researcher, 35(7), 13-24.

Darling-Hammond, L. (2010). Teacher education and the American future. Journal of Teacher Education, 61(1-2), 35-47. 10.1177/0022487109348024

Darling-Hammond, L. (2012). Creating a comprehensive system for evaluating and supporting effective teaching. Stanford, CA.: Stanford Center for Opportunity Policy in Education.Retrieved from http://edpolicy.stanford.edu/sites/default/files/publications/creating-comprehensive-system-evaluating-and-supporting-effective-teaching.pdf

Delandshere, G., & Arens, S. A. (2001). Representations of teaching and standards-based reform: Are we closing the debate about teacher education? Teaching and Teacher Education, 17(5), 547-566. 10.1016/s0742-051x(01)00013-0

Department of Education. (2012). Teachers' standards: Effective from 1 September 2012. England: Department of Education, Crown copyright.

European Agency for Development in Special Needs Education. (2010). Teacher education for inclusion - International literature review. Odense, Denmark: European Agency for Development in Special Needs Education.

Feiman-Nemser, S. (2001). From preparation to practice: Designing a continuum to strengthen and sustain teaching. Teachers College Record, 103(6), 1013-1055.

Feiman-Nemser, S. (2003). What new teachers need to learn. Educational Leadership, 60(8), 25-29.

Florian, L., & Rouse, M. (2009). The inclusive practice project in Scotland: Teacher education for inclusive education. Teaching and Teacher Education, 25(4), 594-601.

General Teaching Council for Northern Ireland. (2011). Teaching: The reflective profession. Belfast: General Teaching Council for Northern Ireland.

Gibbs, C., & Aitken, G. (1995). Qualification standards for education in teaching: Endorsed standard titles. Wellington: New Zealand Qualification Authority.

Gibbs, C., & Aitken, G. (1996). The competent teacher: Beyond competencies. Teacher education to standards. Paper presented at the New Zealand Council for Teacher Education, Biennial Conference, Dunedin.

Gibbs, C., & Munro, R. (1993). Qualification standards for education in teaching. Endorsed unit standard titles. Wellington: New Zealand Qualifications Authority.

Haberman, M. (2004). Star teachers: The ideology and best practice of effective teachers of diverse children and youth in poverty. Houston, TX: The Haberman Educational Foundation.

Hare, W. (2003a). The ideal of open-mindedness and its place in education. Journal of Thought, 38(2), 3-10.

Hare, W. (2003b). Is it good to be open-minded? International Journal of Applied Philosophy, 17(1), 73-87.

Hare, W. (2009). What open-mindedness requires. Skeptical Inquirer, 33(2), 36-39.

Hill, M., Cowie, B., Gilmore, A., & Smith, L. F. (2010). Preparing assessment-capable teachers: What should preservice teachers know and be able to do? Assessment Matters, 2, 6-27.

Ingvarson, L. (2002). Development of a national standards framework for the teaching profession. ACER Policy Briefs, 1st May 2002, Australian Council for Educational Research (ACEReSearch).

Kleinhenz, E., & Ingvarson, L. (2007). Standards for teaching: Theoretical underpinnings and applications. Australian Council for Educational Research.Retrieved from http://research.acer.edu.au/teaching_standards/1/

Ludlow, L. H., Enterline, S. E., & Cochran-Smith, M. (2008). Learning to teach for social justice-beliefs scale: An application of Rasch measurement principles. Measurement and Evaluation in Counselling and Development, 40(4), 194-214.

MacFarlane, A. H., Glynn, T., Grace, W., Penetito, W., & Bateman, S. (2008). Indigenous epistemology in a national curriculum framework? Ethnicities, 8(1), 102–127. 10.1177/1468796807087021

Manins, L., & Hardie, A. (2009, 28-30 September 2009). The development of inclusive education: Student teachers' perceptions. Paper presented at the meeting of Making Inclusive Education Happen: Ideas for Sustainable Change, Te Papa, Wellington.

McGrath, D. (1996). Standards in teacher education: Security, success, survival. Paper presented at the New Zealand Council for Teacher Education, Biennial Conference, Dunedin.

Ministry of Education British Columbia. (2012). Standards for the education, competence and professional conduct of educators in British Columbia. Vancouver, Canada: Ministry of Education Teacher Regulation Branch, January 2012.

New Institute of Teachers. (2005). Professional teaching standards. Sydney South, Australia: New Institute of Teachers, February 2005.

New Zealand Government. (2010). A vision for the teaching profession: Education Worforce Advisory Group Report to the Minister of Education.

New Zealand Ministry of Education. (2011). Tātaiako: Cultural competencies for teachers of Māori learners. Wellington:

New Zealand Teachers Council. (2004). Code of ethics for registered teachers. Wellington: New Zealand Teachers Council - Te Pouherenga Kaiako o Aotearoa.Retrieved from http://www.teacherscouncil.govt.nz/required/ethics/codeofethics.stm

New Zealand Teachers Council. (2007). Graduating teacher standards: Aoteaora New Zealand. Wellington: New Zealand Teacher Council - Te Pouherenga Kaiako o Aotearoa, April 2007.

Ontario College of Teachers. (2010). Foundations of professional practice. Toronto: Ontario College of Teachers.

Parr, J., & Timperley, H. (2008). Teachers, schools and using evidence: Considerations of preparedness. Assessment in Education, 15(1), 57-71.

Phelps, P. H. (2006). The dilemma of dispositions. Clearing House, 79(4), 174-178.

Phillips, D., & Burbules, N. (2000). Postpositivism and educational research. Maryland: Rowman & Littlefield.

the Queensland College of Teachers. (2009). Professional standards for Queensland teachers (graduate level): A guide for use with preservice teachers. Toowong, Queensland, Australia: The State of Queensland (Queensland College of Teachers), March 2009.

Reynolds, M. (2001). Education for inclusion, teacher education and the Teacher Training Agency Standards. Journal of In-Service Education, 27(3), 465-476. 10.1080/13674580100200164

Shulman, L. S. (1986). Those who understand: Knowledge growth in teaching. Educational Researcher, 15(2), 4-14.

Shulman, L. S. (2002). Foreword. In P. Hutchings (Ed.), Ethics of inquiry: Issues in the scholarship of teaching and learning (pp. v-viii). Menlo Park: The Carnegie Foundation for the Advancement of Teaching.

Spiegel, J. S. (2012). Open-mindedness and intellectual humility. Theory and Research in Education, 10(1), 27-38. 10.1177/1477878512437472

Teacher Registration Board of the Northern Territory. (2006). Professional standards for graduate teachers in the Northern Territory. Darwin: Northern Territory Government.

The General Teaching Council for Scotland. (2006). Standard for initial teacher education. Edinburgh, Scotland: The General Teaching Council for Scotland, December 2006.

Thrupp, M. (2006). Professional standards for teachers and teacher education: Avoiding the pitfalls. Wellington: Post Primary Association and New Zealand Educational Instuitute.Retrieved from http://img.scoop.co.nz/media/pdfs/0604/avoiding_pitfalls.pdf

Timperley, H. (2013). Learning to practise. The University of Auckland.

Timperley, H., & Alton-Lee, A. (2008). Reframing teacher professional learning: An alternative policy approach to strengthening valued outcomes for diverse learners. In G. Kelly, A. Luke, & J. Green (Eds.), Review of Research in Education (Vol. 32, pp. 328-369). Washington, DC: Sage.

Timperley, H., Wilson, A., Barrar, H., & Fung, I. (2007). Teacher professional learning and development: Best Evidence Synthesis Iteration. Wellington: Ministry of Education.Retrieved from http://www.oecd.org/education/preschoolandschool/48727127.pdf

Victorian Institute of Teaching. (2007). Standards for graduating teachers. Melbourne, Australia: The State of Victoria, Victorian Institute of Teaching.

Weinstein, R. S. (2002). Reaching higher: The power of expectations in schooling. Cambridge, MA: Harvard University Press.

Welsh Government. (2009). Qualified teacher status standards Wales. Retrieved from http://wales.gov.uk/legislation/subordinate/nonsi/educationwales/2009/3220099/?lang=en

Wheelahan, L. (2012). The problem with competency-based training. In H. Lauder, M. Young, H. Daniels, M. Balarin, & J. Lowe (Eds.), Educating for the knowledge economy? Critical perspectives (pp. 153-165). London & New York: Routledge.

Yinger, R. J., & Hendricks-Lee, M. S. (2000). The language of standards and teacher education reform. Educational Policy, 14(1), 94-106. 10.1177/0895904800014001008

Zeichner, K. M. (1993). Traditions of practice in U.S. preservice teacher education programs. Teaching and Teacher Education, 9(1), 1-13. 10.1016/0742-051x(93)90011-5