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Development of a National Standards Framework for the Teaching Profession

An Issues paper prepared for the MCEETYA Taskforce on

Teacher Quality and Educational Leadership

The views expressed in this publication are those of its author and are not necessarily those of the MCEETYA Taskforce on Teacher Quality and Educational Leadership.

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Explanatory note

This paper was prepared for the Ministerial Council on Education, Employment and Training Taskforce on Teacher Quality & Educational Leadership.

The brief for the paper was to 'Develop an issues paper to provide a basis for discussion and, where possible, propose options. The paper needs to cover the following broad areas:

Definition

How do we develop a national definition of *'Good Teaching'* and what should it include?

Structure

What should a *'National Standards Framework'* look like and what structure is desirable?

Purposes

This needs to cover how could/should a *'National Standards Framework'* be used including aspects such as:

- What are the benefits and ramifications?
- How can it cater for differences between sector/system needs?
- Could it be used to inform the selection criteria?
- How could/should it influence pre-service teacher education courses?
- How could/should it influence in-service teacher education courses?

Other implications

This needs to examine methods for assessing performance against standards, including how teacher performance can be assessed using standards in ways that are reliable, valid and productive in terms of recognition and professional development.'

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Section 1

Definitions and purposes for standards

The meaning of teaching standards

Dictionaries give two inter-related uses of the term 'standard': to *rally*, as around the banner, or flag (standard); and to *measure*.

As rallying points, standards aim to articulate core educational values that teachers seek to make manifest in their practice. Developers of professional standards will be guided by conceptions of learning and development; what they believe it means, for example, to educate a mind, to learn with understanding, and to think independently of the teacher. Standards, by definition, are statements about what is valued.

As measures, standards will not only describe what teachers need to know and be able to do to put these values into practice; they will describe how attainment of that knowledge will be assessed, and what counts as meeting the standard. A standard, in the latter sense, is the level of performance on the criterion being assessed that is considered satisfactory in terms of the purpose of the evaluation.

Teaching standards must identify the *central tasks* of teaching, and adapt to changing public expectations of schools. Some would argue that subject matter is at the core of teachers' work and that the central task of teaching is helping diverse students learn important subject matter. Other roles such as nurturer, classroom manager, role model are means to that end.

Standards also need to identify the *unique* features of what teachers know and do. One tradition of research on teaching has sought principles of good practice that apply no matter what the subject matter being taught. On the other hand, research on teaching and learning over recent years has emphasised the highly context-specific nature of teaching expertise. The content of what is being taught is a central part of the context.

Standards do not just describe current practice; they clarify what teachers should know and be able to do in the light of research and best practice. A standard points to and describes a desirable level of performance. Standards are a means of translating research into expectations for teachers' practice. Standards are not immutable; they need regular revision in the light of research and professional knowledge.

Standards clarify what teachers should get better at over the long term. Standards describe trajectories for professional development. They make manifest the idea that good teaching is something a person learns how to do over time; that good teaching is not just a bundle of personality traits. Standards confront the mindset that teaching is just a matter of personal style and doing your own thing.

Standards give warrant to the claim that teaching is a profession with the capacity to evaluate its own practice and implement professional models of accountability. Standards provide a foundation for teachers and their associations to provide leadership in their own profession.

Trends in the development of teaching standards

1. They are developed by teachers themselves through their professional associations
2. They aim to capture substantive knowledge about teaching and learning – what teachers really need to know and be able to do to promote learning of important subject matter.
3. They are performance-based. They describe what teachers should know and be able to do rather than listing courses that teachers should take in order to be awarded registration or certification.

4. They conceive of teachers' work as the application of expertise and values to non-routine tasks. Assessment strategies need to be capable of capturing teachers' reasoned judgements and what they actually do in authentic teaching situations.
5. Assessment of performance in the light of teaching standards is becoming one of the primary tools for ongoing professional learning and development.

Rationale for teaching standards

The rationale for teaching standards underpinning this issues paper is straightforward. What teachers know and do is the most important factor affecting student learning outcomes. Nothing matters more to the quality of education in our schools than the knowledge, skill and commitment of teachers. Achieving Australia's National Goals for Schooling in the Twenty-first Century (MCEETYA, 1998) will depend above all on the quality of our teachers.

Recognition that teachers matter most calls for greater emphasis on policies that directly affect the quality of teaching and teachers. These will include strategies to attract able graduates, prepare them well, retain them in teaching and promote their continuing professional development toward high professional standards. Central to the success of such strategies are improved working conditions and career paths that place greater value on teachers' work and provide greater incentives for all teachers to develop toward high levels of effectiveness.

While the primary role of a National Standards Framework will be to facilitate efforts by states, territories and the Commonwealth to meet 'intergovernmental responsibilities' and to play their complementary roles in driving, assuring and sustaining the quality of teaching in schools, research tells us over and over again that governments can not mandate what matters in educational reform.

Policy efforts focused on teacher quality must encourage the profession to develop its own capacity to define rigorous standards and assess its members' performance. Recent Commonwealth, state and territory reports and policy initiatives clearly recognise that strengthening the teaching profession in this sense is fundamental to improved student learning outcomes. A National Standards Framework calls for the creation of new structures and professional bodies through which policy makers and the profession can meet on equal terms and exercise their joint responsibility for standards in teaching.

Elmore (1996) points to the central rationale for standards in 'getting to scale' with educational reform:

> The existence of external norms is important because it institutionalises the idea that professionals are responsible for looking outward at challenging conceptions of practice in addition to looking inward at their values and competencies. (...) Without some kind of external normative structure, teachers have no incentive to think of their practice as anything other than a bunch of traits. The existence of strong external norms also has the effect of legitimating the proportion of teachers in any system who draw their ideas about teaching from a professional community and who compare themselves against a standard external to their school or community. External norms give visibility and status to those who exemplify them. (p. 319)

Purposes for teaching standards

The nature and content of teaching standards vary according to their purpose. Standards used to select entrants into teacher education programs will be different from standards used to assess the performance of teachers applying for registration. Standards used by a professional body to certify that a teacher can perform at a very high level in their specialist field will differ in important respects from standards used by an employer in making decisions about promotion or unsatisfactory performance. These in turn may not be the same as standards used by a state registration body in making decisions about whether a teacher should be deregistered. One standards framework will not fit all the purposes for which standards may be developed.

Table 1 sets out a number of different standards along a continuum that runs from entry and pre-service education to induction and later ongoing professional development. It indicates the extensive range of purposes for standards, as in any profession. Table 1 should be seen as illustrative only, rather than an accurate description of what currently happens in teaching. Not all states and territories, for example, have statutory teacher registration boards.

Explication of standards in Table 1

Selection standards for entry into teacher education programs

These may include cut-off TER scores, aptitude tests, as well as standards for pre-requisite subject matter knowledge, degrees, courses, and qualifications. Little is documented about current practice nationally or across universities. There is relatively little external monitoring of the entry standards in Australia. The Teacher Training Agency in the UK judges teacher education institutions partly in terms of the academic quality of the students they can attract. Most US states have legislation on academic entry standards. In Victoria, TER scores for teacher education entrants have been increasing steadily over recent years. It is to be hoped this trend can be sustained over the next period when larger numbers of new teachers will be needed.

Standards for tertiary qualifications in teaching

These may include standards for what *graduates* from teacher education courses should know and be able to do, such as depth of knowledge required of subject matter to be taught. It is not easy to pin down the levels of academic/subject matter/content knowledge standards required in Australia for graduation from teacher education programs across the states or from university to university.

Research on effective professional development points regularly to the beneficial effects of helping teachers to understand better the content of what they are expected to teach. This is an area that would warrant close attention in the development of a National Standards Framework.

The Teacher Training Authority (TTA) in the UK lays down specific guidelines for the subject matter to be covered in teacher education programs. In the US, the trend over the past fifteen years (eg The Holmes Group) has been to give much stronger emphasis to subject matter knowledge over general pedagogy courses. Most states now require graduates to pass their own tests of knowledge related to the subject matter they will teach, additional to, or separate from university qualifications. Many research studies indicate that the nature and depth of a teacher's understanding of what they are teaching is related to the teaching methods they can use and student learning outcomes (Darling-Hammond, 2000; Brophy, 1990).

Accreditation standards

These usually include standards for the evaluation of courses and institutions, conditions of training, staffing, school experience, teaching practice, etc. One trend is to use exit student performance as a criterion for assessing and accrediting pre-service courses. The Australian Council of Deans has developed National Standards and Guidelines for initial Teacher Education (*Preparing a Profession*, 1998) but, so far, these have not been implemented. There is no national level body for assessment and accreditation of teacher education programs equivalent to the Australian Medical Council. A recent NBEET study of accreditation across professions showed that teaching had one of the lowest levels of external professional involvement in accreditation.

Registration standards

These are standards of performance that need to be met before full entry to the profession (not just employment with one employer). In most professions registration depends on successful completion of some kind of induction or intern program. In other words, registration standards are distinct from qualification standards. With some exceptions, this has not been the usual practice in teaching. Registration has been automatic following graduation, but most states and territories are now moving away from this model, and are looking at standards and assessments to support more effective induction and mentoring programs.

Table 1
A map of professional standards and quality assurance functions

	Phase 1 **Pre-service preparation**	**Phase 2** **Induction**	**Phase 3** **Continuing professional development**
Standards relevant to each phase:	✦ *Selection standards* **Focus:** Standards for entry to teacher education programs. ✦ *Qualification standards* **Focus:** Standards for graduation from teacher education programs. eg required level of knowledge of subject matter to be taught. ✦ *Accreditation standards* **Focus:** Standards for assessing teacher preparation courses and institutions.	✦ *Registration (licensing) standards* **Focus:** Standards for performance for full entry to the profession after probationary year, or more. ✦ *Permanency (or tenure) standards* **Focus:** Employer-specific standards, where permanency still applies.	✦ *Accountability standards* **Focus:** Standards for periodic review of performance of contractual duties for retention or dismissal decisions. ✦ *Reregistration standards* **Focus:** Standards required for periodic renewal of registration. ✦ *Appraisal standards for professional development* **Focus:** Standards for self-analysis and reflection on practice. ✦ *Advanced certification standards* **Focus:** Profession-wide standards for highly accomplished practice set by a professional body. Assessment by expert peers. ✦ *Promotion standards* **Focus:** Standards for career advancement specific to an employing authority. Certification may be a prerequisite for promotion.
Relevant quality assurance mechanisms:	**Accreditation** (of pre-service education institutions) **State legislation/registration requirements**	**Registration** of new teachers	**Advanced certification** **Registration renewal**

While there are many sets of content standards for beginning teachers, all of which are similar to each other, there has been virtually no research on development of valid methods for assessing teacher performance against those standards.

Permanency standards

Where permanency still applies, the standards in this case are employer-specific standards. Usually applied during the first year or so of teaching with that employer.

Performance management or accountability standards

These refer to managerial requirements for periodic appraisal for satisfactory performance of teaching duties for retention or dismissal decisions. The foundation for these standards rests in the concept of the contract as a legal document – setting out what a teacher is hired to do. (The emphasis here is on student welfare/public safeguard – usually minimum competency type standards.)

Appraisal standards for professional development

This requires standards based on research and professional knowledge, visions of highly accomplished practice, clear dimensions of what teachers should get better at. (Although appraisal is usually to promote professional development, it has an accountability aspect in terms of expectations for keeping up with research and best practice.)

Certification standards

Certification is an endorsement by professional body that a practitioner has high standards of practice. As used in this paper, certification refers to the process by which a non-governmental agency or association recognises an individual who has met professional standards, beyond initial registration standards, set by that agency or association. Professional certification is based on assessment of performance against standards, not course completion.

By definition, certification is not a quality assurance function that government agencies or employing authorities can 'own', though it can be in their interest to encourage professional bodies to undertake responsibility for providing it.

No body currently carries out this function in Australia, although several national teacher associations are conducting research and development on standards and assessments in preparation for playing a role in this area and several others have expressed their intention to go down the same path. One of the best known example of a certification body is the National Board for Professional Teaching Standards in the US. Most state governments in the USA give recognition to NBPTS certification.

Like registration, certification is portable; it is something an individual carries with them from employer to employer, or position to position, or across school systems.

Promotion standards

Standards for career progression or promotion are specific to the employer. These are usually specified in industrial or enterprise agreements. Career progression in teaching has usually been based on selection for a position or job, rather than evidence of development toward higher standards of practice. Selection procedures aim to *predict* ability to carry out new duties or responsibilities – rather than *assess attainment* of performance standards.

Increasingly, career structures are being reformed in Australia, as in many countries, to give greater recognition to the central importance of teacher quality. This calls for standards and methods for assessing teacher performance that must meet high standards of rigour and fairness. Some school systems, such as EDWA, have contracted this task (selecting Level 3 Classroom Teachers) to private consultancy firms. Others place the responsibility with school principals, which can lead to variation from school to school in the way the standards are applied and teacher dissatisfaction, as with the recent 'threshold' reforms in England.

Each of the above purposes not only requires a different type of standard, but different methods for assessing whether the standard has been met. Virtually no research has been conducted in Australia on the reliability, validity or fairness of methods currently used to apply the standards set out in Table 1.

Table 1 is useful in raising questions about the purposes to which a National Standards Framework should be put. It is certainly unlikely that one set of standards will meet all these purposes. And, a national standards framework divorced from clarity about purpose or conceptions of use will not be worth developing.

Section 2

Defining performance-based teaching standards

Many sets of generic teaching standards have been developed. The challenge now is produce standards that will be used. Two of the most important uses for teaching standards are to build more effective methods for professional learning linked to more valid systems for assessing teacher performance.

Tools are needed that will build strong links between standards and action; otherwise standards will remain on the shelf. Assessment is an essential tool in building these links. Considerable advances have been made in recent years in standards-based performance assessment. These hold considerable promise for teacher education and professional development. These advances have come from advances in performance-based testing generally.

The point of the following discussion is to show how to build stronger links between teaching standards, performance assessment and teacher learning by moving toward a *standards-guided professional development system for teaching* (Ingvarson, 1998).

Three different kinds of standards in performance-based assessment

Three types of standards are essential in developing high quality assessments for teaching, as set out in Diagram 1.

- Content standards (defining teaching)
- Evidential standards (capturing teaching)
- Performance standards (evaluating teaching)

As Diagram 1 indicates, these standards need to be embedded in a set of core values and a guiding educational vision.

Diagram 1 aims to convey the message that teaching standards need to be seen as a set of standards, in which answers to the following questions should be provided:

- What is important about what we teach, and what is quality learning of what is taught?
- What should teachers know and be able to do to promote that kind of learning?
- What tasks should teachers perform to provide evidence of what they know and can do?
- How will that evidence be judged fairly and reliably?

Diagram 1
Performance-based teaching standards: main components

Core professional principles/values guiding educational vision

Content standards What is good teaching?	Evidential standards What evidence will we gather?	Performance standards How will we judge performance?
✦ What should teachers know and be able to do? ✦ Defining the domain of good teaching. ✦ What is the scope of teachers' work? ✦ What are we going to measure?	✦ What rules will we use to gather evidence of practice? ✦ Capturing good teaching. ✦ What tasks should teachers be expected to perform? ✦ How are we going to measure it?	✦ What level of performance meets the purpose? ✦ How good is good enough? Where do we get the standard? ✦ How will we discriminate between good and poor? ✦ How are we going to score it?

Professional principles

These are foundational values that underpin more detailed descriptions of teachers' work set out in the standards. They are core propositions setting out in general terms what all teachers should know and be able to do, regardless of the level or specialist field in which they teach. It is more common now to find core principles and values included with recent sets of standards in Australia, such as those produced by Queensland and WA.

> [The National Board for Professional Teaching Standards (NBPTS) for example, began by spelling out, after long debate, a set of core propositions for teaching:
>
> 1. Teachers are committed to students and their learning.
> 2. Teachers know the subjects they teach and how to teach those subjects to students.
> 3. Teachers are responsible for managing and monitoring student learning.
> 4 Teachers think systematically about their practice and learn from experience.
> 5. Teachers are members of learning communities.
>
> (Each of these generic core propositions is elaborated on in considerable detail.)
>
> When the NBPTS appoints standards committees for particular fields of teaching, such as early childhood or high school maths, it asks them to develop subject and level specific standards that:
>
> - reflect these five core propositions;
> - identify the specific knowledge, skills, and dispositions that support accomplished practice in their field, while emphasising the holistic nature of teaching; and
> - show how a teacher's professional judgment is reflected in observable actions; and describe how the standards come to life in different settings.]

Content standards (Defining good teaching)

Content standards refer to what teachers should know and be able to do in particular fields of teaching. 'Content' as used here does not just mean knowledge of subject matter. Developing content standards is best thought of as trying to define good teaching. Content standards describe the scope and content of teachers' work. They set out the main areas of a teacher's responsibilities and provide elaborations what each standard means in terms of teacher knowledge and practice.

Content standards contain statements at varying levels of specificity, as set out in Table 2. At Level 1, statements are common to all teachers, as are most categories at Level 2 (eg 'Assessment of student progress', or 'Reflective practice'). However, standards also need to indicate what is unique about what teachers should know and be able to do, in the context of particular areas of the curriculum and levels of schooling, if they are to be useful for PD or assessment. Table 2 indicates that the debate about whether standards should be generic or specific is, in reality, a non-debate. (Examples are drawn from the ASTA Professional Standards) It's a matter of the level at which statements are being made about teaching.

Validity of Content standards

Content validity refers to whether teachers who implement a particular set of standards actually do provide higher quality opportunities for students to learn than those who do not. Validity refers to whether the standards identify correctly the knowledge, skills and attitudes that lead to highly accomplished teaching.

For example, it is clear from several research studies on professional development that when primary teachers gain a deeper understanding of how students learn the content they are teaching they become more effective, and it shows up in improved student learning outcomes. A well-known example is a series of studies by a University of Wisconsin team in which teachers are provided with research-based knowledge about the development of children's mathematical concept and thinking in number (Carpenter, et al. 1996; Kennedy, 1998).

In other words, the Wisconsin study indicates that there can be links between certain kinds of teacher learning, classroom practice and quality student learning outcomes. Teachers who deepen their understanding of how conceptual development takes place in number, and who gain skills in how to trace that growth in their students, become more effective mathematics teachers.

Table 2
Developing standards: levels of statements about teaching

	Definitions	Examples
Level 1 **Core educational values**	Statements of vision, core principles, propositions. Statements at this level are highly generalised, abstract. They aim to capture the deeper, long term *educational values* and purposes that teachers pursue, but are not intended to be used to assess performance.	'Our Australian society is shaped by the natural environment in which we live; the natural environment in which we live is shaped by our society. The nature of our future society is therefore dependent on the extent to which our citizens understand and appreciate these interactions. At the heart of this is students becoming engaged with science, both attitudinally and intellectually.' (ASTA Standards: Vision statement)
Level 2 **Organising categories**	These statements define the main *categories* of accomplished teachers' work and of the knowledge base of teaching. Most of these categories are 'generic', but some core categories need to spell out what is unique about what teachers do in respective fields of teaching. (eg. an early childhood teacher should show how they help students learn to read)	***Highly accomplished teachers of science (Standards 6-8)*** 6. engage students in generating, constructing and testing scientific knowledge by collecting and analysing evidence. 7. continually look for and implement ways to extend students' understanding of the major ideas of science. 8. develop in students the confidence and ability to use scientific knowledge to make decisions about their personal lives and about wider issues that involve science. (Extract from summary of ASTA Standards)
Level 3 **Subject and level-specific statements**	Statements at this level are elaborations of the Level 2 categories. They describe *what* teachers need to show they can do in particular fields of teaching, without specifying *how* they must do it. Level 3 statements should be useful in making judgments about a teacher's performance. They point to elements of *observable*, appropriate behaviour, but transcend reference to specific practices.	❖ Highly accomplished teachers of science guide their students in active inquiry that leads students to observe and measure phenomena, record data and reach tentative conclusions consistent with data collected. ❖ Accomplished teachers are aware of common conceptual difficulties or misconceptions on certain science topics, which they readily recognise in their students, and deal with. (Extracts from elaborations of ASTA Standards)
Level 4 **Statements about specific strategies or styles**	These are statements that describe specific teacher actions or teaching styles. Not useful as a basis for writing standards as they lead to an overload of detail. Also invalid, as there is no one best way to teach.	❖ Accomplished teachers use concept maps to elicit students' conceptions of heat and temperature. ❖ Accomplished teachers use advance organisers to start lessons.

What role should this kind of knowledge have in the development of teaching standards? Is it the kind of knowledge that the teaching profession should come to expect its members to keep up with? Is it the kind of knowledge that should find its way into teaching standards?

It is not likely to be the kind of knowledge that would readily find its way into generic standards about teaching. Nor can its possession be assessed by methods other than those that can probe a teacher's reasoning about their practice and be used by carefully trained assessors who are experts in the same field of teaching.

The challenge for developers of standards is to write statements that can capture this kind of professional knowledge about effective teaching practices in specific fields of teaching. A standard that simply says 'teachers should use a range of teaching strategies' does not take us very far. Standards need to accurately represent what teachers need to know and be able to do provide effective, appropriate, timely learning opportunities for students – in the specific areas of the curriculum they are teaching. Otherwise standards will devalue, oversimplify and underspecify the professional knowledge of good teachers know and what it takes to teach well.

Standards high on content validity excite teachers, as they can see the value that is placed on what they know and do. Early childhood teachers, for example, gain considerable satisfaction on reading the NBPTS Early Childhood Standards, as they see at last something that portrays their work in educational terms and legitimates their expertise.

Box 1 shows a small extract from one of the NBPTS Social Studies-History standards. Social studies teachers can find something challenging here that goes to the heart of what they are trying to do. The extract also shows how a standard can describe what a teacher should be able to show they can do, without prescribing how they should do it. These standards do not standardise practice.

Standards that describe what an early childhood teacher should be able to do will be different from those for an accomplished high school social studies teacher. Reverse the settings for these teachers and they will readily feel de-skilled. The extent to which their professional capabilities differ quickly becomes apparent. Generic standards have difficulty picking up these differences.

To be valid, standards must be sensitive to these differences in what teachers are expected to know and be able to do in different subjects and at different levels. The same applies to assessors. They need to be teachers who are knowledgeable and experienced in the same field as the teachers they are assessing.

Deep subject matter knowledge is a necessary, though not sufficient, condition for teachers to be effective. Expert teachers not only know their subject matter; they understand the education potential in their subject matter. They also know many ways to help someone learn that subject matter. Content standards also need to capture what is unique about teachers in different fields need to know and be able to do.

> [It is increasingly common to find professional teaching standards bodies in the US adopting the stance taken by the Connecticut State Board of Education. Connecticut's quality assurance framework, its Common Core of Teaching (CCT), sets out a comprehensive set of performance standards for use during teacher education, induction and ongoing professional growth phases. The CCT is made up of two parts:

Box 1

Extract from NBPTS
Social Studies-History standards
Standard VI Civic Competence

...Accomplished SS/History teachers also recognise the critical importance of civil public discourse in the civic life of the nation and work with students to practice and model the skills necessary to be effective participants in such public conversations

...They encourage students to consult a variety of sources for information about the topic in hand. They teach students to construct informed positions on public issues, to express their positions orally and in writing...They help students understand the role of dissent and civil disobedience in the life of the community.

> '(1) foundational skills and competencies that are common to all teachers from kindergarten to year 12; and (2) discipline-based professional standards that represent the knowledge skills and competencies that are unique for teachers of elementary education, English Language arts, history/social studies, mathematics, music, physical education, science, special education, visual arts, and world languages.']

Another example of this trend is the US Interstate New Teacher Assessment and Support Consortium (INTASC) (www.ccsso.org). Box 2 gives a brief profile of INTASC.

Procedural validity: Procedural validity refers to the process by which a set of professional standards is developed. Criteria for procedural validity include:

- the integrity and independence of the body responsible for developing the standards;
- that the standards developing body is composed primarily of those who are already highly accomplished practitioners;
- that the diversity of perspectives in the profession is represented;
- that the process of defining the standards is developed on a sound scientific basis and that the process of developing the standards be formally documented; and
- that a wide sampling of agreement is sought for the standards from the major professional groups regarding the appropriateness and level of standards.

The process by which a set of standards is developed will be a critical issue, not only for the validity of the assessment procedures, but also for their legal defensibility. Procedural validity calls for professional standards bodies that are genuinely independent and can act without fear or favour. Standards developed recently in the UK for assessing over 200 000 teachers at the 'threshold' (top of the salary scale) lacked procedural validity (Ingvarson, 2001).

Box 2

INTASC is a major national program for the development of a national standards framework for initial teacher registration. It was set up and funded in 1987 by the Council of Chief State School Officers (a body vaguely equivalent to AESOC in Australia) to facilitate collaboration among states in the development of standards for licensing new teachers.

INTASC began its work by articulating ten 'common core' principles that delineate the common core of knowledge, dispositions and performances necessary for a learner-centred approach to teaching. Each principle was then described further in terms of underlying knowledge, dispositions, and performance skills expected of all new teachers, regardless of the subjects, grade levels, or students taught.

Principles 1 and 2, for example, state:

1. The teacher understands the central concepts, tools of inquiry, and structures of the discipline(s) he or she teaches and can create learning experiences that make these aspects of subject matter meaningful for students.
2. The teacher understands how children learn and develop, and can provide learning opportunities that support their intellectual, social and personal development.

INTASC establishes subcommittees to translate these core principles into standards and performance-based assessments across the curriculum. The Mathematics Subcommittee, consisting of highly regarded teachers of mathematics, teacher educators and researchers from across the country, translated the ten Core Principles into 'Standards for Beginning Teachers of Mathematics'.

INTASC takes great pains to emphasise that the 'common core' principles are not analogous to generic or context-free teaching behaviours. Applications of these common understandings and commitments are manifested in specific contexts – defined by students, subjects, and school levels, among others. And assessments of specific teaching decisions and actions must occur in varied contexts that will require varied responses. Subject-specific pedagogical decisions, for example, need to be evaluated in the context of subject-specific standards.

Evidential standards (capturing good teaching)

As for content standards, the method we choose for assessment will also be an expression of our values and conception of teachers' work. Evidential standards are standards for ensuring that the evidence gathered about a teacher's performance reflects the intention and scope of what is in the content standards. Evidential standards seek to ensure another kind of validity; that the methods of assessment are relevant to, and representative of, what is in the standards. 'Task standards', or 'work standards' are terms that mean the same thing in the field of standards-based performance assessment.

A good way to understand the idea of evidential standards is to use the example of the decathlon, as in the Olympics. People used to argue, apparently, about who was the greatest all-round athlete. So, the concept of the all-round athlete needed definition. What should all-round athletes be able to do? After a lot of debate, one presumes, the concept was made concrete. They can run fast, jump fast, swim fast, etc, etc. In other words, the content standards were defined – the domain of what should be measured, if you were judging whether someone was a good all round athlete.

The problem of evidential or task standards is not deciding what to measure, but how to measure it. What should an athlete be asked to do to provide evidence that they are good all-round athletes? Ten events were decided upon somehow and the concept was thereby operationalised. This was seen as an appropriate sample of tasks to gauge all-round athletic ability.

Similarly, evidential standards in the assessment of teacher performance call for teachers to undertake a range of authentic teaching tasks, each providing evidence relevant to several standards.

Performance standards (evaluating good teaching)

A performance standard is the level of performance on the criterion being assessed that is considered satisfactory in terms of the purpose of the evaluation. To continue the decathlon analogy, performance standards not only specify how well an athlete must do in each event to qualify; they need to specify how well they must do across all events on the average to be rated a good all round athlete. (I don't know how they do it, but I presume they have a system for allocating points and weighting each event in reaching a final score.)

Setting performance standards, in other words, can be just as complex as developing the content standards. How good is good enough to make the cut score? This takes us into the business of having to develop scales, scoring rubrics, weight the different tasks, set the standards, identify benchmark performances and train the assessors (which won't be gone into here).

The cardinal rules for reliable and valid evaluations of teaching are: multiple, independent sources of evidence (assessment tasks); and, multiple, independent, trained assessors. The message is, don't move into teacher assessment unless you can first prove you can do it fairly and rigorously, and on a large scale. The consequences of poorly researched teacher evaluation schemes can be serious in terms of cynicism and morale.

Summary

Sykes and Plastrik (1993) provide a definition of a standard that usefully summarises the foregoing discussion.

> A standard is a *tool* for rendering appropriately *precise* the making of *judgments and decisions* in a context of *shared meanings and values.* (p. 4)

An example: Evidential validity in NBPTS assessments

How are these ideas translated into standards-based performance assessments for teachers? The most rigorous work, in terms of high stakes assessments for certification is undoubtedly that of the NBPTS. (The INTASC and ETS/PRAXIS standards and assessments are close behind.) It makes good sense to study this work closely and learn from it, as the NBPTS has drawn heavily on the best brains in the educational measurement world and conducted more research than any other body in developing

its certification system. And it is a system that continues to grow and gain credibility and recognition across the US from all sectors, from teacher unions, state governments to business and parent organisations.

Teachers applying for National Board certification are asked to complete ten separate assessment tasks (six portfolio entries and four assessment centre tasks. As in the decathlon example, these tasks aim to represent the range of abilities in the content standards. Each task provides independent evidence of performance on several standards. Every standard is assessed in several different ways.

As with the all-round athlete, we can ask, for example, 'what tasks would one expect a accomplished primary generalist teacher to perform to provide evidence that they have met the standards?' *Teachers on the National Board decided that candidates should show evidence of their teaching across the curriculum, because that is what they are expected to teach.*

Here are summaries of four of the ten tasks that teachers are asked to complete for certification as a highly accomplished primary teacher (Middle Childhood Generalist). Two are based on evidence from student work samples and two are based on video evidence.

1. Provide evidence of a unit of work, with student writing samples, in which you have developed student's writing ability over time.
2. Develop an inter-disciplinary theme and provide work samples that show how you engage students in work over time that deepens their understanding of an important idea in science.
3. Provide a videotape and commentary illustrating how you create a climate that supports students' abilities to understand perspectives other than their own.
4. Provide evidence, through a videotape, written commentary, and student work samples, of how you have helped build students' mathematical understanding.

Note how these tasks, together, sample across four main types of tasks that all teachers normally do: planning and teaching a unit of work; assessing student work; building understanding through whole class discussion; and engaging students in productive small group work. Similar examples apply across the NBPTS's 30-odd certification fields.

Each piece of evidence ('portfolio entries') must come from a different unit of work or area of the curriculum. Each task is a central part of what teachers do, or should do in the ordinary course of their work. That is, each is an *authentic* component of any classroom teachers' work, not an artificial add ons like so much material that finds its way into CVs.

The focus of the tasks differ from one certification field to another, say from a primary generalist teacher to a high school art teacher, but the type and underlying structure of the tasks stay much the same. There is a high level of comparability across the certification fields in the amount of work and the type of evidence teachers provide in applying for Board certification.

Most important, *the tasks provide evidence about what the students are doing as a result of the opportunities for learning the teacher has set up*, not only what the teacher says or does.

The National Board assessments stipulate *what* teachers are to show they can do, but, like the content standards, they are open, or non-prescriptive, about *how* they show they can do it. To illustrate, science teachers are asked to show in one of their portfolio entries that they can engage their students in analysis and interpretation of data the students have collected in a scientific investigation. That a science teacher should be able to do this in order to gain certification as accomplished is a non-negotiable, as far as the National Board is concerned. But how they choose to do this in their school context is completely up to the teacher.

Developing assessment tasks calls for considerable creativity and research. Many ideas seem promising, but do not produce evidence that can be scored reliably. Tasks have to be tailored to what is being taught, though the National Board uses a similar set of 'shells', or structure, across the certification fields, for its six portfolio entries (soon to be reduced to four). Within the common

structure, however, teachers are asked to do things that are unique to their field. Science teachers are asked to provide evidence that they can promote scientific understanding, engage students in inquiry, relate science to social issues and so on. They are not asked to do the same as an Early Childhood Generalist or high school Art teacher. The nature of the evidence asked for is different because these teachers do things that are, in significant respects, different from each other.

As a side comment, it will be seen here again how much the debate about generic vs subject-specific standards is a non-issue. When it comes down to the methods of assessing performance, teachers in different fields will be asked to provide evidence about the things they do that are unique to their field of teaching. Assessment for registration or advanced certification would be quite invalid if it did not ask teachers to show evidence, across a number of independent tasks, of how they had attained the standards in a representative sample of the curriculum areas they are supposed to be teaching.

[An ACER research team has been reviewing methods currently used in Australia for the evaluation of teaching. With few exceptions, procedures do not meet standards for reliable and valid measurement of educational personnel (eg Joint Council on Standards for Personnel Evaluation in Education, (1988). There appears to be little awareness that such standards exist. Procedures currently used in the UK for 'threshold' assessments are almost certainly legally indefensible.]

Governments do not venture into administering state or national tests of student achievement without ensuring that the necessary research and development had been conducted on the tests to ensure the above assessment standards were met, yet this happens regularly with teacher evaluation schemes, often with damaging results on morale or levels of cynicism, as happened with the Advanced Skills Teacher concept.

How are standards structured?

When standards are to be used as a basis for assessing performance, there are several further requirements that must be met. These will only be touched on here.

Coherence

Coherence refers to the overall structure of the standards and the extent to which the standards as a whole 'hang together'. Do the standards as a whole provide a coherent framework that describes the essential elements of accomplished teaching; or do they seem like a random list of disconnected criteria or competencies? Standards used to assess teacher performance need to be high on coherence. The National Board standards are underpinned by a clear framework of elements essential to accomplished performance, as are the ETS criteria for PRAXIS III (see Attachment 1).

Stages of teacher development

What are the bases for distinguishing between beginning and experienced teacher performance, between novices and experts, or between accomplished and highly accomplished? What assumptions are made about what teachers should get better at? In other words, what theory of development underpins the standards?

Performance standards need to be structured around a clear theory of development and indicators of increasing expertise. Few do this well. Many sets of standards describing stages or levels in teacher career paths simply expand the work of teachers, adding bits like 'leadership' or 'management' on to lists of competencies, rather than describing the nature and ways in which performance improves.

Attachment 2 gives an interesting glimpse into the ways in which some state governments and professional standards bodies in the US are moving toward standards-based career structures, making use of a variety of standards and performance assessment systems developed by national bodies such as the Council of Chief State School Officers (INTASC), Educational Testing Service (ETS) and the National Board for Professional Teaching Standards. Recent EBAs in states like Victoria are also moving, in principle, in this direction, basing salary more on external assessment of performance against statewide standards.

Architecture

This refers to the way that the various fields of teachers' work are designated and structured for purposes such as registration or certification. This will be an issue in the development of a National Standards Framework for Teaching, just as it was in the development of the National Curriculum Statements.

A standards framework for teachers will inevitably need to mirror the curriculum framework, and the different levels for which teachers are trained. In defining what students should know and be able to do, curriculum standards define, in part, what teachers need to know and be able to do.

Table 3 indicates the national standards framework developed by the National Board for Professional Teaching Standards. It reflects, of course, the way the American teachers on the Board wanted the fields in which they work to be mapped out. The 'Levels' reflect the way schools are organised in the US, with elementary, junior and senior high schools. And the certification fields reflect the way they organise the curriculum. A standards architecture that suits Australian education would be different. In the interests of promoting discussion, Table 4 shows a possible framework for Australia.

Table 3
NBPTS standards architecture

Certification field	Level			
	Early childhood Ages 3–8	Middle childhood Ages 7–12	Early adolescence Ages 11–15	Adolescence and young adulthood Ages 14–18+
Art				
Career and Technical Education				
English as a New Language				
English Language Arts				
Exceptional Needs				
Generalist				
Guidance and Counseling				
Health				
Library Media				
Mathematics				
Music				
Physical Education				
Science				
Social Studies – History				
World Languages other than English				

Table 4
Fields in which teachers might gain registration and certification in Australia

Registration/Certification Field	Level		
	Pre school Ages 3–5	Early and middle childhood Ages 8–12	Early adolescence and young adulthood Ages 13–18+
The Arts including Music Manual Arts Performing Arts Visual Arts			
English including English as a Second Language			
Generalist			
Health and Physical Education			
Languages other than English (LOTE)			
Library Resources			
Mathematics			
Science			
Special Needs			
Mathematics			
Student Welfare			
Studies of Society and the Environment including History Geography and Economics			
Technology			

Section 3

Teaching standards: Whose responsibility?

Table 1 (in Section 1) not only draws attention to the wide range of purposes for teaching standards. It leads to questions about the appropriate locus of authority for their development. Where does legitimate authority rest for development of standards for professional teacher evaluation and teacher accountability? On what conceptual foundation should teaching standards be based? Who has the authority, or the expertise, to develop standards for what teachers should know and be able to do? How should procedures for assessing teacher performance be developed and validated? Who should apply those procedures and how should they be trained?

Two main purposes for teacher evaluation can be distinguished in the set outlined in Table 1 above. The first is to safeguard the educational interests and welfare of students and ensure that their teachers are able to fulfil their contractual duties. This purpose is based on the undeniable requirement that teachers be well prepared and publicly accountable. Standards for this purpose are mainly generic and common to all teachers. Responsibility here rests with government and is delegated to its managers and managers of school systems. Performance management registration would seem to fall into this category.

The second purpose emphasises the complementary need to ensure that teachers continually review and improve their practices in the light of contemporary research and profession-defined standards. In most professions, responsibility for defining standards for high quality practice and promoting development toward them usually rests with professional bodies. Professional certification and registration renewal systems aim to serve this purpose. There are no examples of certification or renewal systems operating currently in Australia (although such systems are recommended, for example, in the Ramsey Report and by the MACVIT Committee).

Both purposes are unlikely to be achieved effectively without engaging the profession deeply in all phases of development and application of the standards and building a strong sense of ownership and accountability for them among teachers.

A framework of responsibilities for standards

At this point in the paper there is a need to conceptualise a framework of responsibilities for standards. Table 5 is designed to assist in this process. It is adapted from Roth (1996) and is meant to indicate the complementary responsibilities of *public* and *professional* agencies in quality assurance. Table 5 should be seen as an idealised model of the situation in the USA; it distinguishes quality control functions that would be the responsibility of public or state government bodies, such as state institutes of teaching, from those that would be undertaken by independent professional bodies. Because the US has a federal system of government, the model is more relevant to thinking about possibilities for Australia than the UK.

In Table 5, over page:

Licensing (registration) is a function of the state acting on its authority to protect and promote the general public welfare. Registration is a legal process by which the state evaluates the credentials and performance of prospective teachers to ensure they meet the standards set by the state registration agency.

Program (Course) approval is a legal process in which a state body (eg a State Board of Education) recognises the programs of an institution so that a person who successfully completes the program is eligible for provisional registration. The same body that licenses teachers usually conducts program approval. (State governments in the US are not employers of teachers.)

Table 5
Standards: State and professional functions (US)

Agency	Recognition of teacher education programs	Credentialling of individuals	Level of expertise	Participation
Public/State	Approval of programs	Licensing (registration)	Basic	Compulsory
Professional (or National)	Professional accreditation (eg. National Council for Accreditation of Teacher Education)	Professional certification (eg. National Board for Professional Teaching Standards)	Higher or specialised levels of professional practice	Voluntary (but may be designated as prerequisite by employer)

Qualifications are a function of agencies such as universities and other recognised institutions and providers, which attest that an individual has successfully completed a course of study.

Certification is the process by which a non-governmental agency or professional association recognises an individual who has met professional standards set by that agency or association. The National Board for Professional Teaching Standards performs the certification function to acknowledge members who demonstrate advanced capabilities.

Accreditation of teacher education institutions is conducted at the national level by an independent professional body, the National Council for the Accreditation of Teacher Education (NCATE). NCATE is a coalition of educational organisations and is recognised by the US Department of Education to provide the profession's stamp of approval to teacher education institutions.

Table 6 shows what we get when this framework is applied to the current situation in the medical profession in Australia (and NZ).

State and Territory Ministers of Health and their State Medical (Registration) Boards established the Australian Medical Council as an incorporated body in 1985. Since then it has played an increasingly important role in quality not only in accreditation, but in the development of uniform registration standards and latterly in decisions about recognition of new specialist colleges.

As defined here, the term 'accreditation' necessarily involves independent assessment. (The expression 'self-accrediting', as has been used with reference to universities, seems to be a contradiction in terms.)

Table 6
Standards: State and professional (National) functions
The case of the medical profession in Australia

Agency	Recognition of medical education programs	Credentialling of individuals	Level of expertise	Participation
State	(Approval of intern programs only)	State Medical Practitioner Boards	Minimum	Compulsory
National	Australian Medical Council (Est. by State Ministers of Health, 1985)	Specialist Colleges (Professional certification)	Higher or specialised levels of professional practice	Voluntary (but may be designated as prerequisite by employer)

The Australian Medical Council (Incorporated)

Extracts from the AMC constitution (Nov. 1992)

The Australian Medical Council (AMC) was established in 1985 as a result of a decision of the Australian Health Ministers and given the following functions:

1. To advise and make recommendations to the State and Territory Medical (Registration) Boards in relation to:
   (a) the accreditation of medical schools and of courses leading to basic medical qualifications;
   (b) assessment of the suitability for practice in Australia of overseas trained medical practitioners; and
   (c) uniform approaches to registration.
2. To maintain a national compendium of the medical registers of all Australian states and territories.
3. To provide advice to the Australian Health Ministers Advisory Committee on matters concerning the occupational regulation of medical practitioners, including general and specialist registration.

A graduate of a medical course accredited by the AMC is eligible for registration as a medical practitioner in any state or territory of Australia. By assessing the medical schools, the AMC is able to assure the medical registration boards that a medical school's educational program satisfies agreed national guidelines for basic medical education.

Responsibility for developing standards in Australia?

Table 7 was developed to facilitate further MCEETYA discussion about future responsibilities for developing and applying teaching standards. The positioning of the Xs is purely conjectural, though most seem to fall into boxes fairly readily. State bodies like the Queensland and SA Boards clearly have statutory responsibility for many of the listed purposes (and others). No body has responsibility for certification. The function does not exist as yet in teaching. It is hoped the table may assist MCEETYA discussion.

Table 7
Who should be responsible for setting standards in teaching?

Purpose	State government statutory bodies: eg. SA/QBTR Vic/NSW Institute of Teaching	Employing authorities/ EBAs	Professional (national) bodies	Universities
Promotion		X		
Advanced Certification			X	
Registration Renewal	X			
Performance Management		X		
Full Registration	X			
Provisional Registration	X			
Graduation/Qualifications	X			X
Accreditation of teacher education programs	X			X
Subject matter background standards for graduation	X			X
Entry standards to teacher education	X			X

Section 4

A National Standards Framework: Issues and areas for action

The brief for this paper was to explore issues involved in developing a National Standards Framework for teaching and to suggest areas for action. The final section of this paper is organised around three key issues that will need to be addressed in developing a national framework.

Four areas for MCEETYA action are suggested, each of which has the potential to enhance policy efforts by State, Territory and Commonwealth Ministers to assure and sustain the quality of teaching in schools.

Key issues

1. **Purposes**

   What purposes should a standards framework serve? What kinds of standards development efforts at the national level could serve the interests of government?

2. **Structure**

   How should standards frameworks be structured to reflect adequately the commonalities and diversity in what effective teachers need to know and be able to do? How can a framework incorporate the different fields and levels within which teachers need preparation and professional development?

3. **Implementation**

   How should a standards framework be developed? What structures are needed? Who should be involved in developing and applying performance standards?

Purposes

In developing national standards frameworks, it is recommended that the taskforce give priority to the following purposes:

1. Accreditation of initial teacher education programs
2. Assuring beginning teachers have relevant content and academic qualifications
3. Registration, for decisions about full entry to the profession
3. Certification, to promote and recognise evidence of professional development.

A number of purposes for a National Standards Framework were mapped out earlier in this paper. The most central purposes for standards in any profession are registration, accreditation and certification. These basic quality assurance mechanisms are recommended for attention because they cross sectors and employing authorities. They are not specific to schools or school systems. Responsibilities and methods for carrying out these functions lie outside the local enterprise bargaining. Professional standards, by definition, are profession wide, and registration and certification, as endorsements that practitioners have attained those capacities, are portable qualifications.

Individual employing authorities will have their own school or system-specific purposes for teacher evaluation, such as making decisions about permanency, annual performance review, promotion and unsatisfactory performance. And they may decide to draw on and adapt a national framework in carrying out these purposes. But the primary locus of authority over registration and accreditation rests constitutionally with state governments and Ministers, across all regulated professions. Ministers establish state professional standards bodies, not professions, not employers, and they do that when public welfare and safety need to be guaranteed.

Whereas registration and accreditation go hand in hand, certification is a different kind of animal. As a voluntary process of performance assessment against profession wide standards, it is not a function that governments or their agencies can claim to 'own', only something they can decide whether to sponsor and recognise, or not. Certification is common to many professions, but not teaching. It would be unrealistic to expect all employing authorities to give recognition from the start to certification by a national professional body. It may meet the needs of some states and employers and not others. Recognition would only grow as its credibility and utility grew.

Structure

Throughout the following discussion it is recommended that the structure for a national standards framework should be made up of a common core set of professional values and standards, with elaborations of what those standards mean across specific levels and fields of teaching, as outlined earlier in Section 2 (also see Tables 3 & 4). This should be a guiding principle.

Implementation

There would be many ways to implement these proposals. It would be inappropriate to go into precise details here. This would be the business of professional standards committees to decide.

AREAS FOR ACTION

1. Accreditation of teacher education

Explore the feasibility of establishing an Australian Education Council whose main function will be to operate a national system for the assessment and accreditation of initial teacher education programs

While assessment and approval of teacher education programs is a state responsibility, it is believed this is an area where there would be many advantages to inter-governmental efforts by Ministers to establish a national agency to carry out, on their behalf, a rigorous independent accreditation function. Current accreditation systems for professional education generally in Australia are weak in their capacity to shape university programs (Cameron, 2001).

The importance of independence, expertise and distance in accreditation procedures can not be over-estimated. There can be no denying that those responsible for professional education programs should be accountable for ensuring that graduates meet the performance standards required by state governments and their registration boards.

The Australian Medical Council represents a relatively effective working model for the MCEETYA Taskforce – and a useful precedent. The AMC derives its authority from legislation in each state and territory. Health Ministers have established uniform minimum requirements for initial registration as a medical practitioner and the purpose of accreditation is to ensure that programs are producing graduates who meet those standards of performance. The primary function of the AMC is 'to advise and make recommendations to the State and Territory Medical Boards in relation to the accreditation of Australian (and New Zealand) medical schools and of courses conducted by those schools leading to basic medical qualifications.'

There is no equivalent quality assurance mechanism in teacher education. In the optimal situation, registration and accreditation can be powerful, interlocking functions, especially with a move to outcomes or performance based accreditation. Standards for registration, in the full sense defined above, can help to reshape preparation programs regularly in the light of research and the demands of practice. With few exceptions, current course approval arrangements for teacher education at state and territory level lack the capacity and resources to do this.

A national agency for accreditation would bring highly regarded teachers and teacher educators together from across the country with representatives of Ministers and

employing authorities. Panels of assessors used by the AMC must include experts in medical education and come from other states, thus increasing the independence and reliability of the assessment. A national accreditation agency would lead to greater cross-fertilisation of ideas from research and best practice in teacher education. National teacher associations could also play a more significant role in developing guidelines and on assessment panels as well, as they do in NCATE accreditation in the US.

The total number of universities preparing teachers across Australia would not be too large for a body equivalent to the AMC to cope with. And no state has enough universities to warrant a separate accreditation body for that state alone. Some states and territories have only one university and questions about capacity for penetrating and independent evaluations must arise.

There would be considerable economies of scale with a national body. Arguments for a national accreditation agency are reinforced by the fact that graduates are also more likely to move interstate than in the past.

The ACDE report *Preparing a Profession* (1998) provides useful guidelines for accreditation that an Australian Educational Council could draw upon. More emphasis should be given, however, to evidence of performance outcomes in the guidelines, consistent with trends in professional education generally.

A National Standards Framework setting out expectations for teacher education programs would have a very valuable role to play in promoting teacher quality. The idea of an Australian Educational Council along the lines of the AMC deserves consideration. It would seem to have the capacity to enhance the role that Ministers can play in assuring the quality of preparation for entrants to the profession.

Rigorous accreditation procedures will cost more, but some researchers argue that the costs of not doing it well are even greater in the long term (Darling-Hammond and Sclan, 1996). Costs would be shared between state and Commonwealth governments and universities. (Universities wanting NCATE accreditation in the US have to cover the costs.)

2. Content and Qualification Standards

(a) Explore the potential for a national framework of standards explicating the levels of content knowledge that graduates need to teach in the fields for which they are being prepared.

(b) Look at the feasibility of developing methods for assessing that knowledge that will be useful for universities and state registration bodies

Variation in student learning outcomes is attributable, more that anything else in the school system, to variations in what their teachers know and can do. And this variation in the quality of learning opportunities that teachers can provide is attributable in large part to variations in the beliefs and understanding they have about the content of what they are teaching and how students learn that content, what ever that content is. This is a necessary condition for effective pedagogy.

Some relevant findings from recent research on teacher education:

- Teacher education is more effective when it is embedded in the specific content of the curriculum that is to be taught;
- Student teachers need extended opportunities to deepen their own understanding of the subject matter and skill that they will be expected to teach;
- Student teachers need to deepen their understanding of how students learn the content; and
- Student teachers need to develop various ways of representing and conveying that content in teaching.

It may be no accident that some of the most effective professional development programs for experienced teachers, for example, in literacy and numeracy, owe their success to the fact that they have these essential characteristics. Teachers on these programs sometimes ask 'why wasn't I taught this in my B.Ed?' The recent appearance of omnibus P–10 teacher education programs, sometimes

containing no more than one semester courses in a couple of content areas like mathematics and English over four years, gives cause for some concern.

Action

1. ***Initiate a study to examine the utility to state and territory registration bodies of a nationally agreed framework of subject matter background qualifications necessary for registration across levels and fields of teaching***

The NSW Review of Teacher Education (p.153) provides one example of such a framework. (Victoria is currently conducting a review of the qualifications that should be required of graduates in specific fields of teaching.) The framework would aim to provide a guide to the nature and levels of content and subject matter knowledge that graduates need in each registration field to perform their teaching duties effectively. This is not necessarily equivalent to familiarity with a given state's curriculum standards framework.

2. ***Such a study should also examine recent developments in methods for assessing content and content-specific pedagogical knowledge for their utility to state and territory registration bodies and universities***

New methods for assessing pedagogical content knowledge are emerging. These have the potential to be valuable instruments for promoting learning relevant to professional standards as well. They focus, for example, on tasks that beginning teachers should be able to perform to engage student actively with the content they are learning.

Consideration could be given to establishing a short-term pilot project to develop and trial some of these assessment methods. Developing these standards and assessments could become one of the ongoing functions of an Australian Education Council, acting on the advice of State and Territory Ministers and Registration Boards (or their equivalent).

3. Performance-based assessments for registration

Explore the feasibility and utility of a major national research project to develop performance standards for entry to the profession

All states and territories have standards and systems for meeting their responsibilities to ensure that entrants to the profession are competent to practice. What role might a National Framework play in enhancing these efforts? What service might it provide?

Action

The minimalist position

There are obvious advantages in aligning standards to assist mutual recognition of people who have met standards of entry across the states and territories. But what exactly would be aligned in an exercise like this? In terms of the discussion earlier in this paper about standards, is it to be the whole standards system, which includes content, evidential and performance standards, or just the generic standards? Will it be the surface features of what is written in the content standards, or, will it to be what it takes to meet the performance standards?

If it is simply the content of what is in current sets of generic competencies that is to be aligned, it would take a reasonably intelligent person a few days to do the job – but states and territories would gain little from the exercise. In fact many have carried out this kind of exercise before. Reynolds (1992) and Dwyer (1994) have probably done the most thorough work on this kind; reviewing research on the generic tasks that beginning teachers should be able to perform. There are many examples of generic sets of standards here and overseas, and syntheses of them as well.

There is little need for any more work in this area, as there is a high level of consistency about the main elements or categories. But, as argued above, it has to be recognised that this way of developing standards has severe limitations, if the aim of content standards is to explicate what teachers really need to know to pull off these tasks successfully.

What is lacking are valid or reliable methods for assessing performance against the standards, methods or tasks, which, in themselves, are vehicles for development, self-evaluation and reflection. Such methods are possible, but they have not been developed to suit the Australian educational context.

The extended option: Make registration a process of learning, not an event

Recent reviews and reports on teacher education agree about the need to make a clear distinction between gaining a university qualification and gaining full entry to the profession. The preparation of a teacher is only just beginning at graduation. The rubber stamp days when registration was simply automatic on evidence of completion of a university program in teacher education are coming to an end. Registration increasingly means gaining a qualification and completing successfully an induction period, including a staged series of performance assessment tasks integrated with the normal work of a beginning teacher. These assessments would be designed to promote development toward meeting the entry performance standards.

Current state and territory initiatives to improve teacher quality consistently point to the importance of a period of induction and mentoring before full registration. Queensland has required a period of provisional registration for many years. The proposed Victorian Institute of Teaching, for example, will develop performance standards required for full registration. The Ramsey report (2000) does not recommend compulsory registration, but makes 'accreditation' for APT1 a necessary condition of career progression from 'graduate associate'. It recommends that the proposed NSW Institute of Teachers should,

> 'establish effective processes for the development, validation and assessment of such standards based on appropriate models of professional development.' (p. 215)

Earlier sections in this paper indicated some of the complexity involved in establishing valid performance standards systems for high stakes purposes such as registration.

The message is clear from too many half-baked teacher evaluation schemes. *Do not venture into this field of performance assessment unless there is a clear possibility of doing it well* – in ways that are professionally and publicly credible, legally defensible and psychometrically rigorous.

Action

(1) Initiate a program of research that will lead to the development of a range of standards-based performance assessments for the registration of beginning teachers.

(2) Develop assessment tasks that can be tailored to specific fields of teaching

Considerable work has been done in Australia on generic standards for beginning teachers, but less work has been done on developing methods to assess whether they have attained those standards. To reap the full benefits for teacher education and quality assurance, standards need to be linked to assessments of performance that matter, such as decisions about registration or readiness to enter the profession.

To date, little research has been done to develop rigorous methods that state education authorities might use to assess whether beginning teachers have attained these standards of performance. The reliability of current methods is open to question.

One option suggested here is to establish a national project to develop new methods for assessing beginning teacher performance. The project should, of course, be conducted in full collaboration with education authorities and teacher organisations. It should aim to provide a service that state education authorities and registration bodies can use if they choose, not impose some national system on them.

> ***Implementation: If there were a body such as the proposed AEC above, it would be appropriate for the AEC to undertake such a project. Alternatively, MCEETYA could establish a research program itself.***

The main stages in such a project would include:

- Synthesis of standards in current state and territory frameworks. Further development by national standards committees specific to particular levels of schooling and subject areas;

- Development and trialing of new methods for assessing performance for feasibility, validity, reliability;
- Developing programs for training and accrediting state-based assessors; identifying benchmarks, setting standards, weighting assessments, etc, to make the program fully operational.

The likely costs of developing a performance-based registration would be quite high. An appropriate comparison would be the costs of developing curriculum standards and assessments for students. A national project on performance-based standards would be a more efficient use of resources and expertise. Full development and implementation would take at least five years.

Once validated, the methods of assessment, and training programs in how to use them, would be made available to state education authorities, and other relevant agencies such as teacher registration bodies and teacher education institutions to adapt and use in ways relevant to the state context.

Teacher educators will use these standards and assessments to enhance the quality of their teacher education programs. Beginning teachers themselves will use the standards as a guide to their own learning and what they will be expected to know and be able to do before gaining entry to the profession.

Another, perhaps, is that courses themselves might be assessed for accreditation in terms of the extent to which they enable beginning teachers to attain the standards. This is consistent with the trend in other professions towards outcomes-based approaches to accrediting preparatory courses.

While the development of coherent and well-grounded teaching standards is not easy, the development of rigorous methods of assessing teacher performance (and the training of assessors to use them reliably) is much more complex. As mentioned above, however, valuable research and development has been done in the US and Australia is building its own capacity to do this work.

4. Performance-based certification

Establish a national system of professional certification for highly accomplished teachers

- *Develop a national standards framework for levels of practice beyond those required for entry to the profession*
- *Build performance assessments as vehicles for professional learning*
- *Support the development of professional learning infrastructure with the capacity to engage all teachers in the kinds of professional development that will help them develop toward higher standard of practice*
- *Encourage education authorities to develop incentives and recognition for teachers who gain professional certification tailored to their own needs*

Certification

Perhaps the most significant step that MCEETYA could take at this time is to sponsor a national effort to build a national certification system for highly accomplished teachers. Widespread debate about the need to reform career structures for teachers has been going on for many years. The time is ripe for action.

Implementation of the *Advanced Skills Teacher* failed for many reasons, but the need for better systems to recognise and reward good teachers and pay them what they are worth is greater than ever. The absolutely necessary condition for any lasting reforms in this area are valid standards and performance assessments.

Most state and territory employing authorities are undertaking initiatives to give greater recognition to teachers for evidence of professional development. These initiatives would only be reinforced by a national effort to build a performance-based professional certification system. Certification could be targeted most effectively at standards expected of teachers at the top of the existing salary scale for classroom teachers. Professional recognition is an area ripe for inter-governmental cooperation, economy of scale and productive links with the current efforts of the profession to provide certification.

The Level 3 Classroom Teacher initiative in WA, and the ETWR and Leading Teacher procedures in Victoria, both recognise the need for valid state-wide standards and assessments external to the school. This requirement is built into the EBA's in those states. WA even contracts out the task of assessing teacher performance for the Level 3. In Victoria the proposed VIT will provide advanced certification, assisted by 'recognised' professional associations. NSW is considering recommendations for a three-tier 'accreditation' system. Tasmania has a successful professional recognition program, which is heading toward being performance-based and the Northern Territory has its Teachers of Exemplary Practice.

The Commonwealth has given strong support to the development of professional standards through the QTP initiative and through ARC funding to assist national teacher associations to develop standards and assessments for highly accomplished teaching. The Australian Education Union also gives clear support to the idea of national certification and the Australian College of Education has played a critical role in facilitating national forums and fostering debate.

The Senate Report (1998), *A Class Act*, called for a national system for professional certification in the following terms:

> A system of professional recognition for teachers must be established which is based on the achievement of enhanced knowledge and skills and which retains teachers at the front line of student learning. Such knowledge and skills should be identified, classified and assessed according to criteria developed by expert panels drawn from the profession. Education authorities should structure remuneration accordingly. (p. 7–8)

Current initiatives across states and territories to provide incentives and recognition for good teaching indicate that a national certification system could meet a real need and provide a valuable service. Employing authorities could make a significant contribution to the quality of eduction by strengthening the market for highly accomplished teachers.

The profession is demonstrating its ability to reach a consensus on standards for highly quality teaching. These standards indicate that the profession has the capacity to lay down its own long-term goals for the professional development of its members.

A certification system provides a basis for:

- Improving the effectiveness of professional development, by clarifying what the profession expects its members to get better at with experience and establishing a standards-guided system for continuing professional learning with the capacity to engage all teachers across the profession.
- Improving career path opportunities and pay systems for classroom teachers who attain those standards.
- Providing, thereby, stronger incentives for all teachers to engage in long term professional development focused on student learning and guided by challenging profession-defined teaching standards.
- Strengthening the contribution the profession makes to leadership in teaching, accountability and quality assurance.

A national certification body for teachers should have one core function; to provide a system of standards and assessments that is credible to all parties, including the public, governments, education authorities, and teachers.

Certification standards are not competitive standards for 'super' or 'elite' teachers. They represent the profession's conception of the standards *that most qualified or registered teachers should be able to attain* over the first ten to twenty years, given appropriate opportunities for continuing professional learning.

Performance assessment for certification serves the important psychological function of providing teachers with *professional recognition* based on a rigorous assessment of the quality of their practice by respected, expert, trained peers.

A national certification system provides a *service to employers and the public* seeking valid and independent assessments about a teacher's level of professional knowledge relative to profession-wide standards. Professional certification should also be distinguished from performance management procedures that are properly the responsibility of employing authorities.

The presence of a certification system may discourage those who do not reach standards for highly accomplished practice after ten to fifteen years from remaining in the profession.

A standards-based professional development system linked to certification is complementary to, not a replacement for, the in-service education that employers should provide to support the implementation of changes and reforms they have initiated. That, properly, should remain the responsibility of employers, but, as in any profession, employing authorities can not and should not be expected to take responsibility for all professional development. But, as in any profession, professional development is more than keeping up with policy changes made by governments and employing authorities.

Professional certification and registration need to be carefully distinguished. They serve different functions and are normally carried out by different agencies. Registration in regulated occupations is compulsory and, properly, a responsibility of the state. In contrast, professional certification is voluntary and is primarily for providing endorsement that practitioners can meet high performance standards.

Moving on

The debate about a professional certification is well rehearsed and generally understood. There is widespread recognition that advantages would be gained by all from the development of a national framework for standards at the top end of highly accomplished practice, including teacher unions, state governments and the Commonwealth (QTP initiative). The hard question is how to move from where we are to a profession that actually has some real professional responsibilities, such as certification, with which it is entrusted.

A dilemma for governments is how to sponsor and encourage what amounts to the professionalisation of teaching (strengthening systems to define and apply professional standards) without undermining their own responsibilities. Tensions inevitably arise between political and professional responsibility in any attempt to establish systems for standards and professional accountability. We need a conception of professional accountability as well as ministerial accountability.

Questions have to be answered: Where does legitimate authority rest for teacher evaluation and teacher accountability? On what conceptual foundation should teaching standards be based? Who has the authority, or the expertise, to develop standards for what teachers should know and be able to do? How should procedures for assessing teacher performance be developed and validated. Who should apply those procedures and how should they be trained?

It is increasingly common to hear senior government officials say that the development of teaching standards is not their business; rather, it is something they are looking for the profession to do. There are now many more signs that this is just what the profession is willing and able to do. In 1999, four major teacher associations embarked on projects to develop advanced professional standards and performance assessments for the professional certification of highly accomplished teachers in science, mathematics and English. These projects were welcomed generally by state and territory systems. Several have supported these projects and been closely involved.

Each of these projects is now close to completing their work. The Australian Science Teachers Association has launched its 'Standards for Highly Accomplished Teachers of Science' (ASTA, 2002) and will have the capacity to offer its own certification in the next year or so.

Two issues arise from these developments:

- How can similar initiatives from other teacher associations be encouraged? Several have made it clear they want to move down the same path.
- How can these initiatives be built on and coordinated?

The 1998 Senate Report on the status of teaching conceived of a national body that would provide an umbrella organisation for the development and operation of a certification system, inclusive of all stakeholders. There would be a clear need for such a body to ensure comparability across the standards and the assessments for each certification field, if employers and unions were to give recognition. Teachers will rightly expect the standards and work required being comparable across certification fields.

Stance

No existing body has the capacity, or acceptability across the professional educational community, to undertake the role of a national professional certification body for teachers. Any serious attempt to introduce and operate a professional certification system will depend on the creation of an entirely new kind of body in Australian education.

Options

1. Basic option: Initiate a research project to review current standards and methods used by employing authorities to assess teachers for promotion, as teachers. Synthesise this work into a set of content standards for use at the local level.

Bolder options

2. Commission a national research project to develop standards and performance assessments that will be funded by and tailored to the needs of those states and territories currently considering the introduction of their own systems for advanced certification or accreditation.

3. Investigate the feasibility of establishing a new independent, expert national body with the sole function of providing an advanced certification function, separate from, but with a similar constitution to, the proposed Australian Education Council. This body should embrace all stakeholders from government, teachers' organisations, employing authorities, business and the public, but have a majority of practising classroom teachers.

4. Incorporate the certification function into the constitution of the proposed Australian Education Council. (c/f. the AMC now plays a role in relation to accrediting new specialist colleges and Commonwealth funding assists in the establishment of accreditation procedures.)

Note

Professional certification or accreditation is not necessarily a service that all employing authorities will want to use, at least not initially. This should be expected. Some states and territories appear ready to move in this direction, others have their own schemes. In fact it may be wiser to start with just one or two states and territories and build out from there to more states as the operation gains credibility. There will be a lot to learn how to establish and operate a national certification before scaling up. Rigorous research will be essential. But it will not be necessary to have total consensus before taking action in this area. Better to start small and think big, as usual.

Several recent reports on teaching and teacher education point to the need to create new independent institutions that will enable policy makers and the profession to talk on equal terms and to exercise their shared responsibility for the provision of quality conditions for student learning. Unlike most professions, teaching lacks national organisations that speak independently for the profession as a whole on matters of quality in teaching and teacher education.

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Attachment 1
PRAXIS III Standards framework (ETS)

This is an example of a coherent standards framework specifically designed for the assessment of beginning teacher performance

Domain A – Organizing Content Knowledge for Student Learning	
A1:	Becoming familiar with relevant aspects of students' background knowledge and experiences.
A2:	Articulating clear learning goals for the lesson that are appropriate for the students.
A3:	Demonstrating an understanding of the connections between the content that was learned previously, the current content, and content that remains to be learned in the future.
A4:	Creating or selecting teaching methods, learning activities, and instructional materials or other resource that are appropriate for the students and that are aligned with the goals of the lesson.
A5:	Creating or selecting evaluation strategies that are appropriate for the students and that are aligned with the goals of the lesson.

Domain B – Creating an Environment for Student Learning	
B1:	Creating a climate that promotes fairness.
B2:	Establishing and maintaining rapport with students.
B3:	Communicating challenging learning expectations to each student.
B4:	Establishing and maintaining consistent standards of classroom behaviour.
B5:	Making the physical environment as safe and conducive to learning as possible.

Domain C – Teaching for Student Learning	
C1:	Making learning goals and instructional procedures clear to students.
C2:	Making content comprehensible to students.
C3:	Encouraging students to extend their thinking.
C4:	Monitoring students' understanding of content through a variety of means, providing feedback to students to assist learning, and adjusting learning activities as the situation demands.

Domain D – Teacher Professionalism	
D1:	Reflecting on the extent to which the learning goals were met.
D2:	Demonstrating a sense of efficacy.
D3:	Building professional relationships with colleagues to share teaching insights and to coordinate learning activities for students.
D4:	Communicating with parents or guardians about student learning.

Attachment 2
A proposed State (Iowa) framework of teaching standards and career stages (for local adaption)

Teacher Category	Teaching Standard Used	Salary Level Minimum Ranges	Other Features
Accomplished	National Board Certification Administered by national professional body	Top: 2.0 x Beginning plus 15% 3-4 steps	Comprehensive review once every five years: no maximum years in category
Professional Career 3	PRAXIS III Advanced Administered locally (principal)	Top: 2.0 x Beginning 3-4 steps	Comprehensive review once every five years: no maximum years in category
Professional Career 2	PRAXIS III Proficient Administered locally (principal)	Top: 1.75 x Beginning 3-4 steps	Comprehensive review once every five years: no maximum years in category
Professional Career 1	INTASC, full professional license Administered by state standards board	Top: 1.5 x Beginning 3-4 steps	Comprehensive review once every five years: no maximum years in category
Novice	PRAXIS II Content & Professional Knowledge Test Administered by state standards board	Top: 1.2 x Beginning 2 steps only	Maximum of 5 years in category
Apprentice	Initial provisional license	Beginning Salary	Maximum of 2 years in category

NB:

The Brief (2000) for this study included:

1. 'Create a professional teacher salary schedule that links salary to levels of performance. . . Create a structure that sets out the expectation and real possibility for a teacher to be excellent.'
2. Create a linked system of standards and performance assessments using:
   - The *INTASC standards for teacher licensure* (assessment using portfolio tasks) and the Praxis II tests for content and professional knowledge.
   - The *PRAXIS III standards for career teachers* (an evaluation system that can assess teachers to four different levels:
     - Below basic
     - Basic
     - Proficient
     - Advanced
   - The *National Board Standards* for experienced, highly accomplished teaching.
3. Benchmark the new salary framework to the competitive labour market for recruiting and retaining teachers in Iowa.
4. Ensure principal licensure includes evidence of expertise in performance review.
5. Provide higher salary stages for teachers who reach high professional standards, such as National Board Certified teachers.