2006

Standards for Advanced Teaching : a review of national and international developments

Lawrence Ingvarson
Australian Council for Educational Research (ACER), lawrence.ingvarson@acer.edu.au

Elizabeth Kleinhenz
Australian Council for Educational Research (ACER), Elizabeth.Kleinhenz@acer.edu.au

STANDARDS FOR ADVANCED TEACHING
A review of national and international developments

Lawrence Ingvarson and Elizabeth Kleinhenz

August 2006

Teaching Australia

AUSTRALIAN INSTITUTE FOR TEACHING AND SCHOOL LEADERSHIP LTD

STANDARDS FOR ADVANCED TEACHING
A review of national and international developments
Lawrence Ingvarson and Elizabeth Kleinhenz

August 2006

Teaching Australia
AUSTRALIAN INSTITUTE FOR TEACHING AND SCHOOL LEADERSHIP LTD

ACER

TABLE OF CONTENTS

List of acronyms

AAMT	Australian Association of Maths Teachers
AATE	Australian Association for the Teaching of English
ABLE	American Board for Leadership in Education
ACEL	Australian Council for Educational Leaders
ADL	Assessment Development Laboratories
AESOC	Australian Education Systems Official Committee
ALEA	Australian Literacy Educators Association
APAPDC	Australian Principals Associations Professional Development Council
ASTA	Australian Science Teachers' Association
CAT	Connecticut Administrator Test
CCSSO	Council of Chief State School Officers
CPD	Continuing Professional Development
DfES	Department of Education and Skills, UK
DPA	Dutch Principal Academy
GTCS	General Teaching Council for Scotland
HAToM	Highly Accomplished Teacher of Mathematics
ISLLC	Interstate School Leaders Licensure Consortium (of the Council of Chief State School Officers, USA)
LEA	Local Education Authority
LIFT	Leadership Initiative for Transformation
MLQ	Multifactor Leadership Questionnaire
NAHT	National Association of Headteachers
NBPTS	National Board for Professional Teaching Standards
NCSL	National College for School Leadership
NPQH	National Professional Qualification for Headship
OFSTED	Office for Standards in Education, UK
SEED	Scottish Executive Education Department
SQH	Scottish Qualification for Headship
TDA	Training and Development Agency (Formerly that Teaching Training Agency, UK)

Chapter 1: Introduction

In July 2005, Teaching Australia - Australian Institute for Teaching and School Leadership, (TA) commissioned the Australian Council for Educational Research (ACER) to provide advice on current developments in relation to advanced standards for teaching, to inform and guide the Institute's continuing work on professional standards and certification.[1] ACER was asked to review national and international developments in relation to advanced standards and certification processes for teaching and to prepare a consultation paper identifying options for a national approach to the introduction and certification of advanced teaching standards.

This report provides a review of national and international developments in relation to advanced standards and certification processes for teaching. It also considers the implications of current research on teaching for the development of advanced teaching standards and related improvements in teaching and learning.

On 21-22 August 2005 the NIQTSL hosted a national conference, 'Sharing Experience: Ways Forward with Standards', in Melbourne, at which ACER presented some interim findings. This conference brought together the wide spectrum of teacher organisations and associations and other stakeholders who have been actively involved in recent years in the development of standards for school teaching. The conference demonstrated that there are significant groups of Australian teachers who have sound expertise in, and commitment to, the development of their own professional standards.

This report builds on the experience of those groups. It brings this together with the experience on standards that teachers and their organisations from overseas have gained in developing and applying their own profession-defined standards.

The Teaching Australia project on advanced standards has important links with the current work being carried out in states and nationally. It builds on the extensive work on standards already conducted in Australia, including the *National Statement from the Teaching Profession on Teacher Standards, Quality and Professionalism,* the *National Framework for Professional Standards for Teaching,* and sets of standards for accomplished teaching developed by professional associations, such as the national mathematics, English, literacy and science subject associations. The primary aim of Teaching Australia is to facilitate the development of national professional standards that will provide inspiration to aspiring teachers, guide teachers in their professional development, and increase public recognition of the complexity of what teachers do. The project will provide further opportunities for professional participation in developing profession-wide standards for teaching, and will debate how they can

---

[1] "Certification", as used in this report, refers to an endorsement by a professional body that a person has attained a specified set of standards of professional practice.

best be implemented to enhance the quality of learning opportunities for students in Australian schools.

Rationale for developing standards for accomplished teaching

One of the main reasons for establishing advanced teaching standards is to increase the effectiveness of professional preparation and development for teachers. It is primarily by engaging more teachers in more effective modes of professional learning that advanced standards can make a major contribution to improving student learning.

Many quality sets of standards for teachers have been developed in Australia, but most are specific to particular jurisdictions or employing authorities. They are not profession-wide. Teaching is almost alone among professions in this respect. Members of other professions would find it odd that governments and employing authorities have played the major role in developing standards for the teaching profession.

There are several reasons for the teaching profession to establish its own standards for teachers and school leaders.

Responsibility for the development and application of professional standards builds commitment to those standards, whereas imposition of standards leads to mere compliance. Wise policy making in education strengthens belief in the values that attract people into the profession. It recognises that commitment to students and their learning is the engine room of effective practice. The level of ownership of and commitment to professional standards within a profession will depend on the extent to which members of the profession are entrusted with their development and determination of their uses. It is the interests of all stakeholders that teachers have a strong commitment to their own standards.

Claims to professional status are more likely to be taken seriously where there is a demonstrated capacity to articulate and to measure what counts as accomplished practice. Standards are the gateway to winning greater professional self-direction. One of the most significant ways in which teachers' associations can offer leadership is through the development of advanced teaching standards. The capacity to develop standards is a necessary condition for any professional body if it is to claim a right to greater involvement in quality assurance related to professional preparation, development and certification. These are the central mechanisms for quality assurance in a profession.

Having established credibility through developing standards, a profession is well placed to play a major part in their implementation. Taking responsibility for the development and application of professional standards gives a firmer foundation for the profession to argue for quality assurance mechanisms that support professional development and emphasise professional accountability over managerial control.

The ability to define and enforce standards for practice is the defining credential of a professional body, the foundation for public credibility and trust.

The capacity to develop standards gives a profession greater say in defining the nature and scope of its work. Most commentators agree that the work of teachers has intensified in recent years, with worrying consequences for teachers' health and retention. The development of standards is a way of setting boundaries and identifying the unique and essential components of teachers' work. This draws attention to the conditions that need to be in place to enable them to meet the standards.

Responsibility for the development and application of professional standards enables the profession to play a stronger role in relating research to practice. Writers of standards must synthesise the implications of research on effective teaching practices.

Responsibility for the development and application of professional standards enables the profession to exercise more control over its professional learning. Our review of national and international literature indicates teachers have had limited say in systems for their own professional learning, compared with universities (especially in the USA) and government (as in England). The capacity to develop standards gives the profession the ability to play a stronger role in defining the long-term goals of their own professional learning. Professional standards place individuals in a more active role with respect to their professional learning. Valid standards clarify what teachers should get better at over the long term if they are to play a significant part in improving their schools and the 'quality' of learning.

Responsibility for the development and application of professional standards enables the profession to play a more significant role in providing recognition to members who meet its standards. This depends on the profession developing methods for gathering evidence of accomplishment and assessing the performance[2] of its members in ways that are regarded as professionally credible. Professional certification is one means by which the profession can offer its members a valuable portable qualification. It is a means by which the profession can offer a service to employing authorities that want to encourage effective professional learning and reward evidence of its attainment.

Approach to the review

There is a very large body of work on teaching standards in Australia and overseas, and as noted above, several examples of advanced teaching standards are now

---

[2] In this report, standards-based assessment of professional 'performance' by teachers for purposes such as professional certification should not be equated with 'performance management', which is a proper responsibility of school management and employing authorities

available. To make the review manageable, we concentrated our attention mainly on sets of standards that are actually being used widely to guide professional learning and to provide a basis for assessing high-level competence. We have included standards that are used by professional associations and employing authorities to support teachers' professional learning.

The standards developed and used by professional subject associations and other work by the teaching profession in Australia can be seen as landmark developments with significant implications for professional learning within the teaching profession. The future development of national advanced standards by teachers will undoubtedly build upon these standards.

In determining which sets of standards would be selected for intensive discussion and analysis, we decided to focus on standards that were part of a 'system' for promoting widespread engagement of teachers in standards-guided professional learning. Such systems include both advanced teaching standards and mechanisms for providing recognition to teachers who demonstrate that they meet the standards. The basic components are:

- *Standards* that describe advanced teaching and what counts as meeting the standards

- Provision of an *infrastructure for professional learning* that enables teachers to develop the attributes and capabilities embodied in the standards

- Methods for assessing and providing *professional certification* to teachers who meet the standards

- *Recognition* from school authorities for those who gain professional certification.

The systems we chose to examine in detail were:

- England and Wales: *The Performance Threshold* (Department for Education and Training England and Wales)

- Scotland: *The Chartered Teacher Award* (General Teaching Council for Scotland)

- Western Australia: *The Level 3 Classroom Teacher Position* (Department of Education Western Australia)

- USA: *The National Board for Professional Teaching Standards* (National Board for Professional Teaching Standards USA).

The review also covers other examples of advanced teaching standards, including the standards developed by the national Mathematics, English and Literacy, and Science subject associations in Australia. Discussion of these Australian examples is limited however, because, unlike the four examples selected for closer investigation, they are not as yet part of a system that includes the components noted above, although they have moved considerably in that direction recently.

The four examples were chosen mainly because each set of standards is part of such a system. They were selected also because they provided examples from different countries and because they were developed by different agencies: a ministry for education in the English case (The Performance Threshold); a teachers' council in the Scottish case (The Chartered Teacher Award); a state education system in the WA case (The Level 3 Classroom Teacher position); and a national professional body for teachers in the US case (The National Board for Professional Teaching Standards (NBPTS).

Four examples of advanced standards systems

Example 1: The Performance Threshold (England and Wales)

Experienced teachers who teach in English and Welsh government schools and who wish to access the higher levels of the salary spine can choose to demonstrate against advanced teaching standards that they have moved to a stage of highly effective practice. This is called 'crossing the Threshold'. The great majority (about 80%) of eligible teachers undertake the Performance Threshold assessment processes, and most applicants, (about 98%) are successful.

The Threshold has separate sets of standards for primary, secondary, special and 'non standard' teachers.

The assessment processes in the present round (Round 6: 2005-2006) are carried out under the authority of school governing bodies, which delegate the receipt and assessment of applications to the head teacher. Teachers complete an application form and provide evidence of competence against the standards to their principals.

In previous rounds, an external verification process was managed in England on behalf of the DfES by Cambridge Education Consultants and in Wales by a consortium of Local Education Authorities (LEAs). This has been discontinued, probably because the external verifiers agreed with almost 100% of the school decisions, and the verification process was widely criticised as a very expensive rubber stamp.

Example 2: The Chartered Teacher Award (Scotland)

The *'Standard for Chartered Teacher'* was developed under the auspices of the General Teaching Council for Scotland (GTCS) for experienced teachers who chose to undertake the professional learning necessary for the Award. Any teacher may undertake the Chartered Teacher program, provided he/she has full registration with the GTCS, has reached the top level of the salary scale, and has maintained a Continuing Professional Development (CPD) portfolio.

The aim of the *Standard for Chartered Teacher* is to provide 'the best, experienced teachers with opportunities to remain in teaching, to embrace new challenges,

improve their skills and practice and be rewarded accordingly'. It is used as a framework for a system of extensive professional learning and development.

All programs that lead to the award of Chartered Teacher must be delivered through a 'partnership' of registered providers. Providers include local education authorities, further and higher education institutions, private providers and consultants. The partners have collective responsibility for the quality of the participants' experiences and each partner has particular priorities and responsibilities.

There are now two 'routes' for achieving the Standard for Chartered Teacher status: the *'Program' Route* and the *'Accreditation' Route.* All teachers (for both routes) complete Module 1 ('Self evaluation') using guidelines developed by the GTCS. Their chosen provider, using criteria developed based on the Standard, assesses participants.

Teachers who choose the program route complete three further core modules, four option modules and one four-module or two two-module work-based projects. The registered providers of professional development (candidates may choose one or several providers) assess teacher's performance in these modules.

In addition to Module 1, candidates who choose the accreditation route are required to submit a 10,000-word portfolio and commentary showing how they have achieved and maintained the Standard for Chartered Teacher. The requirements for evidence are broad based. The process for preparing the portfolio is supported at a local level. Further guidance and assistance is provided on the GTCS website.

Chartered teachers receive a salary increase of up to £7000 per annum (approximately $A17000). Applicants are expected to cover most of the costs of undertaking the modules. This can range from £6000 (accreditation route) to £12000 (program route).

Applicants who complete the program using the program route are awarded a Masters Degree by their provider as well as Chartered Teacher status. Applicants who complete the program using the accreditation route receive the Professional Award of Chartered Teacher from the GTCS.

Example 3: The Level 3 Classroom Teacher Position (Western Australia)

We wanted to include one Australian example in this set of four. Others could have been profiled here, but we chose this one because it is arguably the most rigorous and the most interesting.

The origins of the Level 3 Classroom Teacher classification go back to the national Award Restructuring reforms of the 1990s. Its major purpose is to support the

retention of exemplary teachers in the classroom, and it is seen as providing status and recognition to teachers' commitment to professional learning. Level 3 teachers are expected to be leaders and mentors of other teachers. Their work is seen as helping to improve teaching and learning in a whole school, as well as classroom context. Any teachers can apply, not just those at the top of the scale. For those at the top of the scale the pay rise is about 10%.

The Level 3 Competencies are aligned with Phase 3 of the WA Teacher Competency Framework. Assessment is in two parts: (a) a portfolio and (b) participation in a collaborative group 'reflective review'. Trained assessors who are L3 Classroom teachers carry it out.

The WA L3 position is open to all teachers in Western Australia. Quotas apply and the assessment processes are seen as rigorous. According to those involved, there has never been a need to apply the quota because the number of successful applicants has never exceeded it.

Example 4: The National Board for Professional Teaching Standards (NBPTS) USA

The NBPTS is an independent, not-for–profit corporate body that, from the beginning, set out to have wide representation yet maintain its independence. It has a broad membership base that includes practising teachers, state governors, school administrators, teacher unions, school board leaders, college and university officials, business executives, foundations and concerned citizens.

The NBPTS sets standards in more than 30 fields. Two dimensions define most of these fields: the developmental level of the students and the subject or subjects taught.

The NBPTS Board of Directors appoints a standards committee for each certification field following a nationwide search for outstanding teachers. Separate Standards Committees have now been set up in over 30 fields of teaching. The committees are generally composed of 15 members who are broadly representative of accomplished teachers in their fields. A majority of committee members are teachers regularly engaged in teaching students in their field; other members are typically teacher educators, researchers, experts in child development, and other professionals who have expertise in the field.

The National Board also works closely with professional teaching associations committed to establishing advanced standards of knowledge and practice in their respective fields. Each standards committee is organised to represent the diversity of perspectives that characterise each field.

The NBPTS is not itself a provider of professional learning, but the introduction of National Board certification has spawned many new professional development

programs that support candidates. It is common to find universities adapting their Masters programs to assist candidates preparing for National Board Certification.

Assessment processes emphasise performance-based assessment methods that are fair, valid, consistent and reliable. Assessment Development Laboratories (ADLs), working with standards committee members, develop assessment exercises and pilot-test them with small groups of teachers. The assessment process is structured around two key activities: (1) the compilation of a teacher's portfolio of practice during the course of a school year and (2) participation in one day of assessment centre activities.

Assessors, who receive a full week's training, are mainly accomplished teachers, many of whom have Board certification.

Employers of teachers across the USA who recognise the value of NBPTS certification often contribute to the cost of teachers' completing the Certificate. Almost all states have introduced some form of recognition and reward, including substantial salary bonuses for Board certified teachers.

The Board regularly commissions evaluations and studies of its own performance. In such evaluations, teachers report that they have gained substantial professional satisfaction and a sense of enhanced professional efficacy from their experience of undertaking NBPTS certification.

Differences and similarities among the four systems

The four systems have interesting similarities and differences. These are further discussed in later sections of the report. Three systems - the *Performance Threshold,* in England, the *Standard for Chartered Teacher* in Scotland, and the *Level 3 Classroom Teacher* position in Western Australia - operate within one educational jurisdiction only, the government school system. In contrast, the *National Board for Professional Teaching* Standards (NBPTS) is a professional body that offers professional certification to teachers from all states, all local education jurisdictions and all school systems, whether public or private.

In this sense, only the NBPTS system operates *profession-wide*. In each of the four examples, teachers who show they have attained the advanced standards are offered some form of 'certification', and in some cases substantial recognition for this certification in salary terms and career advancement. National Board certification, however, is the only example of profession-awarded certification that is widely recognised and portable across educational jurisdictions and school systems.

Comparing and contrasting these four systems provides rich opportunities for identifying options for Australia. They all use different processes for developing and validating the standards and have different principles for promoting professional learning. They call upon teachers to provide different forms of evidence of meeting

the standards, and use different methods for judging whether that evidence is relevant to the standard.

The extent of practitioner involvement

One of the persistent questions we asked of each system during this review was the extent to which teachers made the core decisions about each aspect of the system – this included conceptualising the system, developing the standards, developing the methods of assessment, providing the professional support and judging the evidence for certification. In conducting the review, we have drawn on the experience of people who have been involved in operating each of these systems, especially researchers who have conducted studies on the validity of each system and its effects on professional learning for teachers.

There is no doubt that teachers played the major role in all aspects of the development and implementation of the NBPTS standards and certification system. Standards developed by employers or statutory bodies, such as those of the other three systems discussed, typically contract the expertise of an outside organisation, for example, a university, independent research body, or firm of education consultants. The DfES developed the Threshold standards with the help of Hay-McBer Consultants; Murdoch University led the initial development of the WA L3 Classroom Teacher standards; the GTSC sought the advice of various providers in the development of the Standard for Chartered Teacher. In all of these processes, practising teachers played a significant working role, but the level of participation by teachers and their professional associations in developing and operating each system varied considerably.

Guiding questions and structure of the review

The following questions guided our review of the four systems:

Standards

- Who developed the advanced standards for teaching and for what purposes?

- How were the standards developed and on what foundation?

- What is included in the standards, and how are the standards organised?

Certification and recognition

- What forms of evidence are used to determine whether the standards have been attained?

- Who provides certification for teachers who are able to demonstrate the achievement of standards of advanced practice?

- Who assesses whether the standards have been attained, and how were these people trained?

- What incentives are there for teachers to meet the standards and seek professional certification?

- What recognition is given by employing authorities to teachers who meet the standards and gain professional certification?

Infrastructure for professional learning

- How is professional learning organised to assist teachers to reach the standards?

- Who are the providers?

- How are the programs funded?

- How do the programs or activities engage teachers in professional learning?

Chapter Two defines advanced teaching standards and discusses their purposes. It examines the implications of research on teaching for the development of advanced teaching standards and investigates the relevance of these standards to improvements in the quality of teaching and learning.

Chapter Three provides an overview and brief history of standards for teachers' professional development and recognition over the past four decades. This chapter provides essential information and analysis of key issues, and a background to the investigation of current initiatives that is carried out in following chapters.

A great deal of work has been done in the development of profession-wide advanced teaching standards in Australia – more, perhaps, than in any other country apart from the USA. Chapter Four explains and explores the initiatives taken by Australian national teachers' professional associations, and the roles played by other agencies such as the Australian College of Educators (ACE) and the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA).

Chapters Five, Six and Seven focus on the four international examples of advanced teaching standards in light of the guiding questions described above. Chapter Five compares the approaches of each of these systems towards the development of standards. Chapter Six focuses on the certification and assessment processes used in the four systems to judge whether candidates have met the standards. Chapter Seven considers the four systems in terms of the opportunities they provide for teachers' professional learning. Chapter Eight identifies some of the key issues that emerged in the course of the review. With these in mind, it considers some possible implications of establishing a system of advanced profession-wide teaching standards in Australia, for students, governments, employers, and teachers. The chapter also suggests some ways in which Teaching Australia might design and implement such a system at a national level.

Chapter 2: Advanced Teaching Standards: Definitions and Purposes

This chapter reviews definitions, principles and purposes for teaching standards, with a focus on standards for advanced or highly accomplished teaching. It also reviews some recent conceptualisations of 'quality' in teaching, and their relationship to the development of standards.

The meanings of 'standard'

The *Shorter Oxford Dictionary* gives two definitions of the word 'standard':

> 1. n. Distinctive flag (often fig. of principle to which allegiance is given or asked; the royal &c-raise the – of revolt; free trade, &c) and

> 2. n. Specimen or specification by which the qualities required of something may be tested, required degree of some quality, levels reached by average specimens (attrib.) serving as test, corresponding to the – of recognised authority or prevalence.

Both definitions apply to the development of standards for teaching. In the first sense, standards articulate professional principles and values. Like the flag on ancient battlefields, they can provide a rallying point. A full set of teaching standards should provide a vision of good teaching and quality learning to guide the development of standards in the second sense.

Standards are also measures, as indicated by the second definition. They are tools we use constantly in making judgements in many areas of life and work, whether measuring length, evaluating writing, critiquing restaurants, or measuring performance. Standards provide the necessary context of shared meanings and values for fair, reliable and useful judgement. Measures are one of humankind's most powerful inventions and have been the basis for significant improvement in most areas of human endeavour.

Writers of teaching standards need to articulate a vision of quality learning that will guide their more detailed work of describing what teachers should know, believe and be able to do. Reaching a consensus is a necessary part of standards development, but it is a consensus that must be justified in terms of research and the wisdom of expert practitioners. It means that practitioners who are also developers of teaching standards must reach agreement on the scope and the content of their work and the principles that support it.

Sykes and Plastrik (1993) point out that the word 'standard', as in the second sense of a measure, carries different usages and nuances. One of these is the idea of a standard as a legally recognised unit, such as that of Greenwich Mean Time, or the Gold Standard, or the Standard Metre for length. Another is the notion of a standard as 'an authoritative or recognised exemplar of perfection', such as the

sacred books of a religious organisation. Yet another usage refers to 'a definite level of excellence, attainment, wealth or the like' such as 'standard of living', standards of health or a particular level of proficiency', as in playing the piano or conducting a hip replacement, for example (Sykes & Plastrik, 1993).

Developing teaching standards

When standards are used in assessing teaching performance, for purposes such as professional reflection, providing feedback, improving practice and certification, there are three essential steps in their development. These are:

- Defining what is to be assessed (i.e. What is advanced? What are the essential elements of good teaching?) These are often called *content* standards.

- Deciding how it will be assessed; that is, how valid evidence about practice will be gathered, and

- Identifying what counts as meeting the standard, or 'how good is good enough?' This calls for rubrics that specify, or benchmarks that exemplify, the level of performance that meets the standards.

Sykes' and Plastrik's definition of a standard (1993) as 'a tool for rendering appropriately precise the making of judgements and decisions in a context of shared meanings and values' is a useful reminder that a complete definition of standards needs all three components listed above. That is a) content standards (what are we measuring?), b) rules for gathering evidence about performance (how will we measure it?), and c) performance standards (how good is good enough and how will we judge the evidence?).

A full set of standards, therefore, points not only to what will be measured, but also to how evidence about capability and performance will be gathered, and how judgments will be made about whether the standards have been met. While *content* standards define the scope of teachers' work, *performance* standards (i.e. as described in rubrics and benchmarks) are needed to tell us about the level a teacher's performance needs to be to meet the standard. We found few examples of teaching standards in the review that were complete in this sense. Few systems reflected an understanding that a complete set of standards was necessary if fair and valid decisions were to be based on the standards, such as certification or selection.

Standards-based performance assessment as a vehicle for professional learning

It is important not to polarise standards for development and standards for assessment (Ingvarson, 1998). Learning and development depend to a considerable extent on judgements or assessments about current performance in the light of standards. This is what 'application' of standards means. Standards are useful for professional reflection and professional development to the extent that they are

useful for assessing performance. The more insightful the assessment, whether self-assessment or feedback from colleagues, the more likely it is to promote learning or improvement of performance. Improvement of performance in teaching, as for learning any skill, feeds off accurate, informative feedback about one's practice, more than uninformed praise (Joyce & Showers, 1980). We have come to understand much better how diagnostic assessment is vital to effective classroom teaching (e.g. Black, et al. 2004) – and how the process of assessment can be a vehicle for student learning. This is no less true for teaching and learning to be a better teacher.

In other words, to be useful for purposes such as professional learning, standards need to be understood as measures, as indicated by the second part of the dictionary definition above. One of the hallmarks of a profession is its demonstrated capacity to define and assess the quality of professional performance. Research on profession development for teachers has shown the vital importance of informed coaching (assessment) and feedback to the acquisition of new teaching skills (Joyce & Showers, 1980). To place value on teachers' work, it is necessary first to be able to evaluate (measure) it, within a framework of shared meanings and values.

'Advanced' teaching standards

In accordance with the first part of the dictionary definition, writers of teaching standards aim to arrive at a consensus on the principles, values and knowledge that underpin accomplished practice and guide professional relationships. By developing standards, teachers come to discover and understand the distinctive features and aspirations of their profession. Standards for teaching, understood in this sense, unite people around shared ideals and values; they encourage the recognition that there are diverse means for making these values manifest in practice.

While contexts for teaching and learning vary, the values that teachers strive for are remarkably similar across countries, cultures and religions. There is little to distinguish teaching standards developed in countries as different as Australia, Jordan, Chile, Singapore, or the USA. This is to be expected as the core nature and purposes of teachers' work are similar. Teachers' professional values and standards, by definition, are profession wide, not specific to particular jurisdictions, schools or school systems.

Standards for 'advanced' teaching are statements about the kind of teaching and learning that is highly valued in the profession. It is not possible, of course, to give precise meaning to "advanced" or accomplished teaching standards without providing a complete set of standards that includes rubrics indicating different levels of performance in relation to the standards and examples of benchmark "anchor" performances. Ultimately, teachers trained in the standards and the application scoring rubrics to evidence of practice, decide which examples of teaching represent "advanced" or "accomplished" levels of performance on those standards. Evidence from the NBPTS indicates that teachers can reach high levels of consistency in making judgments based on standards about the level of teaching performance after three to four days of training.

Few of the systems included in this review reflected an understanding of the difference between developing standards and setting standards (as in specifying what counts as evidence and what counts as meeting the "advanced" standard). Some systems, such as the English and Scottish systems, took a rather pragmatic stance - that 'advanced' reflected a level of performance that teachers at the top of the relevant salary scale might be expected to have attained. This is less than satisfactory, of course, as the meaning of advanced is left undefined or unspecified, and is usually something that is left to the discretion of the untrained individual school principal or school panel to apply. These systems usually specify that teachers must have reached the top of the incremental salary scale before being eligible to apply for levels such as 'master' or 'advanced skills teacher'.

Others, such as WA Level 3 Classroom Teacher, the NBPTS and the AAMT systems, make their certification available to all teachers, or teachers with as little as three years of classroom experience as in the NBPTS case. They take special care to develop rubrics and examples of benchmark performances that they use to train expert teachers to make reliable standards- or criterion-based assessments of performance. Ultimately, the level of performance that counts as meeting advanced standards of practice is a matter of professional judgement by teachers from the same field of teaching who have been carefully trained to apply the standards reliably and to minimise the influence of personal biases.

Purposes for standards

The brief for this review was to focus on advanced standards developed by the profession to provide a basis for assessing professional performance and thereby guiding professional learning. There are, however, other purposes for teaching standards that need to be acknowledged and distinguished from these. Employing authorities and school managers, for example, have a responsibility to monitor and evaluate teaching in schools, in the public interest. The nature and content of standards will vary according to their purposes, and the standards will be used to make different kinds of decisions. Professional standards, for example, aim to be based where possible on research. However, there are other bases on which teaching may be evaluated such as parliamentary statutes and ministerial regulations.

Most employers have developed 'standards' or criteria for purposes such as 'performance management' and annual performance reviews. The basis for teacher evaluation in performance management systems is often a legal one, in the form of duties as defined in the employment contract. These evaluations may be used in making decisions about annual bonuses or salary increments. However, as outlined in the introduction to this report, professional associations of teachers increasingly are developing their own standards to guide professional learning and to provide recognition of professional performance.

The following list provides examples of some different types of standards and their purposes:

- Standards used by employers in making periodic reviews and decisions about whether teachers are fulfilling their contractual duties. These legalistic standards would be used in dismissal or renewal decisions

- Criteria developed by employers to make selection decisions, such as whether a person is eligible for appointment to a position of responsibility in a school

- Standards developed by teacher registration bodies to use when making decisions about whether to register, de-register, or re-register teachers

- Appraisal standards developed by employers or professional bodies that teachers can use for self-analysis and reflection on practice

- Standards developed by teachers professional associations to guide professional learning

- Finally, standards developed by professional bodies for various kinds of certification, which is usually an endorsement that a member has attained a specified level of professional performance.

Two broad purposes for standards emerge from this analysis. Each serves different audiences or groups. The first group of purposes, such as performance management, is unquestionably the responsibility of employing authorities, in the interests of the public. This is based on the undeniable requirement that teachers should fulfil their contractual duties. The second is where professional bodies develop standards for the purposes of professional learning and recognition. This purpose is based on the expectation that teachers should keep up with developments in research and knowledge in their area of teaching and work toward standards for accomplished practice. The standards for these two purposes will be similar, but the audiences are different. This report focuses on the second purpose.

Links between research on teaching and the development of advanced teaching standards

Research on teacher personality and teacher effectiveness

For most of the 20th Century, education researchers sought to identify those attributes that distinguish 'advanced' or 'accomplished' teaching. Much of the early research was a fruitless attempt to identify the personality traits and attributes that distinguished effective from less effective teachers. This research tradition was thoroughly reviewed and finally put to rest by Getzels & Jackson (1963).

> It is said . . . that good teachers are friendly, cheerful, sympathetic, . . . But when this has been said, not very much that is useful has been revealed. For what conceivable human interaction . . . is not the better (for such characteristics) rather than the opposite? What is needed is not research leading to the reiteration of the self-evident but to the discovery of specific and distinctive features of teacher personality and of the effective teacher (p. 574)

Process–product research on effective teaching

The process-product approach to research on teaching, which reached its height in the mid-1970s, aimed to identify the generic features of effective teaching, with limited success. Researchers in this tradition investigated relationships between classroom processes, or teacher behaviours, and student outcomes. The research designs used in this tradition were co-relational, not causal, in the main – they could only identify those behaviours of teachers that were associated with higher achieving classes of students.

Hundreds of studies in this tradition examined the strength of association between a wide range of teacher behaviours and classroom characteristics, and student test scores. Brophy & Good, (1986) provide one of the most authoritative reviews of this research, but they are well aware of its limitations:

> One is that the causal relationships that explain linkages between teacher behaviour and student achievement are not always clear, and even when they are, process-product relationships do not translate easily into prescriptions for teaching practice. In the case of correlations between teacher behaviours and achievement, positive correlations do not necessarily indicate that the teacher behaviour should be maximised (Brophy & Good, 1986).

One danger with process-product research, as a foundation for teaching standards, is that of privileging certain teaching behaviours or "styles" (for example, wait-time, group work or advance organisers) that are not <u>necessarily</u> related to students' learning. This danger materialised in the 1980s and 1990s where some jurisdictions translated process-product research findings into checklists for classroom observation that were used in teacher appraisal. Scriven (1998) provides a damaging critique of the use of process-product research as a basis for teacher evaluation.

A further danger in attempting to establish standards based on this kind of research is that simplistic connections may be drawn between the actions of teachers and the achievements of students. Teachers vary considerably in their impact on student learning, but identifying the knowledge and practices that cause this variation is not easy. Many factors need to be taken into consideration:

> Teaching is a complex task that involves interactions with a great variety of learners in a wide range of different circumstances. It is clear there is not a single set of teacher attributes and behaviours that is universally effective for all types of students and learning environments, especially when schooling varies in many important regards across different countries. Effective teachers are people who are competent across a range of domains. (Organisation for Economic Cooperation and Development (OECD), 2005).

Conceptualising 'quality' in teaching

Fenstermacher and Richardson take up this issue in a recent conceptual paper. While cautioning against 'sliding' into the conceptual fallacy that teaching could only be said to be occurring when students were learning, they suggest that *quality teaching* might entail *successful teaching*, i.e. teaching that had caused learning to occur.

> Quality teaching could be understood as teaching that produces learning. In other words, there can indeed be a task sense of teaching, but any assertion that such teaching is *quality* teaching depends on students learning what the teacher is teaching. To keep these ideas clearly sorted, we label this sense of teaching *successful* teaching (Fenstermacher & Richardson, 2005).

But when making a judgement about quality, describing an act of teaching as 'successful' is clearly insufficient as an assessment of 'quality'. The authors point out that children could be taught to kill successfully, to lie, to cheat, but no one would describe such teaching as 'quality'. And even if the content were acceptable, such as teaching the causes of WW11 or how to calculate the mass of an electron, the teacher might beat the children, or drug them to learn. Such teaching would never attract the adjective 'quality'.

Fenstermacher and Richardson argue that *quality* teaching must include considerations not only of what is taught, but how it is taught. Such teaching may be called *good teaching*:

> Quality teaching, it appears, is about more than whether something is taught. It is also about how it is taught. Not only must the content be appropriate, proper, and aimed at some worthy purpose, the methods employed have to be morally defensible and grounded in shared conceptions of reasonableness. To sharpen the contrast with successful teaching, we will call teaching that accords with high standards for subject matter content and methods of practice 'good teaching. *Good teaching is teaching that comports with morally defensible and rationally sound principles of instructional practice. Successful teaching is teaching that yields the intended learning.* (Fenstermacher & Richardson, 2005) p.189) (our emphasis)

It would be tempting, say these writers, to conclude that 'quality teaching' is some kind of simple combination of 'good' and 'successful' teaching. But that argument is 'fraught with complexities'. For quality teaching to occur, conditions necessary to learning need to be in place:

> There is currently a considerable focus on quality teaching, much of it rooted in the presumption that the improvement of teaching is a key

element in improving student learning. We believe that this policy focus rests on a naïve conception of the relationship between teaching and learning. This conception treats the relationship as a straightforward causal connection, such that if it could be perfected, it could then be sustained under almost any conditions, including poverty, vast linguistic, racial or cultural differences, and massive differences in the opportunity factors of time, facilities, and resources. Our analysis suggests that this presumption of simple causality is more than naïve; it is wrong. (Fenstermacher & Richardson, 2005).

The writers of this paper conclude that appraisal of quality teaching is strongly interpretative and requires high levels of discernment on the part of the appraisers:

> The vital insight is that when making a judgement of quality, one is always engaged in an interpretation – in a selection of one set of factors or indices over another, in attention to some dimensions of the phenomenon over other possible dimensions, in desiring and valuing some features of the task or the achievement more than other features. (Fenstermacher & Richardson, 2005) p. 206)

The major implication of this discussion for the developers of professional teaching standards is that both standards and assessments should focus on the quality of the opportunities for learning that teachers are providing for their students. The evidence required of teachers to show that they are meeting the standards needs to include evidence of successful student learning over time that relates to conditions for learning established by the teacher in particular learning contexts. Another implication is that, while the *content* of teaching standards may be context-free, evidence of teaching performance needs to be deeply embedded in information about the context in which it is taking place before valid and fair judgements can be made about whether quality teaching and learning is taking place.

The discussion also points to the need to develop standards that describe not only teachers' actions and the kinds of behaviour they exhibit, but the reasons behind their practice, and those elements of practice, knowledge, values and ways of thinking that are most likely to result in successful student learning. Making judgements about teachers' performance in relation to standards is an activity that calls for high levels of expertise and discernment from trained judges who are knowledgeable professionals in the same teaching field.

The subject context matters: Cognitive approaches in research on teaching

A major shift in approach to research on teaching took place during the 1980s - from a focus on classroom behaviour, as in the process-product tradition, to a greater interest in how teachers' knowledge and thinking shapes their planning and actions in the classroom (Shulman, 1986; 1987). Teachers themselves became more

actively involved in this type of research than they had been in process-product research. A special interest of many researchers was in understanding the nature of "expertise' in teaching (e.g. Berliner, 1992).

Process-product research tended to ignore the subject matter context in which teaching was taking place. It turned out, for example, that teachers' knowledge and beliefs about the subject matter they were teaching had a highly significant influence on the nature and quality of their pedagogy (Stodolsky, 1988). Brophy (1991) contains a wide range of studies examining teachers' knowledge of subject matter as it related to their teaching practice, and this research tradition continues strongly, as indicated by the latest *Handbook of Research on Teaching* (Richardson, 2001).

The implications of this new research tradition for the development of teaching standards were clear. The generic teaching behaviours and competencies, based on process-product research, commonly used in the USA in the 1980s to evaluate teaching performance in many schools and education systems seriously under-represented the professional knowledge that underpinned good teaching of subject matter and skills. Generic competencies did not spell out what effective teachers know and why they do what they do.

Shulman coined the term *pedagogical content knowledge* to capture the kind of additional knowledge that expert teachers acquired that enabled them to help students learn the relevant content, whether early years literacy, numeracy or university level economics. A recent paper by Hill et al. (2005) shows how far research in this area has come in the past 20 years. Hill's work identifies the kind of knowledge of mathematics that teachers need to have in order to help students learn effectively. Her study indicates that there is a significant relationship between teachers' 'knowledge of mathematics for teaching' and students learning outcomes. Standards needed to reflect this knowledge and the reasoning that lay behind the decisions and actions of effective teacher.

The major contribution that this line of research has made to the development of teaching standards is to show how complex and sophisticated the knowledge of an effective teacher is. Lists of competencies containing items such as: 'uses a range of teaching strategies' are an inadequate representation of the expertise that good teachers bring to the classroom. Modern standards writers constantly press researchers about the latest research developments. They understand the complexity that standards must reflect if they are to be an effective guide to professional learning. This is why they, and teachers generally, tended to be dismissive, if not contemptuous, of the lists of discrete competencies and personality traits that passed for standards in the earliest versions.

The five core propositions of the NBPTS, described in Section 2 of this paper, reflect a cognitive rather than process-product research approach. These propositions continue to be widely discussed and reflected upon by teachers and educators. The NBPTS ensures that members of standards committees in the 30 plus NBPTS certification fields have access to the latest research in their areas when

they are developing and refining standards. The Board regularly commissions and disseminates research on various aspects of the standards through its website and publications. It also conducts validity studies, some of which especially in recent years have identified connections between Board certified teachers and successful student learning outcomes.

Few sets of standards for advanced teaching systematically describe the research evidence on which the standards are based. Few standards are taken through rigorous validation procedures. The NCTM teaching standards, the Praxis III standards developed by ETS and the NBPTS standards are exceptions (Dwyer, 1994). Most standards remain at the generic level rather than drilling down into field specific knowledge, values and practices. This may be because they were often developed for use by school administrators for teacher appraisal and performance management purposes. These issues are taken up in later sections of the review.

Standards as a means of building stronger links between research and practice research

How can advanced teaching standards link to improvement in the quality of teaching and learning? Standards can form a valuable bridge between research and practice. Standards writers attempt to articulate the implications of research for what effective teachers know and do. The task of defining advanced teaching standards entails a direct application of research in teaching and related fields. Standards developers are hungry for the latest research discoveries in education and fields such as psychology, child development, and the disciplines, for example, science, history or linguistics. Their task is to gather and synthesise these findings and capture them in the standards. Teachers whose practice reflects the content of research-based standards can therefore be recognised as providing students with the best possible opportunities to learn.

Historically, the take-up of research and innovation in teaching has been poor, and there has been a lack of clarity about what teachers should be expected to keep up with. This has been blamed on the uncertainty of the professional knowledge base, the absence of structures or vehicles through which it could be developed and codified, and the difficulties of achieving a research based consensus on what constitutes quality in teaching.

In recent years, great progress has been made in discovering and articulating the properties of quality teaching that promote successful student learning, especially in fields such as literacy (Louden, et al., 2005) and numeracy (Clarke, 2001). New research-based knowledge about effective teaching is increasingly finding its way into sets of professional teaching standards. In the processes of developing standards, teachers and other educationists have synthesised this knowledge with their existing experiential knowledge – knowledge based on the 'wisdom of practice'. These processes of standards development allow teachers' voices to be heard. They connect theory with hard-nosed practice, thereby highlighting the complexities of

the professional knowledge base and avoiding the shortcuts and oversimplifications of the past.

Do teachers who meet advanced teaching standards improve learning outcomes for students?

A lesson from research in education over many years is that it is dangerous and misleading to make automatic connections between any particular set of teacher behaviours and improvements in student learning outcomes. If a teacher does X, Y will not necessarily follow. 'Teaching' does not logically entail 'learning', and it is possible, if admittedly difficult, to imagine 'good' teaching occurring without students learning very well - just as it is possible for students to learn even when they are not well taught.

However, as Fenstermacher and Richardson point out in the paper discussed earlier in this chapter, it is reasonable to expect that 'quality' teaching should be successful in terms of promoting student learning, provided that other conditions for learning are in place, such as student motivation to learn. A central assumption about advanced standards is that teachers who have achieved valid standards for advanced teaching will have more students who learn successfully than teachers who have, as yet, not - and that this success may be attributed, at least in part, to the advanced knowledge and expertise of the teacher. In other words, it should be possible to demonstrate links between professional development toward advanced teaching standards and improved student learning outcomes.

There was no evidence, yet, of such a relationship in the English, Scottish or WA examples of advanced standards. The necessary research is complex and has not yet been done. Attempts have been made to assess the impact of the work of teachers who had crossed the Threshold on students performance, using test scores (Atkinson *et al.*, 2004). However, it was difficult to draw meaningful conclusions from this research because almost all teachers who apply for the Threshold 'pass', and almost all teachers who are eligible to apply for the Threshold do so.

The difficulties facing researchers who undertake research in this area cannot be underestimated. The NBPTS has long agonised over the question of whether the students of National Board Certified Teachers (NBCTs) perform better on external measures of achievement than applicants who do not gain certification. It has only been comparatively recently that the Board has been able to claim that its certification is a valid indicator of teachers who are more effective. The following examples come from some of the most recent research that has been carried out in this contentious field.

One of the best known studies is from a project by Bond, Smith, Baker & Hattie (2000), where the researchers compared samples of student work from a group of students taught by teachers who gained certification with work samples from another group taught by teachers who did not. The results of this study found that

NBCTs significantly outperformed their non NBCT colleagues on 11 out of 13 key dimensions of teaching expertise, and out performed them on all 13 measures (Bond et al., 2000).

More recently, Goldhaber and Anthony (2004) used outcomes data from standardised tests for students in the third, fourth and fifth grades in North Carolina, the state with the largest number of NBCTs in the USA. They examined data for the years 1996-1997 through 1998-1999 using multivariate analysis to compare the effects of NBCTs on student achievement in mathematics and reading with those of non-NBCTs. The students taught by the NBCTs performed better and showed more growth in performance than those taught by the non NBCTs. The researchers concluded that the NBPTS certification process is an effective means of identifying teachers of high quality (Goldhaber & Anthony, 2004).

In 2004, Vandervoort and his colleagues (Vandevoort, Amerin-Beardsley, & Berliner, 2004) compared the achievement data of the students of 35 NBCTs with those of non certified teachers in Arizona. In three quarters of the comparisons, the elementary school students of the NBCTs performed better in reading, language arts and mathematics than students of non NBCTs. The authors of this study concluded that:

> The preponderance of the evidence suggests that students of NBPCTs achieve more. ((Vandevoort et al., 2004) p.36)

Evidence that NBCTs make a major contribution to successful students' learning continues to mount. The most recent study, conducted by Linda Cavalluzo (2004), used data from a large urban school district – Miami-Dade Public Schools – to assess the contribution made by teachers' professional characteristics to student achievement in mathematics in the ninth and tenth grades. One of the strengths of the data set used was the detail regarding each student. In addition to standard demographic indicators, Cavalluzo and her colleagues were able to control for a number of indicators of student motivation and performance that might influence student achievement.

This study found that, when compared with students whose teachers had never been involved with National Board Certification, the achievements of students of NBCTS were higher:

> After taking into account differences in the characteristics of their students, such comparisons show that students who had a typical NBC teacher made the greatest gains, exceeding gains of those with similar teachers who had failed NBC or had never been involved in the process. Students with new teachers who lacked a regular state certification, and those who had teachers whose primary job assignment was not mathematics instruction made the smallest gains. (Cavalluzo, 2004), p.3).

These researchers concluded that:

> In this study, (National Board Certification) proved to be an effective signal of teacher quality. Indeed, seven of nine indicators of teacher quality that were included in the analyses resulted in appropriately signed and statistically significant evidence of their influence on student outcomes. Among these indicators, having an in-subject teacher, NBC and regular state certification in high school mathematics had the greatest effects. (Cavalluzo, 2004), p. 3)

A full list of independent research projects about the validity of the NBPT standards and certification procedures can be found at the NBPTS website. (http://www.nbpts.org/research/research_archive.cfm)

Summary

Teaching standard, by definition, are both statements about what standards developers value and measures –tools for measuring performance and achievement. A complete set of teaching standards comprises: guiding values and principles about teachers' work; descriptions of what effective teachers know, believe and do; guidelines for gathering evidence about whether the standards have been met; and rubrics or benchmarks for assessing that evidence against the standards.

In other words, a complete set of standards provides answers to the following questions:

- What is important about what we teach, and what do we consider to be quality learning of what we teach?

- What should teachers know and be able to do to promote that kind of learning?

- How do teachers provide evidence of what they know and can do?

- How will that evidence be judged fairly and reliably and what level of performance counts as meeting the standard?

The following trends are evident in the development of teaching standards

1. They are developed by teachers themselves

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

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 a primary tool for teacher education and on-going professional learning.

Many agencies in Australia and overseas have developed sets of advanced teaching standards, for a variety of purposes. Some have been developed to reflect the specific requirements of employers and school systems. Standards developed by teachers' associations in Australia and elsewhere aim to be 'profession wide'; that is, they aim to capture what highly accomplished teachers know and do no matter where they teach. Many of these associations also aim to use their standards as a basis for providing teachers who achieve advanced levels of performance with a form of recognition that has profession-wide credibility.

Chapter 3: Background: a Brief History of Standards for Professional Development and Recognition

For more than thirty years educators and policy makers in Australia and overseas have shown increasing interest in the potential of standards for strengthening the responsibility that the teaching profession exercises for teacher education and the continuing professional learning of its members. This interest flows directly from the central importance of teachers' knowledge and skill to quality learning outcomes for students. This chapter provides an overview of some of the main developments that occurred over these three decades.

The Australian School Commission

In 1973, the Interim Committee for the Australian Schools Commission called for a more active role for the teaching profession in developing standards for practice and in exercising responsibility for professional development. Their Report argued that:

> A mark of a highly skilled occupation is that those entering it should have reached a level of preparation in accordance with standards set by the practitioners themselves, and that the continuing development of members should largely be the responsibility of the profession. In such circumstances, the occupational group itself becomes the point of reference for standards and thus the source of prestige or of condemnation. There are circumstances that make teaching a particular case since the administrative hierarchy within which most teachers work is recruited largely from outstanding practitioners. However, in Australia teachers as an occupational group have had few opportunities to participate in decision-making. Their organisations have been traditionally more concerned with industrial matters, including those that affect the quality of services offered, than with the development of expertise, which has been seen as primarily the responsibility of the employer. (Interim Committee for the Australian Schools Commission, 1973).

Movement toward this Karmel vision has been slow over the past 30 years, although this has quickened recently. It is a vision of a teaching profession that takes responsibility for developing standards for teacher education and the continuing professional learning of its members. While it would not be accurate to say that the teaching profession has become "the point of reference for standards and thus the source of prestige or of condemnation" for members who attain (or fail to attain) its standards, there are definite signs of movement in this direction.

Award Restructuring

The present interest in advanced teaching standards represents the culmination of efforts by many to strengthen the relationship between professional development and career development in teaching. The first attempts to achieve this came with

award restructuring in the late 1980s that led to the concept of the Advanced Skills Teacher (AST) in the education sector (Bluer & Carmichael, 1991; Durbridge, 1991). Award restructuring at that time was a strategy for reforming "structural inefficiencies" in career paths that did little to encourage and reward evidence of continuing learning and skill development, compared with successful economies in Europe. Union leaders played a major role in shaping the way these reforms were implemented in the education industry (Burrow, 1996).

The Schools Council (National Board for Employment, Education and Training)

Many reports emerged around the late 1980s and early 1990s with a focus on teacher quality, teacher education and professional development. The Schools Council of the National Board for Employment, Education and Training produced several (for example, Schools Council: NBEET, 1990a, 1990b). There was also major concern about the decline in academic quality of students that universities were accepting into initial teacher education courses. Representatives of the broad Australian education community met at a conference in Melbourne in March 1992 to consider ways of achieving a national framework for teachers' qualifications and professional standards (National Project on the Quality of Teaching and Learning, 1992) and to consider the case for a national professional body (McRae,1992). One of the main outcomes of this conference was a proposal to establish a National Teaching Council, "governed, operated and funded by the teaching profession", which should, among other things:

- Promote systematic and collaborative professional development and improve processes for its accreditation and recognition

- Promote and recognise excellence in teaching

- Support the development of effective leadership. (p. 26)

An "Australian Teaching Council" was established in 1994 and operated briefly until 1997, failing to gain continuing support from the in-coming coalition government.

The fate of the Advanced Skills Teacher

The Advanced Skills Teacher (AST) concept found expression in a variety of forms in Australian school systems during the early 1990s, few of which were faithful to the original intention (Ingvarson & Chadbourne, 1997). The complexity of the task of developing professionally credible standards and methods for assessing performance against the standards was underestimated. Consequently, the AST concept quickly lost credibility and, with it, its capacity to invigorate and reform the professional development system for teachers (Ingvarson & Chadbourne, 1996). With a few notable exceptions, such as the Level 3 Classroom position in WA, the Advanced Skills Teacher concept of a career path in teaching, based on evidence of professional development and teacher leadership, was absorbed back into the traditional notion of career ladders based on movement out of professional practice into management hierarchies.

One of the central lessons from this period was the need to ensure a clear separation between the right and proper role of unions, in pressing for awards that provide recognition of gains in professional development, and the role of professional bodies in developing standards and valid assessment methods to indicate that those gains had taken place. This is a lesson well understood in other professions that provide advanced professional certification. Professional bodies control the certification function. Industrial bodies press for recognition of that certification for their members. Although implementation of the AST concept failed in most cases, the need for credible systems to recognise effective teachers and pay them what they were worth remained.

Overseas developments

Interest in teaching standards kept resurfacing during the 1990s. In some cases, this was because of the inspirational nature of standards that started to appear in the 1980s from teacher subject associations such as the National Council for the Teaching of Mathematics (National Council of Teachers of Mathematics, 1991) and the National Board for Professional Teaching Standards (www.nbpts.org) in the USA. The NCTM was one of the first to develop teaching standards designed to support the implementation of its demanding curriculum standards. The developers of the NCTM standards for teaching began their task with a vision of high quality learning in mathematics and then asked, "What do teachers need to know and be able to do to promote that kind of learning in their classrooms?" The result was a clearer conception of the complexity and sophistication of the knowledge and skill that underpins accomplished teaching.

This research and development work on standards also made it clearer that accomplished teaching was the outcome of a long-term process of professional learning and experience, not a bundle of personality traits. Teaching worthwhile subject matter was something teachers could get better at. It also made it clear that "it takes one to know one." Valid and useful assessments of teacher performance required teachers who taught in the same field and were up to date with research and best practice in that field. It was becoming clearer from research that the

capacity to assess teaching performance against standards, whether self- or peer-assessment, was the gateway to more useful feedback and more effective professional learning for teachers (Hawley & Valli, 1999).

The NCTM was concerned to combat the deleterious effects of trends in mathematics textbooks and testing in the 1980's on the quality of mathematics teaching. These associations were also concerned to find alternatives to counter the invalid and demeaning character of many teacher evaluation schemes in the USA. The idea of a National Board for Professional Teaching Standards also emerged in the USA in the late 1980s. It came from a broad coalition of teacher union leaders led by Al Shanker, educational administrators, academics and other stakeholders concerned about the crisis in supply and retention of able teachers, and the lack of credible mechanisms for encouraging and recognising evidence of professional development (Carnegie Taskforce on Teaching as a Profession, 1986).

Teaching standards and the defence of the profession

Interest in teaching standards internationally grew during the 1990s for other reasons as well. The teaching profession was relatively defenceless in the face of a range of reforms to school management and accountability that were perceived to be de-professionalising teachers' work. The status and attractiveness of teaching as a career was declining at the same time that evidence was steadily accumulating that a student's achievement depended significantly on the knowledge and skill of his or her teachers. It was also evident that structural reforms in school management, curriculum standards and new accountability systems were intensifying rather than supporting teachers' work. Teachers in the USA, UK and Australia reported that the new performance management and appraisal schemes appearing at this time were having little beneficial impact on their practice and were invalid as methods for assessing their performance (Chadbourne & Ingvarson, 1998). The effectiveness of a school depended most on the knowledge and skill of its teachers, yet to remain in the classroom was a low status option in the profession. Mechanisms for recognising and rewarding evidence of professional development and accomplished teaching were still poorly developed in the profession.

Concern about the status of teaching led to a Senate Inquiry into the status of teaching in the late 1990s. The recommendations that emanated from this inquiry (*A Class Act,* Senate Employment, Education and Training Committee (Crowley, 1998), had one main theme – to strengthen the profession, especially its role in the development of standards. The Senate Report called for a national system for professional standards and 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.

A strengthening professional role in standards development

The level of activity and debate about profession-wide standards accelerated in the new millennium. Teacher subject associations in English, literacy mathematics and science were successful in gaining grants from the Australian Research Council to develop advanced teaching standards and investigate methods for using those standards as a guide to professional learning and the assessment of practice (E.g. Gill, 1999; Ingvarson & Wright, 1999). This work undoubtedly lifted the self-respect and the status afforded to these associations in policy circles. At the launch of the Australian Science Teacher Association standards, for example, a senior education department administrator held up the standards and said, "We would not dare to develop standards as high as these for our school system".

Under Jim Cumming's coordination, the Australian College of Educators built on this work and orchestrated a major collaborative effort over three years in pursuit of a common and unifying approach to teaching standards. This work was brought together in a *National Statement from the Teaching Profession on Teacher Standards, Quality and Professionalism* agreed to by more than twenty teacher associations and unions in May 2003. As part of this effort, Paul Brock prepared a national discussion on standards of professional practice for accomplished teaching (Brock, 2002).

One of the main objectives of the Statement was to demonstrate the profession's collective capacity to inform and contribute to national policy in ways that complemented the work of governments and school systems. The Statement sets out a valuable list of principles to guide the development of standards by the profession. It makes the point that standards are tools for action – tools with which the profession can exercise greater responsibility for the quality of teaching and learning in schools.

Echoing the Karmel Report, the Statement indicates that the primary value of standards is to give direction to teacher education and continuing professional development. And it points out that, for this to happen on a broad scale, the profession needs to improve its capacity to assess performance against the standards and thereby provide recognition and certification to teachers who attain the standards.

> A nationally coordinated, rigorous and consistent system should be established to provide recognition to teachers who demonstrate advanced standards….The enterprise bargaining process between employers and unions will be an important mechanism for providing recognition for professional certification. All employing authorities should be encouraged to provide recognition and support for professional certification as the process comes to demonstrate its credibility and its effects on professional learning. (p. 4)

Recent developments at national, state and territory levels

Other reports on teachers and teacher education came thick and fast during the early 2000s. The broad ranging Ramsey report, *Quality Matters: Revitalising teaching: critical times, critical choices* produced for the New South Wales Department of Education was published in 2002. In providing quality opportunities for students to learn, it emphasised the fundamental dependence of government on teacher commitment to, and ownership of, professional standards. This required recognition that there was an irreducible shared responsibility between government and the profession in ensuring students received quality opportunities for learning.

> Good teaching does not come through imposed requirements but through the individual teachers' commitment to high professional standards. The important changes needed in teaching are those that teachers must make for themselves. They are not changes that governments can mandate or unions can achieve through their industrial activities. (The way) to revitalize teaching is to make it possible for teachers to draw on the deep well of their own professionalism. (Ramsey, 2002).

Among its many recommendations, the Ramsey report gave prominence to the introduction of a voluntary certification system for teachers at four career levels, based on a framework of teaching standards. This theme was taken up strongly once more in the recommendations of the Review of Teaching and Teacher Education *Australia's Teachers: Australia's Future* (Department of Education Science and Training, 2003), one of the most comprehensive reviews on the subject ever undertaken in Australia. Based on widespread consultation and research, the review recommended that:

- national standards for different career stages should continue to be developed by the profession;

- recognition, including remuneration, for accomplished teachers who perform at advanced professional standards and work levels be increased significantly;

- a national, credible, transparent and consistent approach to assessing teaching standards be developed by the teaching profession with support from government; and that

- teacher career progression and salary advancement reflect objectively assessed performance as a teaching professional.

The work of state teacher registration bodies in relation to standards.

While several Australian states have required teachers to be registered with a registration authority since, at least, the 1970s, major developments in the area of teacher registration and standards development have occurred in recent years. Over the past decade, most Australian state education authorities have strengthened the legislation related to existing registration authorities or established new

authorities. The new bodies include Institutes and Colleges of teaching with remits to promote the professional interests of teachers and protect the interests of the community. The Victorian Institute of Teaching, for example, is the statutory authority for the regulation and promotion of the teaching profession in Victoria. It was established by an Act of Parliament in 2001 and its functions are typical of these authorities. These functions include:

- Registration to ensure only qualified teachers are employed in Victorian schools

- Promotion of the profession of teaching to the wider community

- Procedures for renewal of registration

- Working with teachers to develop standards of professional practice

- Supporting teachers in their first year of teaching with a structured induction program

- Approving and accrediting pre-service teacher education courses that prepare teachers

- Investigation on instances of serious misconduct, serious incompetence or lack of fitness to teach.

While the respective legislation is different in different states, each registration body has been given the power and responsibility to register teachers who are employed, or who seek employment, in the public and private education sectors. Registration is based on professional standards established by each body. In 2005 these bodies came together to form the "Australian Forum of Teacher Registration and Accreditation Agencies" (AFTRAA), which gained official recognition from MCEETYA in 2006. Mutual recognition arrangements are emerging among AFTRAA members, so that a teacher registered in one state or territory should be eligible to teach in other states or territories.

Here in brief, are the current arrangements for registration and advanced standards in each state:

New South Wales

The NSW Institute of Teachers and the Quality Teaching Council were established in 2005 under the *NSW Institute of Teachers Act 2005*. Accreditation with Institute will be mandatory for new graduates from 2006. The Institute has developed Professional Standards at four levels of performance: Graduate Teacher; Professional Competence; Professional Accomplishment; and Professional Leadership. It has developed processes to 'accredit' (i.e. certify) teachers at the first level and is intending to do the same for other levels.

The accreditation processes for Professional Competence require teachers to undertake school-based learning, with support from colleagues, and to provide evidence of satisfying the standards at that level. Senior teachers at the school

prepare a report, and external assessors who are trained and appointed by the Institute evaluate this report.

The Institute is currently investigating the establishment of a process, to accredit teachers at the Professional Accomplishment level, which is likely to be similar to that used for accrediting teachers at the Professional Competence stage.

Queensland

Queensland introduced compulsory registration for all teachers in 1975. It was the first state in Australia to do so. (Victoria, *(Education Act 1958)* and Tasmania (*Education Act 1932*) had, for many years, required teachers working in non-government schools to be registered.)

Early in 2004, the Queensland government commissioned a review of teacher registration. As a result of the recommendations (outlined in the document: Strengthening Teaching Standards in Queensland a new Education (Queensland College of Teachers), Bill 2005 was drafted and became legislation on November 2nd, 2005. On January 1st, 2006, the *Board of Teacher Registration* was replaced by *The Queensland College of Teachers*. The College is currently developing new Professional Standards for Teaching, which will supersede the current Professional Standards for Graduates. The new standards will outline desired professional outcomes for the graduate entry level (provisional registration) and fully qualified level (full registration). There is no intention, at this stage, to develop advanced teaching standards, but a spokesperson for the Board said that such a development was not to be ruled out for the future.

The Northern Territory

The Northern Territory Teacher Registration Board was created as an independent statutory body in 2004 under the *Teacher Registration (Northern Territory) Act 2004.* All teachers were required to be registered by January 2005. Teachers who were currently employed were automatically registered subject to endorsement by their principals. The Board is currently developing professional teaching standards that aim to provide 'a seamless guide to professional development from pre-service teacher education through induction and probation to established professional practice.' (*TRB, Professional Standards project, 2005, p.1.)* The draft Professional Standards are aligned with the National Standards (MCEETYA) and reflect the unique needs of education in the Territory. The Board does not intend, at his stage, to develop advanced teaching standards.

The *Teachers' Registration and Standards Act, 2005*, was designed to strengthen the powers of the existing Teachers' Registration Board. Currently, the Teachers' Registration board is working in conjunction with AFTRAA and key stakeholders to develop a set of professional teaching standards aligned with the National Standards Framework. A spokesperson for the Board said that developing advanced teaching standards was not part of the Board's role, and that there was a view that the subject associations were better placed to do this.

Victoria

The Victorian Institute of Teaching (VIT) was established under the *Victorian Institute of Teaching Act 2001* in December 2001. Since 2004, all teachers must be registered with the Institute.

In late 2002, under the Standards and Professional Learning Project, the VIT set in train processes to establish professional teaching standards for full registration. In 2003, the standards were developed in tandem with a pilot program that involved 200 teachers. The pilot aimed to support provisionally registered teachers to move from provisional to full registration in their first year of teaching, and to promote their learning. It involved mentoring and the completion of a portfolio of evidence, including response to three performance assessment tasks. The portfolios were assessed at the provisionally registered teachers' schools, under the responsibility of principals. After an evaluation that showed the success of the pilot, especially in terms of enhancing professional learning, the program has been extended to all graduate teachers in 2004, 2005 and 2006.

The VIT has not developed standards for advanced teaching, but it has now developed *Standards of Professional Practice for Renewal of Registration*. All teachers will be required to renew their registration on or before the anniversary of their fifth year of full registration. The VIT is currently consulting its members on the renewal of registration processes, which are likely to include a mandated number of hours of professional development activities with reference to the *Standards of Professional Practice for Renewal of Registration*.

Tasmania

Current teacher registration processes for all teachers in Tasmania are governed by the *Teachers Registration Act*, 2002), which requires all teachers who teach in Tasmanian schools to be registered with the Teachers' Registration Board. The legislative responsibility of the Board includes development of and responsibility for professional teaching standards. A spokesperson said the Board did not intend to develop advanced teaching standards, and that this could be a useful role for Teaching Australia.

Western Australia

The *Western Australian College of Teaching* was established in 2005. It is seen as the professional body for teachers in that state, and it is responsible for establishing professional teaching standards and registering all teachers. There is no intention at this stage to develop advanced teaching standards.

Developments at government levels

Employing authorities were not idle over this period. Most state and territory employing authorities had undertaken initiatives to give greater recognition to

teachers for evidence of professional development, such as WA with the Level 3 Classroom Teacher classification. The MCEETYA Report, *A National Framework for Professional Standards* (Ministerial Council for Education Employment and Training (MCEETYA), 2003) matches and reinforces the reports cited already. The Framework provides a generic standards architecture along two dimensions. The first, *Career Dimensions*, describes, in broad terms, a continuum of professional development from Graduation and Registration through to Accomplished Teacher and Professional Leadership. The second, Professional Elements, includes professional knowledge, practice, values and relationships. A noteworthy feature of the MCEETYA Framework is that it makes explicit links between career development and professional development and is designed to promote, support, recognise and reward quality teaching.

Skilbeck and Connell (2003) completed a report on behalf of the Australian Government for the OECD project, *Attracting, Developing and Retaining Effective Teachers*. Their report pointed to concerns about the negative image of teaching conveyed by practising teachers and the capacity of current career paths to recruit and retain people of outstanding ability in teaching. The need to view teachers as professional learners on a continuum of professional development, characterised by a quest for higher standards of teaching, was widely accepted, but tangible support from employers and system authorities was uneven. As McRae et al (McRae *et al.*, 2001) report in *PD 2000,* participation rates among teachers in continuing professional learning were also very uneven, with a significant proportion reporting less than two days per year. Professional development was still a matter of choice when it was becoming a matter of necessity, if students were to have equity and quality in their opportunities to learn. Lack of professional development could no longer be an option when the knowledge base about teaching and learning was expanding.

Enter NIQTSL (now Teaching Australia)

In the lead up to the *National Statement from the Teaching Profession* and the establishment of the National Institute of Quality Teaching and School Leadership, professional associations recognised that the new body had significant potential to enable them to provide professional leadership in areas that they could not provide for themselves separately. These included, for example, facilitating conversations within the profession on the development and potential uses of national standards for advanced teaching and school leadership, by the profession and for the profession, throughout Australia.

Teaching Australia's future work on the development and uses of advanced standards will build on existing work by professional associations in Australia and will take into account current work on standards being carried out in states and territories, by registration authorities. Teaching Australia is initiating nationwide conversations about professional teaching standards within the profession in a process that will bring together teachers and principals from all areas of the teaching profession in Australia. In this process, practising teachers and principals will be invited to participate in extended discussion, debate and drafting for the purpose of

defining the scope and architecture of national standards, exploring the connections and ultimately defining the scope and content of national professional standards in Australia.

Summary

Aspirations for the professionalisation of the teaching profession in Australia go back many years. In 1972, the Karmel Report called for a teaching profession that exercised responsibility for quality assurance and professional development more than thirty years ago. The potential of professional standards to improve the quality of teaching and learning has been of interest to educators and policy makers for many years.

The level of debate and activity in this area has accelerated during the 1990s and into the new millenium. Reports on the status of teaching increasingly called for the establishment of a national professional body with responsibility for teaching standards and greater incentives and recognition for evidence of professional development toward those standards. National subject associations in English, literacy mathematics and science developed advanced teaching standards and investigated methods for using them. The work of The Australian College of Educators, which built on these developments, was brought together in a *National Statement from the Teaching Profession on Teacher Standards, Quality and Professionalism* agreed to by more than twenty teacher associations and unions in May 2003.

In New South Wales, the Ramsey report (2002) recommended the introduction of a certification system for teachers at four career levels, based on a framework of teaching standards. This theme was taken up strongly once more in the recommendations of the Review of Teaching and Teacher Education *Australia's Teachers: Australia's Future* (Department of Education Science and Training, 2003)

Major developments in the area of teacher registration and standards development also occurred in these years, as most Australian state education authorities either strengthened the operations of existing registration bodies or initiated the establishment of new ones. Professional standards have been developed, or are being developed by these bodies. The standards are being used mainly to register teachers, but at least two states have developed standards for teachers at more advanced levels of practice.

Teaching Australia expects to play a major future role in the development and use of professional teaching standards. It will bring together many teachers and principals from all areas of the teaching profession to participate in discussions, debates and drafting, with the ultimate purpose of defining the scope and content of national professional teaching standards in Australia.

Chapter 4: Advanced Teaching Standards in Australia

Since the late 1980s, various groups and agencies in Australia have been interested in expressing the elements of accomplished teaching in the form of professional teaching standards. In 1996 the Australian Teaching Council published the *National Competency Framework for Beginning Teachers* (National Project on the Quality of Teaching and Learning (NPQTL), 1996). With the subsequent shift in discourse from 'competencies' to 'standards', writers of standards began to pay more attention to a broad range of factors and considerations beyond basic skills, such as teachers' knowledge of subject content and student learning, their values and dispositions. Across the country employers, teacher registration bodies, members of subject associations, teacher educators and other stakeholders participated in standards design processes of various kinds and for various purposes. The following list provides some examples of work that has been completed over the past ten or so years:

- The Professional Teaching Standards Framework (New South Wales Institute of Teachers)

- The Professional Standards for Teachers (Education Department Queensland)

- The School Excellence Initiative standards (Department of Education Australian Capital Territory)

- The Professional Standards for Teachers (The Department of Education and Training Victoria)

- The Standards of Professional Practice for full Registration (Victorian Institute of Teaching)

- The Western Australian Competency Framework for Teachers (Department of Education (Western Australia)

- Competencies (aligned with Competency Framework) for the Level 3 Classroom Teacher status (Department of Education Western Australia)

- Criteria for the Advanced Skills Teacher (AST) Tasmania

- Tasmanian Professional Teaching Standards Framework (draft for consultation)

- Standards (accredited as graduate certificates through the Australian Recognition Framework) in
  - Teaching of literacy
  - Teaching of numeracy
  - School leadership
  - Managing Student Behaviour; and Inclusive practice (Tasmania)

- Criteria for the Advanced Skills Teacher (AST) South Australia

- Standards for Teachers of Exemplary Practice (TEP) Northern Territory

- The Standards for Teachers of English Language and Literacy in Australia (STELLA) (English and Literacy teachers subject associations)

- Standards for Excellence in Teaching Mathematics in Australian Schools (Australian Association of Mathematics Teachers)

- The national Professional Standards for Highly Accomplished Teachers of Science (Australian Science Teachers Association).

- Standards of Professional Excellence for Teacher Librarians

- Standards for Teachers of Indonesian

- Standards for the teaching of ESL students by TESOL specialists

Some of these examples include standards that were specifically developed as 'advanced' teaching standards. Some sets of advanced teaching standards have been used by employers as a basis for making decisions about teachers' promotion to higher classifications (See Appendix Two and Appendix Three).

Australian standards initiatives at a national level

The National Statement from the Teaching Profession on Teacher Standards Quality and Professionalism

As already mentioned in Chapter Three, the Australian College of Educators (ACE), in May 2003, published *The National Statement from the Teaching Profession on Teacher Standards Quality and Professionalism.* This was completed following an extensive period of consultation with teachers and their professional associations, and in collaboration and co-operation with the work of the Teacher Quality and Educational Leadership Taskforce (TQELT) of the Ministerial Council on Education, Employment Training and Youth Affairs (MCEETYA). The purpose of the Statement was to identify common and agreed understandings about professional standards and their relationship to teacher quality and teacher professionalism.

The authors of the Statement emphasise the connections between professional teaching standards and professional learning. They also see connections between standards and professional learning, improved practice and teachers' career paths, and the provision of quality assurance:

> Professional teaching standards provide an important mechanism for improving the effectiveness of professional development; informing the means for improving career path opportunities; providing incentives for continuous professional learning; and building capacity for leadership, accountability and quality assurance. (ACE, 2003, p. 2)

The Statement describes standards as 'tools for action', whose uses include recognition and certification. It envisages 'a nationally co-ordinated and consistent approach to professional certification' and sets out a number of principles to guide such a system:

Professional certification is an endorsement by an authorised professional body that a member of that profession has attained standards for highly accomplished professional practice. In the school sector, certification might be implemented across a number of fields of teaching and learning. Given the work of national professional associations, state/territory statutory bodies for teachers and the inclusion in some industrial agreements of advanced status payments, a nationally co-ordinated and consistent approach to professional certification could be further developed. It is important to acknowledge an emerging consensus that any process for the formal assessment of performance for professional certification of advanced standards should:

- be voluntary

- be authentic

- be based on and measured against professional teaching standards

- have peer involvement in its development and execution

- reflect the core business of teaching

- be positively oriented

- use a range of methods and evidence

- incorporate appeal processes (ACE, May 2003, p.4.)

The National Framework for Professional Standards for Teaching

In November 2003, The Ministerial Council for Employment, Education and Training agreed on a *National Framework for Professional Standards for Teaching* (Ministerial Council for Education Employment and Training (MCEETYA), 2003). The Framework supplies an 'architecture' within which generic or subject/Year Level/specialist professional standards, including advanced teaching standards, can be developed at National and State and Territory levels.

The Framework provides an organising structure that establishes, at a national level, agreed foundational dimensions and elements of 'good teaching' under the headings: Professional Knowledge; Professional Practice; Professional Values; and Professional Relationships. These serve as broad organising categories within which the content of standards can be developed.

The Framework proposes four stages of career progression for teachers that relate to four standards levels:

1. Graduation – beginning teachers who have undertaken endorsed programs of teacher preparation and who are about to begin their teaching careers

2. Competence - teachers who have demonstrated successful teaching experience

3. Accomplishment - teachers who are recognised by their peers as highly proficient and successful practitioners

4. Leadership – Teachers with a record of outstanding performance who apply their professionalism in ways that are transformative for other teachers, students and the community.

Standards developed in Australia by teachers' national subject associations

As Chapter 3 documents, Australian interest in the potential of standards to enhance the quality of teaching began many years before the publication of the *National Statement for Teacher Standards* and the *National Framework for Professional Standards for Teaching*. Award Restructuring and the concept of the Advanced Skills Teacher in the late 1980s was essentially an attempt to build stronger links between career structures for teachers and evidence of professional development.

The Australian Science Teachers Association commissioned a review of international developments in teaching standards and certification in 1994 (Ingvarson, 1995). In 1999, Monash University initiated three projects in collaboration with subject associations whose purpose was to develop advanced professional standards for teachers of English/literacy, mathematics and science. They stand out from other standards development work in Australia, most of which, as the examples listed above show, has been carried out by employers or teacher registration bodies. The projects were carried out between 1999 and 2002, with the aid of Australian Research Council (ARC) Strategic Partnerships for Research and Training (SPRT) grants. Collectively, the projects provide a platform for further standards initiatives from other professional associations. The three projects are profiled below:

The Standards for Excellence in Teaching Mathematics in Australian Schools

These standards were developed between 1999 and 2002, by the Australian Association of Mathematics Teachers (AAMT), the peak professional body for Mathematics teachers in Australia, and staff from the Faculty of Education at Monash University. They were the central focus of the project: *Excellence in the Teaching of Mathematics: Professional Standards Project*. The project was initiated by Monash University and jointly funded by the AAMT and an ARC-SPRT research grant.

Some forty AAMT members worked in collaboration with a team from the Education Faculty at Monash University on the necessary research, and the development of the Standards and associated assessment processes.

The standards are organised into three 'domains':

- Professional knowledge
- Professional attributes

- Professional practice

The description of each domain includes an encompassing statement about the domain.

After adopting and publishing the standards in 2002, the AAMT moved to implement them as a framework for teachers' career-long professional learning in mathematics. Recognising that standards are both statements of what is valued in the profession and measures, the Association moved to implement the standards as:

- The framework for teacher' career-long professional learning in mathematics

- The measures against which a teacher can choose to be assessed for peer recognition as a Highly Accomplished Teacher of Mathematics (HAToM).

The AAMT's pilot project *Teaching Standards Assessment Evaluation Project (TSAEP)* finalised the draft Assessment Model developed by the AAMT-Monash University project. The model was based on clear principles that the assessment should be:

- Rigorous and valid

- Adaptable to and applicable in all teaching contexts

- Fair to all candidates no matter what their teaching situation

- Equally accessible to teachers across the country

- Controlled by the candidate in so far as this is possible and

- Oriented towards contributing to the professional growth of the candidate (The AAMT Standards Assessment Model, September 2003, p.1)

The assessment model of this pilot study required candidates to:

- respond to unseen questions that simulated teaching decisions through an Assessment Centre

- submit a portfolio of their work and achievements as a teacher. The portfolio was to contain a Professional Journey (reflective essay), a Case Study of one or two students' learning, and an example of Current Teaching and Learning Practices. It also included 'Validation' (report of a classroom observation or video of their teaching) and Documentation (awards, references, testimonials, etc.)

- take part in an interview. The assessors, who were also experienced teachers, were trained in assessment procedures.

The peer assessors were mathematics teachers (five teachers from Tasmania, Victoria, WA and SA). Individual assessors accumulated evidence from what had been presented, and made holistic judgements directly against each standard. Assessors then met to reach consensus about whether they had identified sufficient evidence to be confident that individual Standards had been met. To be recommended as a HAToM the candidate had to meet all ten standards.

Important tasks of the project were:

- Developing guidelines to assist candidates to prepare their portfolio items. This included commissioning 20 sample items from volunteer teachers to help refine the Guidelines.

- Recruiting the six candidates who were a 'mix' from different jurisdictions and teaching sectors.

- Providing support for the candidates during the process, including sample Portfolio material and the opportunity to work with a mentor.

- Selecting and training the peer assessors

- Developing the items for the Assessment Centre

A report by an independent external evaluator (Brinkworth, 2004) found that the assessment model 'worked', in terms of feasibility. The positive assessment of four of the six candidates was confirmed, and the teachers were given an AAMT 'credential' as *Highly Accomplished Teachers of Mathematics* (HAToMs). The other two were provided with assistance to resubmit evidence for achieving the credential. Overall, candidates reported positive feelings about the processes. Further studies of the reliability and validity of the model should be encouraged. These will call for larger numbers of applicants and independent indicators of teacher effectiveness from those included in applicant portfolios, such as student outcome data.

The National Professional Standards for Highly Accomplished Teachers of Science

These standards were developed between 1999 and 2002, in a collaborative project between Monash University and the Australian Science Teachers Association (ASTA). The development was jointly funded by ASTA and the Australian Research Council. The project envisaged three main stages:

- Developing the standards

- Developing methods for gathering evidence about practice related to the standards, and

- Developing reliable methods for training teachers to assess this evidence

The standards were written by a national committee of fifteen practising teachers who worked in collaboration with science education researchers, facilitators from Monash University and the Australian Council for Educational Research, and a professional writer.

The ASTA standards begin with a vision statement for learning science of about 500 words. The standards have three dimensions: Professional Knowledge; Professional Practice; and Professional Attributes. Each dimension has an overarching statement/description with several components with prose elaborations of each standard component of about 500 words. The standards underwent a major consultation and revision phase in every state and territory.

ASTA members have developed five portfolio tasks, which provide teachers with carefully developed guidelines about how to provide evidence, in a portfolio "entry," of their practice related to the ASTA standards. These tasks have been developed so that they represent readily identifiable components of what teachers do as a normal part of their work, such as planning and teaching a unit of work, or assessing student development of understanding. Here is a brief outline of each of the five tasks developed so far.

Entry 1

Designing a Teaching a Learning Program

In this entry, the teacher provides evidence that they can plan and implement over time a sequence of activities that develop student understanding of a major idea in science, and establish connections between the major idea, technological applications, and associated issues.

Entry 2

Assessing student work

This entry invites the teacher to provide evidence that they can use assessment of students' learning in science, well integrated in the teaching and learning program, to provide effective feedback to students, with explanations for choice of particular strategies and reflection on effectiveness in informing practice.

Entry 3

Proving student understanding

This entry invites the teacher to provide evidence that they can engage students in whole class and group discourse using a variety of probing and discussion strategies to elicit students' initial beliefs and conceptions, clearly demonstrating how the teacher uses these understandings as a foundation to further students' learning of science.

Entry 4

Inquiry through investigation

This entry invites the teacher to provide evidence that they can engage students actively in the process of investigation – of scientific inquiry, active data collection and analysis – and evidence of an ability to describe, analyse and evaluate students' ability to work, think and reason scientifically.

Entry 5

Documented accomplishments: professional and school community

This entry invites the teacher to provide evidence that they have contributed to collegiality, educational leadership and curriculum development in their school and wider professional community and strengthened links with student families and care givers. They provide an interpretative summary related to these accomplishments in terms of furthering their students learning science.

The key feature of these tasks is that they are designed to provide evidence about what the students are doing, thinking, learning and so on, <u>as a result of the conditions for learning established by the teacher</u> (c.f. Fenstermacher and Richardson's concept of "quality" in teaching in Chapter 2). Another is that they are rich tasks, in the sense that they maintain the wholeness of teaching. They do not atomise teaching. Each provides evidence related to several standards at once. They call for teachers to provide, for example, samples of student work, or videos of lessons that bear a direct relation to the task and the standard it was designed to assess.

About 45 science teachers have trialled these portfolio tasks in groups as part of professional development courses, and participants always report that the learning experiences are professionally rewarding and valuable (Semple, 2006). Over the past three years, ASTA has conducted several standards-based professional development programs for science teachers, funded by school systems in four states. ASTA is currently seeking funding for the final stage of the project, which will involve developing scoring rubrics based on the standards, and training teacher assessors to use the standards to assess the portfolios at acceptable levels of consistency.

The Standards for Teachers of English Language and Literacy in Australia (STELLA)

The 'STELLA' standards were developed in a collaborative project that was initiated by Monash University and jointly funded by an ARC SPRT grant, the Australian Association for the Teaching of English (AATE), and the Australian Literacy Educators Association (ALEA)

The standards were written by a national committee of practising teachers who worked in collaboration with Monash University, Edith Cowan University and the Queensland University of Technology. Other bodies involved were: the Ministerial Advisory Committee on the Victorian Institute of Teaching; the Centre for Teaching Excellence, Queensland; and the Education Department of Western Australia.

Like the AAMT and ASTA standards, the STELLA standards have three dimensions: Professional Knowledge; Professional Practice; and Professional Engagement. Each is elaborated in a prose description of about one hundred words. For each dimension

there are also 'key words and focus questions' that underline the standards' intended purpose - to be dynamic and practical tools for professional learning.

The English Literacy standards were identified on the basis of accounts of teachers' experiences. These accounts, ('narratives'), which exemplify the standards, form an important part of the total standards' 'package'.

In a twin project with the Mathematics standards group (Portfolio Research in Mathematics and English (PRIME), funded through an ARC Linkage grant), a small group of English teachers prepared portfolios that demonstrated their professional accomplishment in relation to the English standards. The teachers wrote descriptions of their 'professional journeys', analysed samples of students' work, and gave examples of curriculum development and evaluation. The writers of the STELLA standards assessed the portfolios and provided feedback to the participants.

In 2005, the ALEA initiated the ALEA 2005 STELLA professional learning project. *Teachers' stories: professional standards, professional learning.* ALEA members were invited to apply for a 'scholarship' that would provide time for them to work with a mentor. Using the STELLA standards as a framework for learning, the teachers identified an aspect of their current practice to investigate, using one or more of the STELLA standards as a focus. Their own reflections on these investigations have yielded some rich and informative stories of classroom practice that have recently been published. The project participants were also given the opportunity to meet collegially in a workshop of the ALEA/AATE National Conference on the Gold Coast in 2003.

Comparing the three Australian standards development projects

Commonalities

Participants in each of these Australian standards projects, wanted to develop new standards models that would express the distinctive knowledge and practice of teachers who taught in specific subject areas/fields. Each set out to develop standards that would explore and identify the complex pedagogical knowledge of their disciplines, and would provide a vehicle for teachers to develop as professionals. As advanced standards, the standards would be representations of excellent practice to which all teachers might aspire.

Since the projects were carried out under the umbrella of national teacher professional associations, it was to be expected that teachers would play a major role in their development and would have a strong sense of 'ownership' of the standards. It was not realistic in the early stages to expect that large numbers of teachers would be involved in the actual writing of the standards. Each project was based on the work of relatively small groups of teachers. However, the associations canvassed the ideas and opinions of their members and, in each case, at every stage, careful attention was paid to providing opportunities for teachers to provide input.

Teachers' practical knowledge and skills were fundamental in all three projects. The Mathematics group, for example, set up 'Teacher Focus Groups' in four states (Victoria, New South Wales, Tasmania and South Australia) and all materials were validated through broad consultative processes. The English 'consortium' of the two teachers associations, three universities, and 'standards' bodies in Queensland, Victoria and South Australia had its research base in teacher panels in three states, Victoria, Queensland and Western Australia. Each state had a steering committee drawn from the three partners, and there was a national reference group that involved representation from stakeholders in other states and territories. ASTA circulated drafts of its standards widely in cycles of national consultations that were co-ordinated by the various state and territory branches of the association. ASTA also sought feedback on the standards from other stakeholders, such as members of university science departments and employing authorities. The national structure of all four subject associations ensured input from states and territories that were not directly involved in the research.

Great care was taken in the selection of standards writers. For example, ASTA formed a National Science Standards Committee (NSSC) to write its standards. All members of ASTA were invited to nominate for membership of the Committee. The Committee was selected from a large number of teachers who expressed interest, based on stringent criteria that included evidence of successful professional practice and a commitment to the task.

The projects worked separately in a deliberate effort to ensure that the results met the needs and expressed the intentions of the professional communities involved. However, people most closely involved in the projects had opportunities to share their work. At a national Professional Standards Workshop held in Adelaide in March 2001, participants were able to identify certain 'commonalities'. They agreed that:

> The broad frameworks for the three sets of professional standards are very similar in terms of the domains seen as important. All have a strong commitment to teachers as reflective practitioners and expect teachers to work positively in professional communities. Narratives, vignettes and other examples from individual teachers' work are seen to be important precursors to describing the standards. There is a common commitment that the standards be relevant for teachers from K-12, and that they be accessible and useful for teachers in the wide variety of teaching contexts present in Australian schools and other settings in which teaching and learning take place. As a result, consideration of context and how to ensure that professional standards 'speak to' all teachers is a major focus for the projects – the standards have to ensure that the professional standards do not lead to 'standardisation' of teaching practice, something that the three projects are determined to avoid (Althorp, Cockburn, Hayes and Morony 2001.)

Differences

While the standards writers in all three projects recognised that teachers' accounts of their practice needed to be part of the standards development processes, there were differences in the ways in which these accounts were approached and used. The STELLA standards writers emphasised the importance of 'narratives', to the extent that the published STELLA standards included teachers' own specific accounts of their actual experiences. These narratives were used to contextualise the standards and to supply a critical perspective.

From the start of the standards development processes, the ASTA and the AAMT envisaged that their standards would eventually be part of a national professional learning and certification system. They gave attention, therefore to establishing guidelines for teachers about the kinds of evidence they should provide if they wanted to demonstrate that they had met the standards. The developers of the STELLA standards chose not to proceed down this path. Instead, English and Literacy teachers were encouraged to read the standards and see them as a springboard for writing further narratives describing specific instances of their teaching as a form of self-reflection and means of gaining feedback from colleagues about aspects of their teaching. In practice, this is a similar process to that which the mathematics and science standards developers envisaged for the preparation of portfolio entries in which teachers' showed how their practice met the standards. The difference is that it is not intended that the (STELLA) activities will be formally assessed, and the teachers who complete them will not receive formal recognition or a credential.

Some further examples of standards developed by teachers' professional associations

Following the work of teacher associations described in the preceding paragraphs, other teachers professional groups have moved, or are moving to develop field specific teaching standards. The Australian Library and Information Association (ALIA) and the Australian School Library Association (ASLA) recently endorsed the *Australian Standards of Professional Excellence for Teacher Librarians.* The 12 standards describe the professional knowledge, skills and commitment demonstrated by teacher librarians working at a level of 'excellence.' The document is primarily intended for use by teacher librarians as a framework for ongoing professional learning.

Professional standards have also been developed for TESOL practitioners in Australia by the Australian Council of TESOL Associations Inc. (ACTA), which is the national professional body representing teachers of English to speakers of other languages in Australia. There are 27 standards under three domains, Dispositions Towards TESOL; Understandings about TESOL; and Skills in TESOL. The standards validate the three professional orientations of ESL teachers: education in a multicultural society, second language education and TESOL practice. ACTA plans to undertake further work to identify indicators of the achievement of Standards in

different sectors in TESOL and to detail the diversity of settings across sectors through case studies in closer alignment with the MCEETYA Framework.

Another standards development project of interest is the *Development of Standards for Teachers of Indonesian* project, for which a Final Report, prepared by the Australian Federation of Modern Languages Teachers (AFMLTA) was written in August 2005.

These standards were developed by a project team of seven educators, the majority of whom were practising teachers of languages. They cover two areas: (1) Standards for teaching languages and cultures, and (2) Program standards. The standards for teaching are grouped into eight broad areas: The program standards indicate that quality programs occur in contexts where certain conditions, such as appropriate timetabling, are in place.

The brief for the project, initiated by DEST, included:

The project may:

- Develop a model for standards for teachers of Indonesian

- Trial the model with teachers of Indonesian

- Train assessors in the model developed

- Following consultation with the AFMLTA membership, identify a small number of teachers to be assessed using the model develop

- Award a credential to the successful teachers

- Evaluate the model trialled

- Produce a Report for the Department (AFMLTA, 2005, p.1)

The AFMLTA was not prepared to undertake the 'assessment' and 'awarding of a credential' aspects of the brief, believing that these were 'in conflict with the role and functions of the AFMLTA as a professional association' (AFMLTA 2005, p. 1). (Other professions, such as Medicine, Accounting, Engineering and Architecture, which routinely take responsibility for assessing and awarding credentials for their members, appear to have a different conception of the functions of 'a professional association.')

The above examples provide only the briefest indication of the similarities and differences of approach to standards and their possible uses that exist in different areas of the teaching profession. The National Framework has made a powerful contribution to achieving consistency and consensus in important areas.

Summary

Interest in the development of advanced standards for teaching has grown steadily over the past three decades. Since the publication, in 1996, of the *National*

Competency Framework for Beginning Teachers (National Project on the Quality of Teaching and Learning (NPQTL), 1996) by the Australian Teaching Council, various agencies, including state teacher registration bodies, subject associations, teacher educators and other stakeholders have initiated standards design projects of various kinds and for various purposes.

The National Framework for Professional Standards for Teaching, agreed on by MCEETYA in November, 2003, supplies an 'architecture' within which generic or field specific standards, including advanced teaching standards, can be developed at National, State and Territory levels. The Framework proposes four career stages for teachers in relation to four levels of certification; 'graduation' 'competence' 'accomplishment' and 'leadership.'

Three advanced standards projects, for teachers of English/Literacy, Science and Mathematics were carried out between 1999 and 2002, by four national teachers' subject associations and Monash University. These projects preceded the MCEETYA *Framework*. Collectively, these projects provide a platform for further standards initiatives from other professional associations. At a national Professional Standards Workshop held in Adelaide in March 2001, participants from the different associations were able to identify certain 'commonalities'. These included agreement on the main 'domains' of professional knowledge and skills, a strong commitment to teachers as reflective practitioners and the importance of narratives as precursors to describing the standards. There was also general agreement that the standards be accessible and useful for teachers in the wide variety of teaching contexts present in Australian schools and other settings in which teaching and learning take place, and a concern that standards should not lead to 'standardisation' of teaching practice.

From the start of the standards development processes, the ASTA and the AAMT envisaged that their standards would eventually be part of a national professional learning and certification system. The developers of the STELLA standards chose not to proceed down this path. Instead, English and Literacy teachers were encouraged to see the standards as a springboard for writing further narratives describing specific instances of their teaching as a form of self-reflection and means of gaining feedback from colleagues about aspects of their teaching.

The question of whether teachers' professional associations should be involved in processes of assessment leading to certification of accomplishment is emerging as critical. This debate is gaining momentum as, following the work of the three initial standards development projects, other teachers professional groups, have moved, or are moving, to develop field specific advanced teaching standards. These groups have views about how standards should be used, and about their own role, as professional bodies, in providing professional certification for their members.

Chapter 5: Developing Advanced Teaching Standards - a Comparison of International Approaches

As outlined in Chapter One, four examples of advanced teaching standards were selected for more detailed examination on the basis that each was currently part of a operational standards 'system' at a national or state level. This means that the standards had not only been developed, they were actually being used to guide professional learning and as the basis for providing some form of recognition to teachers who were able to demonstrate that they met the standards. In each example, the standards were part of a system that included the following components, described earlier in Chapter One:

1. *Standards* that describe advanced teaching and what counts as meeting the standards

2. Methods for assessing and providing *professional certification* to teachers who meet the standards

3. Provision of an infrastructure for *professional learning* that enables teachers to develop the attributes and capabilities that are embodied in the standards

4. *Recognition* from school authorities for teachers who gain certification from a professional body.

This chapter is concerned with the first component. It compares the relevant approaches of the four systems to standards and their development. The three chapters that follow investigate the next three components. In all four chapters, the discussion follows the guiding questions, as set out in Chapter One, for each component.

The following questions guided the comparisons in this chapter:

- Who developed the advanced standards for teaching and for what purposes?
- How were the standards developed and on what foundation?
- What is included in the standards, and how are the standards organised?

Consideration is given throughout to the extent to which practitioners are involved in standards development processes.

The Chapter concludes by providing information about research on the reliability and validity of the various standards development procedures, and the extent to which they can be generalised.

Responsible bodies and purposes: a comparison

The English Threshold

A major period of reform to teacher career structures took place in England during the late 1990s. The 1998 Green Paper, *Teachers: Meeting the Challenge of Change*, introduced the *Performance Threshold* Assessment for teachers at the top of the old salary scale. Successful candidates who 'passed' the Threshold assessment were to receive a 10% pay rise and gain access to further steps on the new pay scale. The *Threshold* was an integral part of the government's new performance management system, which aimed to improve teachers' performance in order to raise levels of students' achievement.

The Threshold is the responsibility of the Department for Education and Skills (DfES) in England.

Employers or statutory bodies who intend to develop standards typically call on the expertise of an outside organisation such as a university, an independent research body or firm of education consultants. The DfES developed the Threshold standards with the help of Hay McBer Consultants.

The General Teaching Council, Scotland

The body responsible for *The Standard for Chartered Teacher* is the General Teaching Council for Scotland (GTCS). Set up in 1965 to ensure that students were taught by well qualified teachers, the GTCS claims credit for helping to ensure that teaching in Scotland is now an 'all graduate' profession. (McIver 2005).

The GTCS is an independent statutory body funded entirely from annual registration fees paid by teachers. Its Council membership of 50 consists of 26 elected registered teachers, 18 appointed members representing the wider public, and six members nominated by Scottish Executive Ministers It has much in common with similar statutory bodies in England, Canada, Australia, Wales and Northern Ireland that are variously known as Teachers' 'Councils' 'Colleges' 'Institutes' or 'Registration Boards'. Several of these bodies have also developed standards for advanced teaching.

In 2000, the same year the Scottish Parliament was established, an act of that parliament extended the responsibility of the GTCS to include a national framework of standards and continuing professional development. Meanwhile, a major industrial settlement (the McCrone settlement) leading to significant improvement in teachers' pay and conditions had been reached between the unions and employers in 1998 (a 21% pay rise). The settlement recommended more resources for teachers' professional development and gave special attention to reforming the career structure for teachers to give more rewards for evidence of professional

development. A core feature of that reform was a national program to establish the *Chartered Teacher* status, requiring a completion of a "challenging and structured program of relevant and accredited CPD, over a period of four years"

A consortium of two universities and a private consulting firm developed the Chartered Teacher proposal, which to an outside observer was very favourable to the interests of universities.

The aim of the *Standard for Chartered Teacher* was to provide 'the best, experienced teachers with opportunities to remain in teaching, to embrace new challenges, improve their skills and practice and be rewarded accordingly'. It is used as a framework for a system of extensive professional learning and development that leads to the award of Chartered Teacher status. Chartered Teachers are expected to be leaders in their schools, and to support colleagues in matters of classroom practice.

The GTSC sought the advice of various 'Providers' in the development of the Standard for Chartered Teacher. In all of these processes, practising teachers played a significant working role, but they were neither the 'drivers' nor the 'owners' of the standards.

The Level 3 Classroom Teacher Position was initiated in 1997 by the Department of Education and Training Western Australia (DETWA), following the advice of researchers and teacher educators at Murdoch University, and in consultation with teachers and other education stakeholders. The position was negotiated with the Australian Education Union, Western Australian Branch. It is part of the current Industrial Agreement.

The major purpose of the Level 3 Classroom Teacher standards and assessment is to support the retention of exemplary teachers in the classroom. Level 3 teachers are expected to be leaders and mentors of other teachers, and their work is seen as helping to improve teaching and learning in a whole school, as well as in classroom contexts.

The National Board for Professional Teaching Standards (NBPTS), the body which is responsible for all NBPTS standards development and certification processes, was established in 1987, as an outcome of the Carnegie Report, *A Nation Prepared: Teachers for the 21st Century*. The Carnegie Report was a reaction to the earlier *A Nation at Risk* report of the Reagan Government.   Its main thrust was a professionalisation agenda to combat a crisis in the status and attractiveness of teaching during the 1980s. Among many recommendations, the report pointed to the lack of a national professional body in teaching for providing incentives for teachers to reach high professional standards.

The NBPTS is an independent, not-for–profit corporate body that, from the beginning, set out to have wide representation yet maintain its independence. It has a broad membership base that includes practising teachers, state governors, school

administrators, teacher unions, school board leaders, college and university officials, business executives, foundations and concerned citizens.

The long-term aim of the NBPTS is to build a national certification system for accomplished teachers, which will recognise accomplished teaching and provide teachers with the opportunity to improve their practice in light of contemporary research and profession defined standards.

The NBPTS processes are driven mainly by practising teachers at every level. The Board itself has a majority of teacher members, and the standards writers are, in the main, practising teachers.

Developing content standards

As discussed in earlier chapters, 'content' standards describe the knowledge, skills and dispositions that comprise effective teaching. In educational measurement terms, they describe the "domain" of teachers' practice. Advanced content standards aim to capture the essence of what consistently effective teachers know and do.

Standards writers face decisions about depth, scope and organisation. Depth is about getting the balance right between the level of specificity or generality in writing statements about teaching. Scope is about setting appropriate and realistic boundaries in the standards as to what is included in teachers' work. Advanced standards for teachers, for example, usually add some widening expectations for leadership. Organisation is mainly about the main categories to be included a set of standards. Here is a common set of three organisers at a high level of generality.

1. Knowledge

2. Practice

3. Attributes

As broad categories, these may be accurate, but they do not tell us much about what teachers should actually know and be able to do. Standards writers need to move to a deeper level. Here, for example, is a typical set of organisers or categories from a set of standards for beginning teachers.

Beginning teachers:
- Collect and analyse information about students for the design of learning experiences
- Plan learning goals and experiences
- Provide intellectually challenging learning experiences in the classroom

- Assess and report on student learning

- Create a safe and supportive learning environment

- Demonstrate a commitment to professional practice

- Make a contribution to professional teams

- Maintain effective relationships with the wider community

What is noteworthy about a list such as this is that the organisers, at least the first five, describe the sequence or flow of teachers' work – what teachers do. It represents the basic 'architecture' of what competent teachers do. In other words, it is a coherent set of organisers, not just a list of unrelated elements. This aspect of structure becomes very important when standards are to be used for professional self-reflection and in assessing performance in teaching.

In a full set of standards, each of these organisers would, in turn, be elaborated further. A full set of content standards needs to drill down deeper to accurately represent what teachers need to know and be able to do to provide quality learning opportunities for students, as described in Chapter Two.

General characteristics of well-written standards

Here is an example of a standard from the ASTA set of standards for accomplished teachers of science.

> Accomplished teachers of science engage students in scientific inquiry. Their teaching reflects both the excitement and challenge of scientific endeavour and its distinctive rigour. They both teach and model practices that allow their students to approach knowledge and experiences critically, recognise problems, ask questions and pose solutions. They actively involve students in a wide range of scientific investigations.

Several features of a standard such as this are noteworthy. The first is that it points to a large, meaningful and significant "chunk" of a science teacher's work – it is an example of the purposes they are trying to achieve. It is not a micro-level competency, or a personality trait. Science teachers readily identify this type of standard as referring to an authentic (i.e. valid) example of the kind of work they do (or aspire to do).

The second is that the standard is context-free, in the sense that it describes a practice that most agree accomplished science teachers should follow no matter where the school is. By definition, a professional standard applies to all contexts in which teachers work (which is not to say context does not affect practice). No matter where a school is, engaging students in scientific inquiry is likely to be regarded as a core responsibility of science teachers.

The third feature is that the standard is non-prescriptive about how to engage students in "doing science" and "thinking scientifically"; it does not standardise practice or force teachers into some kind of straightjacket. There are many ways to engage students in scientific enquiry. While the standard identifies an essential element of good science teaching, it does not prescribe how the standard is to be met. In this way, the standard also allows for diversity and innovation. Teachers are invited to show how they meet this standard; how they engage students in scientific enquiry.

The fourth is that, as a standard, it points to something that is measurable, or observable. It is possible to imagine the kinds of evidence that a science teacher will assemble over time to show that they meet the standard, such as samples of students' work or videotape segments over time provided by the teacher.

As an observation, standards developed predominantly by teachers and their associations appear to be more likely to have the features listed above. In summary, and continuing to use the teaching of science as a context, good standards for teachers should:

- be grounded in clear guiding conceptions of what it means to do (science)

- be valid; that is, represent what (science teachers) need to know and do to promote quality learning opportunities for students to learn (science)

- identify the unique features of what (science teachers) know and do

- delineate the main dimensions of development the profession expects of a teacher of (science) – what (science teachers) should get better at over time, with adequate opportunities for professional development.

- be assessable; that is, point to potentially observable features and actions

The NBPTS standards provide many models of standards that meet these criteria. They also provide elaborations of what the standards mean, showing the complexity of teachers' knowledge and practice in subject specific/years of schooling 'fields'. The NBPTS Physical Education standards, for example, are set out in 13 organising categories. These include: 'Knowledge of Students, (Standard 1); Student Engagement in Learning, (Standard 4); Learning Environment (Standard 6). All of the standards are further elaborated in a document of 59 pages. This may sound long, but PE teachers find it a gratifying recognition of what it takes to be a good PE teacher.

This is how the NBPTS Physical Education Standard 11 'Promoting an Active Lifestyle' has been developed:

Standard 11: Promoting an Active Lifestyle

> Accomplished physical education teachers recognise the multiple benefits of a physically active lifestyle and promote purposeful daily activities for all students that will encourage them to become lifelong adherents of physical activity.

The standard is further elaborated in a 500 word statement that describes how teachers 'strive to instil within their students the intrinsic values of lifelong physical activity' (NBPTS Physical Education Standards page 45). The first paragraph of that statement reads:

> As well as teaching the knowledge of how to pursue physical activity, teachers strive to instil within their students the intrinsic values of lifelong physical activity. Engaging students in a physically active life is an important goal of physical education instruction. Accomplished teachers understand that students can learn the habit of regular activity and that attitudes begun during youth determine health and fitness later in life. Knowing that young people who maintain relatively high activity levels will reap benefits later, accomplished teachers promote regular, purposeful physical activity for young people. (NBPTS Physical Education Standards page 45)

The elaborations tease out the various facets of the 'promoting an active lifestyle' concept to show the areas where teachers might take action, and to point to types of evidence that one should see in, for example, a portfolio entry that a teacher submitted to show that they had met the standard.

Levels of statements about teaching

From this example, it can readily be seen that sets of teaching standards are typically set out as statements and elaborations, at increasing levels of depth and specificity [3]. This method has two main advantages: first it presents the elements of teachers' knowledge and practice clearly and logically, within defined areas or 'domains', so that teachers may readily reflect on the various aspects and identify their own strengths, as well as recognising that there may be areas in which they need to improve. In this sense the standards provide teachers with an valuable map for their professional learning. The second advantage is that the standards, when developed to these levels, enable teachers to demonstrate accomplishment and to receive more useful feedback about their teaching.

The following tables provide examples of how standards have been elaborated in the four systems. (It should be remembered that, for obvious reasons of space, they

---

[3] It is important here to note that these levels should not be confused with levels of performance or competence

contain only brief excerpts from much larger documents. The full sets of standards have been published by the responsible agencies. They are easily accessible on the relevant websites.)

Table 1 shows four levels at which statements about teaching can be expressed. It starts with *Level 1* statements that describe general principles or core educational values that guide the particular field of teaching in question. An extract from the ASTA standards for the teaching of science is used here once more as an example. The next Level down, *Level 2*, contains the main 'domains' or organising categories used in the set of teaching standards. This time the example is taken from the AAMT standards. The task for writers of *Level 3* statements is to elaborate on what the Level 2 statements mean for what teachers should know and be able to do. The challenge for standards writers is to make sure that statements at this level point to knowledge and actions that one can imagine being able to assess or observe. The example for this Level is taken from the STELLA standards for the teaching of English. Level 3 statements describe what teachers should be able to show they can do without prescribing how they must do it. Level 4 is a level where statements refer to very detailed teacher actions that are too specific or context bound to be included in a set of standards.

Table 2 compares the Level 2, or main 'organising' categories, from each system. It shows that there are similarities between the main organising categories for each set of standards. All but the WA Level 3 standards make specific reference to teachers' professional knowledge; all include reference to professional learning and/or wider professional and community participation, and most include assessment or monitoring of students' learning. Some evidence of different values and philosophies can be discerned, however. For example, the *Threshold* is the only set of standards (criteria) to refer specifically to 'Pupil Progress', and require evidence of it. (This has significant implications for the kind of evidence that teachers have to provide for the assessment of their performance). The WA Level 3 criteria seem to reflect a particular education-system priority or focus (seen, for example, in the use of the expression, 'an outcomes-focused environment').

Table 1: Developing Standards: levels of statements about teaching

	Definitions and purposes	Examples
Level 1 Core educational values	These are 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: From the vision statement)
Level 2 Organising categories for the standards	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. (e.g. an early childhood teacher should show how he/she helps students learn to read)	**Domain 1: Professional knowledge.** Excellent teachers of mathematics have a strong knowledge base to draw on in all aspects of their professional work, including their decision making, planning and interactions. Their knowledge base includes knowledge of students, how mathematics is learned, what affects students' opportunities to learn mathematics and how the learning of mathematics can be enhanced. It also includes sound knowledge and appreciation of mathematics, appropriate to the grade level and/or mathematics subjects they teach. **Domain 2: Professional attributes.** (with accompanying statement). **Domain 3. Professional practice** (with accompanying statement) (AAMT standards)

Level 3 More specific statements within each organising category	Statements at this level are elaborations of the Level 2 categories. They describe *what* teachers need to show they can do in particular areas 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.	**1.2 Teachers know their subject** (Accomplished English/Literacy teachers) are informed about contemporary issues and debates regarding language, literacy and literature and possess a critical understanding of recent theory and practice relevant to their field, including language acquisition, literacy learning and development, reader response and literary theory. They demonstrate high standards of performance in their own literacy practices and have a firm grasp of the application of new technologies in their field. They have a wide knowledge of different texts and types of texts, classic and contemporary literature (including poetry, fiction and drama) everyday texts, visual, media and electronic texts.) (STELLA standards).
Level 4 Statements about specific strategies or styles	These are statements that describe specific teacher actions or teaching styles. They are not useful as a basis for writing standards as they lead to an overload of detail. They are 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 crack jokes (Constructed example only)

Table 2: Examples of Level 2 categories for organising the standards

Standards	Level 2 'organising' categories
Scotland: The Standard for Chartered Teacher	*The Standard consists of four key components:* • Professional values and personal commitments • Professional knowledge and understanding • Professional and personal attributes • Professional action
England: The Performance Threshold	*The Performance Threshold Standards fall into 8 areas:* 1. Knowledge and understanding 2. Teaching and assessment – planning lessons 3. Teaching and assessment – classroom management 4. Teaching and assessment – monitoring progress 5. Pupil progress 6. Wider professional effectiveness-personal development 7. Wider professional effectiveness -school development 8. Professional characteristics
WA: The Level 3 Classroom Teacher position	1. Utilise innovative and/or exemplary teaching strategies and techniques in order to more effectively meet the learning needs of individual students, groups and/or classes of students 2. Employ consistent exemplary practice in developing and implementing student assessment and reporting processes 3. Engage in a variety of self-development activities, including a consistently high level of critical reflection on the applicant's own teaching practice and teacher leadership, to sustain a high level of ongoing professional growth 4. Enhance teachers' professional knowledge and skills through employing effective development strategies 5. Provide high level leadership in the school community through assuming a key role in school development processes including curriculum planning and management, and school policy formulation
USA: NBPTS Standards for Adolescence and Young Adulthood Mathematics	1. Commitment to students and their learning 2. Knowledge of students 3. Knowledge of mathematics 4. Knowledge of teaching practice 5. The Art of Teaching 6. Learning environment 7. Reasoning and Thinking mathematically 8. Assessment 9. Reflection and growth 10. Families and communities 11. Contributing the professional community

Table 3 shows how differences between profession and employer 'owned' standards that are already in evidence at Level 2 become even more pronounced at Level 3. One such difference is that the employer-designed standards tend to describe *specific teacher actions* incrementally. This can lead to an overload of detail and a fragmented, atomistic check-list approach to teacher assessment. There is insufficient space in the table to describe the Level 3 elaborations of *all* the Level 2 statements described in all four sets of standards. Only one, which deals with *monitoring and assessment,* is shown in Table 3. (Note: It is difficult to see how standards without Level 3 statements can be useful for professional learning or the assessment of performance).

Table 3: Examples of Level 3 statements

Standards	Level 2 statements	Level 3 statements (Note, some of these statements have the characteristics of Level 4 statements, see table 1 above).
Scotland: The Standard for Chartered Teacher	'The Chartered Teacher should demonstrate through his or her work an understanding of…' (12 attributes, including:: • 'Educational assessment and its interpretation')	The Scottish standards provide no further elaboration of what teachers need to know about assessment.
England: The Performance Threshold criteria	The standard requires evidence that teachers: 'Consistently and effectively use information about prior attainment to set well-grounded expectations for pupils and monitor progress to give clear and constructive feedback.'	Has the teacher: • Shown that he/she evaluates progress in relation to national, local and school targets? • Shown that he/she sets realistic and challenging targets for improvement? • Shown that he/she uses assessment information to monitor pupils' progress and appropriately structures teaching approaches? • Used assessment information to report clearly to pupils, parents, other staff and in detail on progress achieved and action required? • Provided evidence to show that he/she has worked at the standard for the last 2-3 years? • If new to the school, indicated other verifiable evidence covering the last 2-3 years (up to and including the date of application) from previous schools(s)'?
WA: Level 3 Classroom Teacher position	Employ consistent exemplary practice in developing and implementing student assessment and reporting processes	(The L3 teacher:) • Develops and applies fair and inclusive practices in assessment and reporting • Uses a range of appropriate assessment strategies • Provides explicit information about student assessment • Makes valid judgements on student progress and achievement based on a range of evidence • Provides comprehensive, relevant information to students, parents and the wider community

USA: NBPTS Adolescence and Young Adulthood Mathematics	**Assessment** Accomplished mathematics teachers employ a range of formal and informal assessment methods to evaluate student learning in light of well-defined goals. They use the results to inform the teaching process and provide opportunities for students to reflect on the strengths and weaknesses of their individual performance.	*(Extract from 500 word statement)* (Accomplished teachers of mathematics) use a variety of assessment techniques, including open-ended problems, group investigations, projects and portfolios that assess the processes as well as the products of students' mathematical explorations and problem solving activities. They also provide opportunities for students to reflect on their own learning and evaluate their progress. Based on assessment results, teachers modify their lessons and the opportunities and activities they offer students. Sometimes backtracking, sometimes designing strategies or peer tutoring, sometimes moving to a more challenging situation. Such teachers use assessment strategies to identify student strengths as well as areas for improvement , and they provide timely and instructive feedback to students…..

Issues of content and procedural validity

When advanced teaching standards are widely adopted for purposes such as professional learning, or certification, as seen in the four examples in this review, they need to be able to withstand several types of challenge, including legal challenges about their validity. This is not to imply that concern about legal challenges and certification processes are the only reasons to ensure that standards are valid. Doubtful validity undermines the integrity of the standards and invalidates their use for any purpose. Challenges may focus on the *content* of the standards (for example, how do you know teachers who match these standards are more effective than those who do not?) or on the *procedures* used in their development (for example, who developed these standards? What gives them any credibility?).

A standard that simply says: 'teachers should use a range of teaching strategies' does not take us very far. To be valid, standards need to represent accurately what teachers need to know and be able to do to provide effective, appropriate, timely learning opportunities for students – in the specific areas of the curriculum they are teaching. Otherwise standards will be criticised on the grounds that they devalue, oversimplify and under-specify the professional knowledge and practices that good teachers need to teach well – that they are, in short, not valid.

Similarly, the procedures used to develop the standards need to be defensible in terms of their 'procedural' validity. Procedural validity calls for professional standards bodies that are genuinely independent and can act without fear or favour. The process by which a set of standards is developed is a critical issue, not only for the validity of the assessment procedures, but also for their legal defensibility.

Attending to the following criteria for procedural validity helps standards writers and responsible agencies to assert the validity of their standards development processes and procedures:

- Ensuring the integrity and independence of the body responsible for developing the standards

- Ensuring that the standards developing body is composed primarily of those who are already highly accomplished practitioners

- Ensuring that the diversity of perspective in the profession is represented

- Ensuring that the process of defining the standards is developed on a sound scientific basis

- Ensuring that the process of developing the standards is formally documented

- Ensuring that a wide sampling of agreement is sought for the standards from the major professional groups regarding the content and appropriateness of the standards.

Most sets of advanced standards for teaching, including three of the four examples focused on in this review (the Threshold, the Standard for Chartered Teacher, and

the WA Level 3), seem to have been developed with little close attention to matters either of content or procedural validity - although all three examples involved some degree of consultation with teachers.

Since its inception, the National Board has sought to ensure the validity and reliability of its standards and standards setting processes. All of the NBPTS content standards were subject to validation studies involving panels of highly experienced teachers in the relevant certification fields (Crocker, 1997). One important study (Hattie, Forthcoming), which investigated the validity of the processes for establishing the Standards for the Adolescent and Young Adulthood English certification standards, concluded that those processes met all the criteria for procedural validity and that the process for establishing the standards could be defended.

Summary

Investigation and analysis of the standards in the four systems in this chapter showed that the profession-defined standards of the NBPTS were the most successful in terms of providing valid representations of what teachers need to know and do to provide opportunities for students to learn. The NBPTS standards were context free, in that they described practices that could apply to all teachers, regardless of the school or state. They were also non-prescriptive, and pointed to aspects of teachers' practice that were readily observable and measurable.

The three tables presented in the chapter showed how standards are developed and elaborated at different 'levels' of specificity. While the four advanced standards systems showed obvious similarities at the first level, which set out core values and beliefs about teaching, the elaborations at the second and third levels, (which are usually the levels at which assessment is carried out), revealed significant differences between employer - developed standards and professionally developed standards. The former tended to describe and emphasise specific teacher actions – micro-level competencies - while the latter provided deep and faithful representations of the content of teachers' knowledge and skills. It was noted that the former approach can result in an overload of detail and a superficial, fragmented, atomistic approach to assessment.

Evidence of government-specific policies and requirements was also found at these levels in the standards developed by employers. It seemed likely that the purposes of the standards at these levels were more closely related to ensuring teacher compliance with aspects of policy, than commitment to professional values and principles.

As well as 'content validity' – being accurate representations of teachers' knowledge and skills - advanced teaching standards need to have procedural validity – i.e. the processes used to develop the standards need to be defensible. Of the four examples, that of the NBPTS was more advanced in terms of both content and procedural validity.

Chapter 6: Approaches to Giving Recognition to Teachers Who Meet Advanced Teaching Standards

This chapter of the review compares and contrasts the ways in which the four examples of systems for advanced teaching standards determine whether teachers have met advanced teaching standards. It discusses how the different examples gather and document evidence about teacher knowledge and practice; how they assess the evidence; how they set performance standards; and how they select and train assessors. Finally, it compares and contrasts the ways in which the four systems recognise and reward teachers who have gained professional certification by demonstrating that they have met the relevant advanced teaching standards.

The chapter is guided by the following questions:

- What forms of evidence are used to determine whether the standards have been attained?

- Who assesses whether the standards have been attained, and how are these people trained?

- Who provides certification for teachers who are able to demonstrate the achievement of standards of advanced practice

- What recognition is given by employing authorities to teachers who gain professional certification?

Certifying authorities

In each of the four systems, teachers who have been able to demonstrate the required standards are recognised – their accomplishment is 'certified' - by the Authority that has overall responsibility for the standards. These Authorities are:

The Performance Threshold:	The DfES
The Standard for Chartered Teacher:	The GTSC
The WA Classroom Teacher position	DETWA
NBPTS certification	The NBPTS

Gathering and documenting evidence

A wide range of sources of information may be relevant in assessing teaching. These sources fall into two groups: information that teachers provide themselves about their practice, such as an entry in a teacher's portfolio, and information that others gather, such as a colleague or an administrator observing a lesson or surveying students. Other potential sources of evidence include student test scores, student questionnaires, surveys of parents, and many types of records that schools record in the normal course of their work.

All four advanced standards systems chosen for review were voluntary, not regulatory. Each invited teachers to provide evidence about their practice against the standards, but they differed markedly in their understanding of the conditions necessary to ensure that evidence was valid and that the evidence was assessed reliably.

Teachers who wish to 'cross the Threshold' in England and Wales complete an application form in which they summarise evidence using concrete examples from their day-to-day work to show that they have worked at the indicated standards over the last 2 to 3 years. They are asked not to attach any supporting evidence to the form, but to ensure that any evidence that they have cited is available on request. Teachers are also advised to provide no more than three examples for each standard and to limit their responses to 250 words per standard. Head teachers assess the application on the basis of the evidence provided by the candidate.

Teachers who set out to achieve the *Standard for Chartered Teacher* developed by the General Teaching Council for Scotland (GTCS) may choose between two routes. They can undertake approved courses offered by providers (usually institutes of higher education) or they can follow the 'accreditation' route, which requires them to provide a portfolio of evidence that shows how they have met the standards.

The Higher Education institutions in Scotland who are responsible for the validation of modules and programs for teachers who choose the 'course' route, decide on the amount and nature of evidence to be presented for candidates wishing to achieve the Standard for Chartered Teacher. Evidence could include tests of subject and pedagogical content knowledge relating to courses taken, or documentation of, for example, action research projects, or evidence of day-to-day teaching tasks, such as planning documents or assessments of students' work, Candidates who choose the portfolio route negotiate the contents of the portfolio with their main provider(s). They can choose from a broad variety of evidence options.

The evidence gathering processes for *The Level 3 Classroom Teacher* selection are based on a two stage, competency-based assessment process that is external to the applicants' schools. In the first stage, candidates submit a portfolio containing statements and evidence to address each competency. In the second stage, they lead a Reflective Practice discussion in which they present and discuss a chosen scenario with three or four other applicants. Further evidence is obtained in the form of statements from a maximum of five referees.

In their portfolios, applicants are required to 'provide a clear, concise statement that demonstrates attainment of each of the Level 3 Classroom Teacher Competencies.' (Department of Education and Training, Western Australia, www.eddept.wa.gov.au). The statement has to be supported by up to 15 pages of evidence of the candidates' choice, plus the optional use of 'unedited action recordings' of no more than ten minutes duration.

DETWA has provided applicants with examples of kinds of evidence they may choose to attach to their written statements for each competency. For Competency 1, ten examples are provided including:

- Annotated Photographic Display (mounted on sheets of A4 paper) that demonstrates an exemplary or innovative teaching/learning strategy with an individual student and/or class of students

- A letter of support from a colleague or group of colleagues that confirms an innovative or exemplary teaching strategy or techniques to meet the learning needs of individual students, groups and/or classes of students

- Evidence of receipt of an Award for Teaching Excellence presented by employing authorities, community bodies or professional associations. (Department of Education and Training, Western Australia, www.eddept.wa.gov.au)

Gathering evidence to support the application of an NBPTS candidate for certification is a matter of responding to specific assessment tasks and activities that have been designed to measure the achievement of the standards. Assessment development teams, including teachers and measurement experts, develop a variety of assessments for each field. The relevant NBPTS standards committees monitor this development to ensure that the evidence collected and presented reflects what is in the standards.

Teachers applying for NBPTS certification prepare a portfolio that includes four entries. Each entry focuses on different, though overlapping, components of the standards. This ensures that the portfolio contains evidence across all the standards and the main curriculum areas. Teachers compile their portfolio over one school year, but they may take longer. Primary teachers, for example, provide evidence of their teaching in several areas of the curriculum, such as literacy, mathematics and science. Each entry that secondary teachers prepare must focus on a different class to increase reliability. The portfolio tasks are carefully structured to guide candidates in how to make good choices in presenting evidence and to ensure fairness and reliability in assessment. Detailed instructions are given about the evidence that is to be submitted. Two of the entries require videotaped evidence of classroom interactions and commentary on that evidence. One entry is based on samples of students' work and developing understanding over time. Candidates provide a detailed analysis and reflection for each entry, showing how they have translated the standards into practice. The candidates also complete a fourth portfolio entry that documents their accomplishments in the wider school and contribution to leadership and professional community. Again, they are required to reflect on the nature and quality of their contribution, and comment on its relevance to their students learning.

In addition, National Board candidates complete six 'exercises' at a local assessment centre, of which there are more than 300 in the USA. These exercises are designed to assess aspects of teachers' subject matter and pedagogical knowledge that cannot be assessed with portfolio entries.

The Board contends that, for an assessment to be valid - for it to accurately measure the depth and breadth of teachers' practice, knowledge and dispositions, it should be specific to a particular field of teaching. Teachers in different fields are asked, therefore, to provide evidence about the things they do that are unique to their fields of teaching. The ten independent pieces of evidence ensure that evidence is gathered in more than one way across all the standards, which enhances the reliability of the assessment.

Each piece of evidence is assessed by different assessors. This increases the reliability of the assessment.

Two approaches to gathering evidence

Ensuring that an assessment task measures what it is intended to measure also requires that the evidence required to show that the standard has been met should be consistent with the standard itself. (This assumes that the standard lends itself to accurate assessment, which is why standards should always be developed with the need for valid and reliable assessment in mind).

Two broad approaches to gathering evidence in support of a teacher's claim to have achieved a standard are illustrated in the four examples. The first, which is the approach used in the first three examples, is to allow candidates to select their own evidence – letting them make their own connections between a standard and the type of evidence they think would support it. The second is to ask candidates to respond to certain 'prompts' or 'tasks' that have been specifically designed to elicit evidence for the standard. (Of the four examples, that of the NBPTS is the only one to include this approach.)

The first approach calls for teachers to provide portfolio entries that are unstructured, in that they do not provide guide questions that lead applicants to address deeper, more complex issues. A structured approach like that of the NBPTS assessments is much more likely to ensure fairness to applicants and reliability of assessment.

Teachers themselves, when they are assessing their own students, nearly always follow a structured approach. They devote at least as much time and expertise to developing a range of assessment tasks, examination questions with built-in 'prompts', and activities to elicit evidence of students' learning as they do to establishing learning goals and assessment criteria. Systems and governments do not administer large-scale tests of student achievement without taking all reasonable steps to ensure the quality and validity of the assessment instruments. It is no less important to ensure that assessment instruments for teachers' performance satisfy the criteria for fair and valid assessment.

Assessing the evidence

Assessing evidence of teachers' performance calls for considerable care. As already noted, Governments do not venture into administering state or national tests of

student achievement without ensuring that the necessary research and development has been conducted on the tests to ensure that assessment standards have been met. These principles also apply, or should apply, to the assessment of teachers' performance.

In the UK and Wales, until the present 'round' (round 6) of applications for the Threshold classification, the assessment process had internal and external components. In the internal processes, headteachers assessed the evidence. In Rounds 1-5 an external verification process was managed in England on behalf of the DfES by Cambridge Education Consultants, and in Wales by a consortium of Local Education Authorities (LEAs). There were two types of assessor verification – distance verification and on-site verification. The majority of schools received distance verification through a process in which external assessors read the applications without visiting the school. The chief purpose of the verifiers was to certify that the headteacher had correctly carried out the process, and to confirm the headteachers' judgements. In these first five rounds, the external verifier rarely changed the headteachers' decision.

This system raises serious questions about the reliability, validity and therefore fairness of the assessment. As far as we can ascertain, no steps have been taken to ensure comparability across schools in the way headteachers are interpreting or applying the standards. The English system falls down on criteria for sound assessment.

For Round 6 and future Rounds the external verification processes have been discontinued, and assessment is now carried out only at schools under the full direction and responsibility of the headteacher. Effectively, the Threshold assessment has become part of Performance Management processes in schools.

For both routes to the Scottish *Chartered Teacher*, PD provider(s) design and carry out the assessment. Because there are two routes to achieving the Standard for Chartered Teacher, and because taking the Course route entails the completion of various courses and units that lead to a Masters degree, the exact nature of the assessments varies widely and reliability and validity are difficult to ascertain.

Trained assessors who are already L3 teachers carry out assessment for the WA Level 3 Classroom Teacher position. Rubrics have been developed to help assessors to judge candidates' performance against each of the five competencies. The assessment rubrics provide further explanation of the specific teacher behaviours associated with each competency. (Department of Education and Training, Western Australia www.eddept.wa.gov.au)

In the first stage of the assessment, two peer teachers who have received training assess the statements and evidence in teachers' portfolios. Candidates do not complete assessment centre exercises, but those who succeed in the Portfolio phase participate in the second stage, the Reflective Review, where candidates lead a round table group discussion on an aspect of their practice. This part of the assessment takes place at a venue that is external to candidates' schools.

The assessors receive two days' training. They work independently and then moderate in pairs in both stages of the assessment process, using scoring rubrics. Assessors do not necessarily teach in the same field as the candidates they are assessing. What this means in terms of making valid and reliable judgements about the depth and breadth of candidates' knowledge, practice and dispositions is yet to be fully tested.

As mentioned, candidates for NBPTS certification complete ten assessment tasks: four portfolio entries and six assessment centre exercises. Each NBPTS task assesses a cluster of the Standards, and each standard is assessed by more than one task. Two scorers, using rubrics, independently assess each exercise. This means that 20 assessors are involved in assessing each total application. A weighted total score is calculated across all ten exercises. Pairs of scorers assess only one exercise, they do not examine all of a candidate's work. A wide-ranging and thorough research program ensures the technical quality and integrity of the measurement processes.

Setting performance standards

Setting performance standards involves establishing processes for distinguishing between levels of performance. Of the four examples, only the NBPTS appears to have made a serious attempt to ensure the psychometric quality of its standards setting processes. The Board initially used the Judgmental Policy Capturing procedure (Jaeger, 1982, 1995). More recently, it has used the less complex direct judgment method. Both methods involved weighting and benchmarking exercises that required judgment by panels of expert teachers.

Research on the validity and reliability of the assessment procedures

This section describes some research that relates to the validity and reliability of the Threshold, WA Level 3 and NBPTS assessments. We were not able to discover any examples of research that related to the validity and reliability of the assessments for any of the Chartered Teacher programs, all of which are carried out separately by individual Providers. In October 2005 only 149 teachers had received the award of Chartered Teacher; 2800 teachers were currently undertaking it through a variety of programs.

In 2001, a research team from Exeter University (Wragg et al. 2001) expressed serious doubts as to the reliability and validity of the English Threshold assessment procedures. In the 1000 schools of their study sample, they found that the success rate of applicants was 97% (the same as the national success rate). This figure alone, they said, raised questions about the effectiveness and validity of the evaluation. It also raised the obvious question of whether the evaluation was necessary in the first place. A number of observers commented that simply giving these teachers a pay rise, without an evaluation, would have been easier and cheaper.

While the Exeter research showed that most teachers were not overly critical of the role played by principals in their evaluations, some, especially the few who failed, were highly critical and claimed that they had been victimised. According to this research, only seven of the 174 unsuccessful teachers felt that the judgment of their case was justified. The other 167 were "shocked" "furious" or "demoralised"

Menter et al's (2004)case study material also indicated that teachers were cynical about the validity of the *Threshold* assessment, seeing it as an unnecessary and burdensome hurdle over which they must jump in order to access a well deserved and over due pay rise. With reference to the research of Mahony and Hextall (2000) they noted that:

> In England, from the outset, the Threshold proposals met with a storm of controversy. Fierce debates ranged over: the values underpinning the policy; the nature and adequacy of the performance standards against which individuals would be assessed; the potential for bias in the assessments; the logistics and technologies of application and assessment; and negative impacts on individuals and general concerns with issues of equal opportunity.

Bottery (1998) found that some school managers were moderately supportive of the Threshold assessment, but many were sceptical. One major concern was the wide variation that was found between schools in the ways in which the assessments were carried out. Another was that sometimes, assessment processes in schools appeared to discriminate unfairly against groups of teachers, for example women and minority ethnic teachers.

The majority of respondents and interviewees in an evaluation of the L3 Classroom Teacher processes (Ewing, 2001) believed that the assessment processes were 'valid':

> The Portfolio process has been validated to the extent that respondents and interviewees appear to agree that the portfolio assessment task appears to measure what it sets out to measure. Additional guidelines and examples are still needed to develop this process. (Ewing 2001)

However no in depth validity study of the L3 Classroom Teacher assessment processes has yet been undertaken. Such a study might measure the comparability of assessments made by assessors from different fields (It might show, for example whether the assessment of a Mathematics teacher's portfolio carried out by another teacher of Mathematics differed substantially from that carried out by a teacher-assessor from another field).

The need for a further study of validity and comparability of assessments for the L3 Classroom Teacher assessments is underscored by the fact that, in the (Ewing 2001) evaluation, only 49% of respondents agreed that the portfolio assessment processes were 'fair'. This was thought to be due in part to the assessors' background:

A belief that assessors did not have the background to assess portfolios outside their teaching experience raised concerns regarding fairness (Ewing 2001, p. 33)

Seventy-two percent of respondents in Ewing's study believed that the portfolio assessment process was rigorous. Anecdotal evidence from teachers suggested that the L3 evaluation was perceived to be more demanding and time consuming than that for principal class positions. Eighty-three percent of survey respondents felt that the L3 assessment process 'far outweighed the requirements of other promotional positions (Ewing 2001, p. 31.) The low 'pass rate' (333 successful applicants of a total 1095 in the two selection processes held in 1999 and 2000) suggests that assessment processes were rigorous. However, it is likely that fear of failure and perceptions of the requirements as too onerous may also be deterring teachers from applying for the L3.

As noted in Chapter Four, the NBPTS takes care to ensure the validity of its standards, the processes for developing the standards, and the validity of the assessment tasks and scoring rubrics, especially the congruence between the assessment tasks and the standards that are being assessed.

All National Board assessments have been subject to validation studies in which panels of expert teachers in the relevant certification areas were asked to respond to a series of questions about the relevance, representativeness, necessity and importance of the standards and assessment processes. The panels found that the exercises and scoring rubrics were appropriate for the content being assessed (Crocker, 1997).

Other validation exercises involved panellists of experienced teachers working in pairs, independently of the assessment panels ranking a sample of portfolio exercises and Assessment Centre exercises. When compared with the scores awarded by the original assessors, the panellists' assessments, with rare exceptions, demonstrated the accuracy and the consistency of the scoring system. (Jaeger, 1998). In another psychometric validation study Jaeger, (1998), that used Livingston & Lewis' (1995) methodology it was found that among the 258 candidates in the study, there was a 13% chance of misclassification, which is relatively low.

Recognition and reward

Teachers who have gained professional certification through an effective system of professional learning usually benefit from intrinsic rewards that result from their improved efficacy. These rewards include satisfaction that students are learning well, and appreciation of positive feedback from students and their families.

Important as such personal rewards are, however, it would be unreasonable to expect that teachers who made extra efforts to improve their practice should receive no form of extrinsic recognition and reward. Yet, to date, little progress has been made in this area. Despite the recognised links between quality teaching and successful student learning outcomes, few employing authorities have developed

teacher career paths that provide substantial recognition and reward for accomplished teaching. Most teachers who choose to remain in classrooms continue to progress more or less automatically along salary scales that provide no avenues for career development or increased remuneration once teachers have reached the highest level of the scale, usually after ten or so years of teaching. Examples of the failure of alternative schemes, such as that of the Advanced Skills Teacher (AST) in Australia in the 1990s, show how difficult it is to break this pattern.

Teachers who satisfy the certification requirements for the English Performance Threshold classification receive an immediate salary increment of £2000 per annum. They also gain access to higher levels of the salary spine that are open only to teachers who have 'crossed the Threshold'. However, as previously discussed, there is little or no evidence to suggest that teachers who have crossed the Threshold are better teachers. The Threshold does not provide teachers with a respected status.

Achievement of the Standard for Chartered Teacher in Scotland carries with it an immediate salary increment of £7000 pounds per annum. Because the requirements for Chartered Teacher completion appear to be rigorous, it is likely that teachers who hold Chartered Teacher status will be more highly regarded and may thus have a significant advantage when seeking employment or applying for further promotion. A representative of the GTCS with whom we have had contact said that teachers who satisfy the evaluation requirements for the Standard for Chartered Teacher believe that they have earned the respect of their peers and school communities. While, to date, fewer than 300 teachers have achieved the standard, she said, there is sufficient reason to expect that they and those who follow them will continue to enjoy the higher status as well as the financial gains that the position was set up to provide.

Level 3 Classroom Teachers in Western Australia receive about $5-6000 per annum more than teachers who have reached and remained at the highest level of the salary scale. Because all teachers are eligible to apply, this represents a substantial salary increase for some teachers. Level 3 Classroom Teachers are highly regarded and sought after in schools. This is because principals are aware (a) that they have satisfied rigorous requirements in the assessment processes and (b) because the position carries with it a flexible obligation, with a time allowance, to provide leadership to other teachers. The immediate extrinsic rewards of this position are, therefore, a salary increase and expanded employment opportunities. There is also some reward in terms of perceived status in a school and the wider education community. Level 3 teachers are seen as leaders, occupying a particular place in the school and district hierarchy, respected and looked up to as models of excellent teaching by other teachers.

The NBPTS does not directly reward teachers who have met its requirements for certification. This is not part of its role. Its main concern is to ensure, through stringent processes previously discussed in the review, that its guarantees of accomplishment are based on processes of sufficient substance and quality to allow

NBPTS certification to enjoy the full confidence of the 'marketplace' of schools across the USA. On this basis of quality, the Board works to ensure that Board certified teachers will be in demand, and will be rewarded accordingly.

This expectation is now being met. Many employers of teachers in the USA now provide substantial salary increments for Board Certified teachers, and a majority of states are prepared to give financial support to teachers who undertake certification. These teachers are in high demand and are often mentors and leaders in their schools. This is largely because members of the education and wider communities are confident that the Board's stringent efforts to ensure the rigour, fairness, validity and reliability of its assessments can be depended upon to provide serious guarantees of teacher quality. Board certified teachers are thus rewarded in terms of enhanced status and expanded employment opportunities as well as financial remuneration.

These ways of encouraging, recognising and rewarding Board certified teachers work well in a nation with many employers of teachers, in circumstances where it would be impossible as well as undesirable to industrially negotiate a single, 'lock-step' national teacher career path or pay system. The certification itself is national, portable and almost universally recognised as providing reliable guarantees of high quality teaching performance against demanding standards. Employers who want to improve student learning outcomes by employing teachers of demonstrated accomplishment find NBPTS certification an efficient as well as effective means of achieving this aim.

Longer term recognition and reward for teachers who gain professional certification

There appear to be few differences in terms of immediate financial reward in the four examples under discussion. All provide substantial and immediate salary increases. The Standard for Chartered Teacher seems to be the most generous, but the costs to teachers of undertaking it are also high.

Certification may also have the potential of recognition and reward in the longer term. Teachers may include their Threshold, Chartered Teacher L3 or NBPTS certification status in their Curriculum Vitae, in the expectation that it will improve their chances of gaining a more senior position, or that it would enhance their chances of employment in another system, or even another country. In this sense, the achieved status, even if designed for one system only, is portable and advantageous across schools, systems, and jurisdictions. This is certainly the case for teachers who hold NBPTS certification. It makes a great deal of sense, given the expanding education 'market' and the ever-increasing mobility of teachers across the world. However the value of the status will necessarily depend upon the recognised credibility of the certification system and the respect it commands.

Summary

The chapter compared and contrasted the different ways in which the four systems determined whether the teachers had met the respective sets of advanced teaching standards. It examined each system in terms of: (1) who provided the certification (2) what forms of evidence were used to determine whether the standards had been attained (3) how and by whom the assessments were carried out and (4) what recognition was given by employing authorities to teachers who had demonstrated that they had met the standards.

Different forms of evidence are required in each system. Teachers who wish to cross the Threshold are asked to provide a form with no more than three examples of each standard and to limit their responses to 250 words per standard. Teachers who undertake the Standard for Chartered Teacher through the Program route provide evidence of having completed the Course requirements of individual providers. Those who chose the Accreditation route present a portfolio of evidence based on the standards. Aspiring Level 3 teachers in WA also present a portfolio of evidence against the standards, as well as participating in a round table 'Reflective Review' process. The NBPTS processes require teachers to prepare a portfolio of evidence on all standards in response to specific tasks which are carefully structured to guide candidates in how to make good choices in presenting evidence and to ensure fairness and reliability in assessment.

The WA Level 3 Classroom Teacher and the NBPTS assessments are carried out externally to candidates' schools by trained peer teachers. The Threshold assessment is conducted at individual schools under the responsibility of head teachers; the assessments for Chartered Teacher status are carried out by the professional development providers, who are responsible to the GTCS. Researchers have expressed serious doubts about the reliability and validity of the *Threshold* assessment processes. Of the four examples, only the NBPTS regularly monitors its assessment programs to ensure the validity of its standards, the processes for developing the standards, and the validity of its assessment tasks and scoring rubrics.

Teachers who show that they meet the Threshold and WA Level 3 Classroom Teacher standards are promoted to a higher level on the employers' pay scales. Those who attain the status of Chartered Teacher receive a substantial increase in salary. NBPTS certification is portable. State and District education authorities in the US who wish to attract NBPTS certified teachers offer various rewards and incentives, including salary bonuses and assistance with certification fees. In some states, policies exist to attract NBCTs to disadvantaged schools.

Chapter 7: Linking Advanced Standards to Professional Learning

One of the central reasons for establishing advanced teaching standards is to increase the effectiveness of professional development for teachers. It is primarily by engaging more teachers in more effective professional learning that advanced standards can make a major contribution to improving student learning.

Each of the four systems described in the previous chapter used, to varying degrees, advanced standards to create a system that provides clearer direction for continuing professional learning and stronger incentives for teachers to engage in modes of learning with links to improved student learning outcomes. This chapter briefly reviews the literature on effective professional learning and examines the extent to which each system succeeds in engaging large numbers of teachers in that kind of learning.

Professional learning and advanced standards

The guiding questions for this chapter in reviewing the four systems are:

- How is professional learning organised to assist prospective or established teachers to attain the standards?

- Who are the providers? Who is responsible for the professional learning?

- How are the activities or programs funded?

- To what extent does the system engage teachers in effective professional learning?

Each system is attempting to address perennial problems in the provision of professional learning for teachers. Until recently, the profession has not provided its members with a clear and challenging conception of what they should develop toward and get better at over the long term. In Australia, there are many individually effective professional development programs and activities operating at school and system levels, but the overall pattern of provision is brief, fragmentary, and rarely sequential. As McRae et al. (2001) found, 75% of teachers spent less than 6 days in professional development activities. In addition, each activity was usually two days or less, too short to lead to any significant change in practice (which research indicates is more likely with courses over 80 hours long and extended in time (Garet *et al.*, 2001). Significant changes in practice that lead to improved opportunities for students to learn take years of engagement in many modes of professional learning.

In other words, the focus has been on providing individual courses, not on providing a system to promote professional learning over the long term toward advanced standards of practice. The focus has been on courses, not developmental stages and pathways to guide and support individual professional growth for every teacher. While the necessity of professional development is widely recognised, current provision falls far short of what the research says is necessary to improve learning

outcomes for all students. This chapter pays particular attention to the quality of professional learning engendered by/through each system.

With some important exceptions, members of the teaching profession have been consumers of professional development activities, not providers of a professional learning system for their colleagues. Opportunities for teachers and their associations to develop a strong sense of ownership and responsibility for the professional learning system have been limited. Control over the direction and provision of professional development in the past has been the province of employing authorities and to a lesser extent universities.

In other professions, there is a stronger sense of shared responsibility for the professional learning system. While employing authorities undoubtedly have a responsibility to provide professional learning needed to implement reforms that they have initiated, professional associations in other professions usually undertake the responsibility of ensuring that individual members keep up with and develop toward professional standards. In this chapter, we ask of each system, how strong is the sense of ownership and responsibility for the system among teachers and their associations?

Various reasons have been advanced to explain why teachers have been much slower to assume 'ownership' of their professional learning and standards of practice than members of other professions. These reasons include the size of the teaching workforce, and the fact that most teachers are public sector employees. But clearly, for whatever reason, the capacity of the profession to engage most of its members in effective modes of professional learning over the long term has been limited. There has been lack of consensus and clarity about what teachers should get better at, and incentives to demonstrate evidence of development in relation to advanced standards of practice have lacked conviction. In other words, the relationship between evidence of professional development and career stages has been weak.

Each of the systems included in our review is attempting to build a stronger relationship between professional development and career progression, with varying success. Professional development is one of the most powerful options available to governments seeking to improve student learning, but, as a lever for change, professional development has rarely been implemented effectively or achieved its potential. Career paths have not reflected the value to schools of teachers who reach high standards of performance.

Each of these countries is attempting to develop what is in effect a professional development-related career path. They believe that the redesign of career paths to provide stronger incentives is essential. There have been attempts to do this in the past, such as the Advanced Skills Teacher in Australia mentioned in Chapter Two. We have also reviewed what evidence we can find about the effects of these reforms on teachers' professional learning.

Recent research on effective professional learning

A key message from research is for professional developers to create contexts and use any methods that increase the frequency and quality of professional conversations that teachers can have with each other about the content of what they are teaching, and the learning that is going on in their own classrooms. These conversations should be about deep aspects of teachers' practice – of what they could expect to get better at - which can only occur over time and as a result of reflection. Examples might include:

- Deeper understanding of content from the learner's point of view

- Deeper knowledge and awareness of students as individuals

- Capacity to provide useful feedback

- Learning how to let your authority "go" and promote independent thinking and learning

- Ability to make assessment a vehicle for student learning

Effective professional learning as a long-term, personal quest

Hawley and Valli (1999, p. 127) speak of 'an almost unprecedented consensus' among researchers, professional development specialists and key policy makers about how best to improve the knowledge of educators. This consensus rests on an understanding that teachers learn most effectively when they engage in solving authentic problems collegially that are related to narrowing the gaps between what students are expected to learn and their actual performance.

On the basis of several syntheses of research Hawley & Valli identify nine 'characteristics' or 'principles' of effective professional development that are most likely to contribute to improved teaching practice that leads to improved student learning. These are shown in.

Table 4: Principles for the Design of Effective Professional Development
(Hawley & Valli, 1999)

1. The content of professional development (PD) focuses on what students are to learn and how to address the different problems students may have in learning the material.

2. Professional development should be based on analyses of the differences between (a) actual student performance and (b) goals and standards for student learning.

3. Professional development should involve teachers in the identification of what they need to learn and in the development of the learning experiences in which they will be involved.

4. Professional development should be primarily school-based and built into the day-to-day work of teaching.

5. Professional development should be organised around collaborative problem solving.

6. Professional development should be continuous and on-going, involving follow-up and support for further learning-including support from sources external to the school that can provide necessary resources and new perspectives.

7. Professional development should incorporate evaluation of multiple sources of information on (a) outcomes for students and (b) the instruction and other processes that are involved in implementing the lessons learned through professional development.

8. Professional development should provide opportunities to gain an understanding of the theory underlying the knowledge and skills being learned.

9. Professional development should be connected to a comprehensive change process focused on improving student learning.

Hawley and Valli's first principle emphasises the overriding importance of *what* teachers learn, as well as *how* they learn it. As Kennedy (1999) puts it, the *form* of professional learning is less important than the *what* – the substance, or content. It turns out that knowledge is the key when it comes to generative professional learning, particularly when it leads to deeper understanding of the content that students are to learn, the research on how students learn that content, and the nature of the problems different students have in learning that content (Cohen & Hill, 2000; Carpenter et al. 1996). This research supports the arguments, discussed in earlier chapters of the review, in favour of subject/field specific standards for advanced teaching, as opposed to generic standards.

Hawley and Valli's second principle emphasises the importance of focusing professional learning around data and feedback from one's own students, especially data about where those students are at in relation to where they could or should be in their development. Some of the most effective professional learning now comes through activities that help teachers to 'moderate' or compare their own students' work with that of students taught by other teachers. In a standards based professional learning system, teachers can be asked to provide evidence of having participated in such activities as part of providing evidence against the relevant standards.

The importance of making teachers' practice, and evidence about practice, the site for professional learning is inherent in all nine of the Hawley and Valli principles. Practice based professional learning represents a major shift from traditional views of professional learning based on participation in 'courses'. This is not to imply that courses and other activities such as workshops and conferences do not have an important role in supporting professional learning. However, these activities are only the 'front end' of improving the work of teachers. We have known for a long time that the 'back end' of processes of change and improvement is where the hard work has to be done – supporting teachers as they test new approaches in their own classrooms (Fullan, 1982). Effective systems of standards based professional learning and certification are practice based. As such, they reflect the best principles of what is known currently about effective professional learning.

Professional learning in the four systems of advanced teaching standards

All four systems discussed in the review (The Performance Threshold in England, the Standard for Chartered Teacher, the Level 3 Classroom Teacher position and NBPTS certification), aim to improve the knowledge and expertise of teachers.

The Performance Threshold

As previously noted, the Performance Threshold is essentially a form of performance related pay, designed to increase teacher effort and to 'encourage and reward good teaching (see the DfES website). This initiative was originally intended

to help teachers improve their practice, but this intention seems to have faded in the implementation processes. However, similar to the three other examples, the Threshold clearly offers teachers opportunities for professional growth and development. This comes from their own efforts and experiences when collecting evidence, from their reflections on this evidence, and from the feedback they receive from head teachers and line managers during and after the school based assessment processes. It may also come from professional interactions with colleagues who are also applying for the Threshold.

Threshold applicants may – or may not – receive support from colleagues or local networks to help them with their applications and encourage and support their learning. We were not able to discover any form of formal professional development programs that had been set up to guide teachers on their journey through the standards as they collected evidence to support their claims.

Some support, however, is offered by the DfES and National Union of Teachers (NUT) each of which has produced documents that offer detailed and comprehensive advice and guidance to Threshold applicants in relation to each standard. The advice does not set out to offer support for teachers' professional learning, however, largely because the process is regarded more as an application for a job than as an opportunity for learning. In fact, the NUT advice is explicit on this point:

> The application should be treated as if it were an application for a
> post ((National Union of Teachers, 2005), p.3)

Some learning may result from informal collegial interactions among teachers, in spite of the fact that most schools probably do not provide such opportunities specifically for teachers who are applying for the Threshold. One study (Croxson & Atkinson, 2001), which reported the results of interviews with the head teachers of 25 English secondary schools about how they implemented the Threshold, records this statement (which is typical of statements made by other head teachers):

> Certain departments just kinda got together and you know like:
> 'come on folks lets spend a few lunch times kicking ideas around.' It
> depends where the kettle is where they have their meeting hole.
> Science departments meet in one place and they spent lunch time
> kicking ideas around – in other departments people went away and
> did it on their own without really discussing it with their colleagues

Comments like this point to how a standards based initiative like the Threshold has the potential to bring teachers together to discuss their practice and to learn in ways that research has shown to be effective. The learning that results from 'kicking ideas around' can be very powerful. However, the process by which teachers gather evidence limits any opportunity for the effective professional learning.

Head teachers may request 'evidence' of all kinds, ranging from 'baseline assessment data' about pupil progress, to schemes of work linked to the School Development/Improvement Plan – for example, showing use of ICT (National Union of Teachers, 2005) - to support the claims candidates for the Threshold make on the application form. However, these teachers are not asked specifically to gather first hand evidence about their practice or what their students' are doing, along the lines suggested by Hawley and Valli's *Principles for the Design of Effective Professional Development*. They do not deprivatise their practice by, for example bringing to staff discussion samples of their students' work that illustrate learning improvement over time. Consequently, the process of assessment for the Threshold is not usually a learning process. It does not engage teachers in analysis and reflection based on concrete evidence about their practice.

Other head teachers' comments recorded in the Croxson and Atkinson study point to the potential of the Threshold evaluation to meet the second principle of Hawley and Valli's analysis, concerning the valuable learning that takes place when teachers, working collaboratively, examine data about where their students are in relation to where they should be. Again, however, although the Threshold assessments may (or may not, depending on the school and head teacher) require teachers to produce data about pupil progress, it is usually data from national testing, not samples of their students' work over time.

> 'It's a daft case really, we're data rich/information poor and I think (the Threshold assessment) just highlighted that to me...I think it's one of the things that came out of the performance management thing that we've got loads of data but we're not handling it very well.' ((Croxson & Atkinson, 2001), p. 13).

There do not appear to be any efforts to build an infrastructure to support the professional learning of teachers as they prepare for the Threshold assessment. The assessment is more an event than a process. The professional learning that teachers experience appears to be incidental rather than part of conscious design to engage teachers in using the standards to analyse and evaluate their own practice.

Teachers who have 'passed' the Threshold do not view the process as a positive learning experience. In a study carried out in 2001, a group of researchers from Exeter University found that only 1% of teachers reported that the experience of the Threshold had had a positive effect on their practice. Ninety-eight percent of teachers said that it had a 'detrimental' effect on their morale and some of the few who were unsuccessful described its effects as 'devastating.' (Wragg *et al.*, 2001)

In view of such findings, it is impossible to avoid the conclusion that while the Threshold may carry some potential for powerful site based professional learning, it has failed to fulfil this potential.

The Standard for Chartered Teacher

In contrast to the English Threshold approach, where the focus is on performance management and managerial accountability, the Scottish *Standard for Chartered Teacher* clearly aims to assist teachers to improve their knowledge and professional practice. Whether teachers choose to take the 'Programme Route' or the 'Accreditation Route' to achieving the Standard, they need to be able to demonstrate that they have experienced successful learning along the way.

A strong infrastructure to support teachers' learning has been established, in the form of Providers – who may be universities, Local Education Authorities (LEAs) or other provider networks – to support teachers as they learn and progress towards the Standard. The learning period is extensive. It can take up to six years.

The program of learning for the Standard for Chartered Teacher is different for each teacher, depending on their individual needs and aspirations, and the providers' varying expectations and provision of opportunities for learning. It has to be noted that teachers who take the Programme route are following a well trodden path that has been taken by many teachers, especially in the USA, over many years. (But dissatisfaction with 'course taking' was part of the reason for seeking alternative means to promote American teachers' learning.)

The Accreditation Route to the Award for Chartered Teacher seems to be more in line with the research findings discussed above, which emphasise the importance of making teachers' practice the site for teachers' professional learning than the Programme route is. However, feedback received by the GTCS strongly suggests that teachers find both the Program and the Accreditation routes are valuable sources of professional learning and development.

The WA Level 3 Classroom Teacher position

Like the Standard for Chartered Teacher, the Level 3 Classroom Teacher position was established with a clear and stated intention to improve the knowledge and skills of applicants, as well as to reward excellence and encourage good teachers to remain teaching. An evaluation of the Assessment Processes used to select Level 3 Classroom Teachers, carried out in 2001 (Ewing, 2001) showed that applicants found the experience, especially the portfolio development, valuable for their professional learning. In the interviews and focus group sessions that were part of this evaluation, respondents expressed concerns about the amount of learning support that was available to them, and about the amount and quality of feedback from the assessors. These concerns were addressed in subsequent rounds. Existing Level 3 teachers now provide mentoring and other support to new applicants as part of their negotiated leadership roles, and District Offices offer various forms of support and encouragement.

Because every portfolio that documents and provides evidence of applicants' journeys towards Level 3 Classroom Teacher status is different, and because the evidence requirements are so broad and general, it is again difficult to judge the effectiveness of the processes in terms of their impact on teachers' professional learning.

The National Board for Professional Teaching Standards (NBPTS)

A major aim of NBPTS certification is to establish effective professional learning opportunities and experiences for teachers. Part of the original rationale for Board certification was that the long-standing American practice of rewarding teachers based on the number of the post-graduate courses they had taken had come to be seen as an ineffective and inefficient use of resources for improving student learning outcomes.

The new thinking was that by establishing a three pronged approach – (1) developing profession defined standards that described 'accomplished' teaching; (2) gathering evidence on the basis of appropriately designed assessment tasks and activities geared to the standards; and (3) ensuring the rigour, validity, fairness and reliability of the assessments - teachers would experience more effective professional learning that was specifically targeted towards their achievement of the standards.

Completing an NBPTS portfolio takes at least twelve months. The portfolio tasks engage applicants in challenging, site based learning that centres on interaction with their own students and colleagues. For example, the following task requires primary teachers to:

1. Provide evidence of a unit of work, with student writing samples, in which you have developed a 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

Tasks like this were designed to be vehicles for professional learning. There is considerable evidence that teachers who have been through the National Board system regard the experience as one of the most powerful professional experiences they have ever had (Tracz S. & Associates, 1995).

A study commissioned by the Board 2001 sampled the views of 10,000 National Board Certified Teachers. This study found that teachers believed the certification process had:

- made them better teachers (92%)

- was an effective professional development experience (96%)

- enabled them to create better curricula (89%)

- improved their ability to evaluate student learning (89%)

- enhanced their interaction with students (82%), parents (82%) and colleagues (80%)

Typical comments included:

> "The National Board Certification process was by far the best professional development I have been involved in. I did not realise how much I still needed to learn about impacting student learning. I learned so much through hours of analysing and reflecting."

> I gained valuable insight of myself as a teacher. The process helped me to assess my teaching abilities as no administrator could have. Most importantly, my students benefit from my self-improvement."

> "Working with other teachers in my school who were also working on certification was rewarding"

> "It was the hardest thing I have ever done and it is something I am so glad that I tried. I am immensely proud of the work I turned in – even if I did not make the needed grade. It has made me a better teacher and colleague."

This last quote provides an interesting contrast with English teachers' feelings about undertaking the Threshold. When teachers perceive that the assessment is rigorous and fair they seem to feel less aggrieved when they are not successful.

As discussed in previous chapters, the NBPTS is not a provider of professional learning. Many universities and providers of teacher professional development across the country offer various kinds of learning support for teachers who are in the processes of obtaining certification.

Comparison of approaches

The most recent research on effective professional learning for teachers provides clear evidence that the content of professional learning matters as much, if not more than the process (Kennedy, 1999; Sykes, 2001). In summary, this research indicates that professional learning is most likely to improve student learning outcomes if it increases teachers' understanding of:

- The content they teach

- How to represent and convey the content in meaningful ways

- How students learn that content

- How well their students are doing in relation to how well they should be doing

Advanced teaching standards need to reflect these principles if they are to promote and encourage professional learning. As argued in previous chapters, the standards that are most likely to promote the best professional learning are profession-defined, rather than developed to serve the purposes of individual employers or other agencies. The former promote engagement, the latter compliance. To be effective vehicles for professional learning, content standards must capture the best of what is known about teaching, based on research and shared understandings of best practice.

Of the four systems discussed, only the NBPTS standards can fully claim to be profession-developed and profession-wide. This does not mean that other standards do not promote professional learning. In the main they do. However, profession-wide standards do it much better. The standards developed in Australia by the four subject associations, discussed in Chapter Four, are also profession-developed and profession-wide. They have strong potential to form the first plank of a standards-based professional learning system in Australia.

The evidence requirements for the Threshold application processes, the Accreditation route for the Standard for Chartered Teacher and the Level 3 Classroom Teacher position are too vague and general to meet this principle of effective PD. Mostly, they leave the choices about the kinds of evidence to be gathered to the discretion of the applicants. The processes are more akin to the processes involved in applying for a job, where the aim is to gather evidence to show that the applicant meets the job-description criteria, than to processes designed to provide evidence of performance and of capacity to provide quality opportunities for students to learn.

In contrast, the NBPTS evidence requirements are targeted towards allowing teachers to show how they have helped students to learn over time. These requirements thereby provide teachers with learning opportunities that do meet this principle, as the following example demonstrates:

Entry 1: Designing science instruction[4]

For this entry you will:

Select an important concept in science to serve as the focus for your response and the instructional[5] sequence on which it is based. The instructional sequence must cover a minimum of two weeks and a maximum of ten weeks.

Select one or more process skills that students develop as they learn about the concept. You should describe how these process skills(s) support student learning of the concept and why the development of these process skills) is important for your students.

Select three activities taken from the instructional sequence that work together to show the progression of your instruction and the growth of student understanding of the important concept.

One of the activities must show a connection to technology

Select two students who represent different types of challenges to you as a science teacher . For each student, submit three student work samples, one for each of the three featured instructional activities. These samples should individually and collectively demonstrate the way students were engaged in active learning about the featured concept and related processes, their understandings of the concept and related processes, how your instruction facilitated deeper understanding of the concept and related processes, and how the student work informs you about your own instruction.

Submit the three Instructional Activities with the two student responses to each of them attached.

Submit a Written Commentary of no more than 11 pages that provides a context for your instructional choices in which you describe, analyse and reflect on the student work and your teaching. (NBPTS 1999 Early Adolescence Portfolio Sampler)

This portfolio task provides an example of how carefully specified evidence requirements call for teachers to complete a number of specific and challenging tasks that were carefully designed to promote professional learning in relation to a number of standards. Such tasks encourage teachers to reflect deeply on the various elements of their practice. They challenge teachers and involve them, at deep levels, in processes of investigation, analysis, and reflection.

The specifications require teachers to ask hard questions of themselves about what and how their students are learning, and the things they are doing to promote that learning; - 'What did I do in this particular classroom activity?' 'Why did I do it?',

---

[4] This entry has been abbreviated for reasons of space. The complete specifications are in the original document as referenced.

[5] The terms 'instruction' and 'instructional' often appear in the American education literature. They do not carry the same didactic overtones in American English that they do in Australian English

'What did I want my students to learn?', 'How well did they learn it?' 'How do I know?' Such approaches reflect research based principles of effective professional development, especially the emphasis on student work and teaching practice.

As discussed in earlier chapters of the review, feedback and assessment are essential components of effective learning. The four systems discussed in the review were found to vary with regard to the effectiveness and defensibility of their assessment procedures. Of the four systems investigated, the NBPTS reflected the highest understanding of the specialist nature of assessment, the need to deploy resources, especially expertise, and appreciation and knowledge of the intellectual and technical procedures required to implement a fair and valid assessment program.

Summary

This chapter briefly reviewed the literature on effective professional learning and examined the extent to which each system succeeds in engaging large numbers of teachers in that kind of learning.

The processes of the Performance Threshold do not appear to be designed to engage teachers in using the standards to analyse and evaluate their own practice. Studies showed that only a tiny minority of teachers reported that the experience of the Threshold had had a positive effect on their practice. The great majority said that it had a 'detrimental' effect on their morale.

The program of learning for the *Standard for Chartered Teacher* is different for each teacher, depending on their individual needs and aspirations, and the providers' varying expectations and provision of opportunities for learning. The Accreditation Route to the Award for Chartered Teacher seems to be more in line with the research findings that emphasise the importance of making teachers' practice the site for teachers' professional learning than the Programme route is. However, feedback received by the GTCS strongly suggests that teachers find both the Program and the Accreditation routes are valuable sources of professional learning and development.

An evaluation of the Assessment Processes used to select Level 3 Classroom Teachers, carried out in 2001 (Ewing, 2001) showed that applicants found the experience, especially the portfolio development, valuable for their professional learning. Existing Level 3 teachers now provide mentoring and other support to new applicants as part of their negotiated leadership roles, and District Offices offer various forms of support and encouragement. However, because every portfolio that documents and provides evidence of applicants' journeys towards Level 3 Classroom Teacher status is different, and because the evidence requirements are so broad and general, it is again difficult to judge the effectiveness of the processes in terms of their impact on teachers' professional learning.

The NBPTS approach to providing standards based professional learning is three pronged: (1) developing profession defined standards that described 'accomplished' teaching; (2) inviting teachers to provide evidence on the basis of appropriately

designed assessment tasks and activities geared to the standards; (3) ensuring the rigour, validity, fairness and reliability of the assessments; and (4) developing a stronger market for highly accomplished teachers. By this means, teachers engage in effective modes of professional learning, directed towards achieving the standards and in line with the findings of research on effective professional development for teachers.

Chapter 8: Summary of Findings

The brief for this review was to provide advice to Teaching Australia on current developments in relation to advanced standards for teaching, to inform and guide the continuing work of the teaching profession on the development and application of advanced teaching standards.

Chapter One presented a rationale for developing professional standards for teachers. It then introduced four sets of international advanced teaching standards, and explained how these standards were chosen for investigation because they were part of a 'system'. This meant that each was used for purposes of professional learning, each required teachers to present evidence of learning and accomplishment, each included a form of assessment, and each provided some form of recognition and reward. These four sets of standards (and their 'umbrella' agencies) were:

- England and Wales: *The Performance Threshold* (Department for Education and Training England and Wales)

- Scotland: *The Chartered Teacher Award* (General Teaching Council for Scotland)

- Western Australia: *The Level 3 Classroom Teacher Position* (Department of Education Western Australia)

- USA: *The National Board for Professional Teaching Standards* (National Board for Professional Teaching Standards USA).

Chapter Two considered some definitions of standards. It explained how standards may be understood as both 'banners' and 'measures'. As banners, advanced teaching standards express a professional consensus on the principles, values and knowledge that drive practice. As measures they are tools for making judgements about performance, for the purpose of improving practice. It was pointed out that to think of standards in the 'banner' sense *only* is to minimise their potential to be valuable tools for improving practice.

Chapter Two also identified the links between research on teaching and the development of advanced teaching standards. Research has shown that teaching is a complex activity that cannot be reduced to a set of behaviours or a list of discrete competencies. Standards need to capture the depth and complexity of what it is that teachers know and do. They also need to reflect the wholistic and seamless nature of accomplished teaching. The main implication of research on teaching for advanced teaching standards is that standards should focus on the quality of the opportunities for learning that accomplished teachers provide for their students.

This review shows that the supposed debate between generic and specialist standards is a non debate. It shows that, at one level, there are common principles that guide all teaching. There is also a similar structure to what teachers do, no matter what they teach. All standards are, of course generic at one level. However, research on teaching and what effective teachers know and do also shows that, in a

significant sense, all teachers are specialists, particularly teachers at advanced levels of expertise. The professional knowledge of an effective early childhood teacher about learning to read, or learning to understand numbers, is very different from the professional knowledge of an effective secondary teacher of art. Generic categories of teaching can not represent the depth of research-based knowledge and expertise needed for effective teaching.

If teaching standards are to fulfil their ambition to represent the complexity of the professional knowledge possessed by an accomplished teacher, they must go deeper than generic categories of practice. They need to represent the range of specialist fields and levels in the teaching profession. The implication for the development of national standards for advanced teaching is that this enterprise needs to encompass the development of at least twenty to thirty sets of standards in order to represent the range of specialist fields in teaching – from early childhood to upper secondary, from art to science, and not forgetting librarians and other key support staff in schools.

Chapters Three and Four provided some essential background information about the history of standards for professional development and recognition. Chapter Three traced the long history from the Karmel Report in 1973 onwards that lies behind the current aspirations to establish a stronger role for the profession in developing standards and providing recognition to those who attain them. Chapter Four described the extensive work on teaching standards that has already been conducted in Australia, including the National Standards Framework developed by MCEETYA. This work provides strong evidence that teachers, when given the opportunity, can and will develop very high standards in their specialist field, whether that field be early childhood, primary or secondary teaching.

Chapter Four also showed how the notion of developing profession-wide advanced standards and standards-guided professional learning systems now appears to be widely accepted among teachers and members of teachers' professional associations in Australia. The three sets of Australian standards for accomplished teachers of Science, English/Literacy and Mathematics, developed under the auspices of four national subject associations provide deep and comprehensive representations of teachers' skills and knowledge within their respective fields.

The 'Sharing Experience' conference hosted by NIQTSL and held in Melbourne in 2005 brought together many members of teachers' professional associations and other stakeholders who have been actively involved in developing professional teaching standards in recent years. The debates at this forum revealed a wide diversity of opinions on a range of issues. They showed that Australian teachers are now ready and well able to proceed with the work of standards development in their specialist fields.

Chapters Five to Seven compared the selected standards systems in detail. Chapter Five compared the way each system went about developing standards. Chapter Six compared the way each system decided whether teachers had met the standards,

and Chapter Seven examined how each system made links between standards for advanced teaching and professional learning. The findings of these comparisons have been brought together in the following sections.

Main findings from the review

Responsible body

Our review of the international literature did not reveal any agency for developing standards for advanced teaching equivalent to Teaching Australia. This is very important to keep in mind as we identify issues from the review in the following discussion. The Chartered Teacher reform in Scotland was introduced by the GTCS, a statutory regulatory authority for teacher education, after negotiations between the Scottish Executive (the government) and the teacher unions. The national government in England drove the Threshold reforms and the WA Level 3 Classroom Teacher standards and certification processes are run by the State Department of Education.

The only body that has some parallels with the constitution and proposed functions of Teaching Australia related to advanced standard is the National Board for Professional Teaching Standards in the US. Teachers have been much more involved in the development of the NBPTS teaching standards than teachers have been in any other system we reviewed (standards have been developed in over 25 specialist fields). While both bodies are independent agencies, the main difference is that the Directors of the National Board include individuals from all stakeholder groups with an interest in promoting quality teaching (while maintaining a majority of practising teachers), whereas the membership of the Board of Directors of Teaching Australia is limited mainly to practitioners. Consequently, Teaching Australia faces a different challenge from that which faced the National Board in ensuring that those who are responsible for the quality of teaching in schools embrace its standards and afford support and recognition to teachers who attain them. Teaching Australia is well-placed to support the development of advanced teaching standards by the profession, but will need to engage with other bodies responsible for the quality of teaching in schools.

The findings of this study suggest that an independent professional body that brings together all the stakeholders with an interest in quality teaching is best placed to support the development of teaching standards that are rigorous in their assessment and that support on-going professional learning. In Chapter Five, for example, we illustrate that teaching standards 'owned' by employers (albeit developed in consultation with the profession) are more likely to lead to a check-list approach to teacher assessment. Our discussion in Chapter Seven suggests that the links between standards and professional development are weakest in the employer dominated, "performance management" examples, such as in England-Wales, and strongest in the profession-dominated model of the NBPTS. In Australia, we have a unique situation where several professional associations have already developed standards for their members within particular areas of the profession. Teaching

Australia has the potential to use its professional base to build on this and to work with the profession to develop rigorous national professional standards in advanced teaching and school leadership for the Australian profession as a whole.

Developing advanced teaching standards

Well written standards for advanced teaching capture the full complexity of teachers' knowledge and practice. They are framed by professional values and informed by research and the practical knowledge of expert teachers. Writing quality standards is, therefore, a difficult and challenging enterprise and the process needs to be well resourced and supported.

Each of the four international examples of advanced teaching standards systems contained features that were noteworthy. However, of the four, only the NBPTS standards could be described as 'profession-wide'. The NBPTS standards are 'profession-owned' in the sense that they were written by practising teachers, under the auspices of an independent professional body with a majority of teachers on its governing board. The standards are independent of any employer or non-professional association or organisation, yet employing authorities and other stakeholders have had a strong input. The NBPTS standards are also 'profession-wide' in that they describe a professional knowledge base that is relevant to the work of all teachers, regardless of where they teach.

The level of participation by teachers in the development of each set of standards was reflected in the scope, content and structure of the standards (Chapter Five). The writing of the standards in the first three examples (England, Scotland, WA), was conducted 'in house' or contracted out (for example, development of the Threshold standards was contracted out to a private consultancy firm). Consequently, we believe, they lack the breadth and depth of the NBPTS standards (and those standards developed by subject associations in Australia). This was not surprising, given that the NBPTS was the only agency to provide standards committees consisting of practising teachers with the resources to meet over a period of at least one year. Teachers on the National Board rejected the idea of generic standards. The NBPTS standards were also the only sets of the four examples that were field specific rather than generic, enabling them to drill deeper into the subject and pedagogical content knowledge of each field.

By definition, profession-owned and profession-wide standards are for all teachers in all systems. Teachers' professional associations played little or no part in the development of the standards in the first three examples. These standards have virtually no currency outside of their respective government education systems. The NBPTS standards, developed in the main by teachers and their professional associations, are recognised by all the major stakeholders, from unions to state governors in USA. 'Profession-wide' may also cross international boundaries. Studies have shown that teachers in New Zealand and Australia find the NBPTS standards, as descriptions of what accomplished teachers should know and be able to do, equally applicable to their country (Irving, 2005).

Assessment

If professional standards are to serve the key purposes outlined in Chapter Two, they not only need to indicate *what* effective teachers should know and be able to do, they need to indicate *how one would know* if the standards were being met. As pointed out in Chapter 5, a set of standards is incomplete and inadequate if it does not indicate procedures that can be used to gather evidence about practice and levels of performance.

The four systems had all developed processes of assessment to reach a final judgement as to whether applicants should be recognised as having met the advanced standards (Chapter 6). In the first three examples, the specifications for evidence to support the assessment were very broad - even vague. This raised serious doubts about the validity, and therefore, the fairness of the assessments - doubts that were exacerbated, especially in the Threshold example, by flaws in the actual design and conduct of the processes for making judgements about the evidence presented. As a result, the Threshold quickly lost all credibility with the profession. Only the NBPTS was found to have paid sufficient attention to critical measurement issues to ensure its assessment methods were reliable, generalisable and valid, and decisions based on that evidence were fair and professional credible. No standards for advanced teaching will realise their potential to lift the status of teaching and promote more effective professional learning without first ensuring that they meet these standards for valid judgment.

Professional learning

On the basis of teachers' own estimations, the NBPTS processes and those for the WA Level 3 Classroom Teaching position were found to be of most value to teachers' professional learning. It is interesting that these were also the systems whose assessment processes, in terms of validity, reliability fairness and consistency were found to be the most defensible (although the WA Level 3 assessment processes were weaker than those of the NBPTS). It is still early days for the Chartered Teacher, but teachers' feedback to the GTCS has so far been encouraging in this regard. Research carried out on the Threshold (Chapter Seven) showed that very few (1%) teachers believed that the processes had any value for their professional learning.

Scotland appeared to have made the most sustained efforts to set up an infrastructure for professional learning through a system of partnerships with universities and other teacher education agencies such as Local Education Authorities. The Scottish professional learning system places considerable faith in the capacity of universities to provide effective professional development for teachers. In our conversations with a representative of the GTCS, initiated as part of the investigations for the review, we learnt that the Council has received positive feedback from teachers who are undertaking it. The Council is aware, however, that course completion in itself may not be a valid indicator of attainment of high levels of performance.

The review found that many providers of teacher education in the US offer programs to support teachers who are undertaking NBPTS certification. The Board is not responsible for these programs and does not initiate them. The main difference between these programs and programs for the Chartered Teacher is that the NBPTS, while it takes no responsibility for the learning programs, is responsible for the assessments, while for the Chartered Teacher, responsibility for assessment (Chapters Six and Seven) has been given to individual Providers. The NBPTS example showed that effective professional learning was linked to the quality of the certification process and the recognition given to the certification. In our view, it would be unwise for any professional body to delegate control over the assessment and certification process, whether to headteachers, as in England, or to course providers as in Scotland.

A complete set of standards needs to indicate how one would know if the standards were being met. Without this component, standards cannot serve their central purpose of providing useful feedback, whether that feedback comes from self-assessment, or a mentor or a colleague. The lack of systems for providing useful and accurate feedback about performance is one of the fundamental weakness in professional learning systems for teachers. The view that standards are fine for professional development, but should not be used for assessing performance, is misguided. Standards are not much use for professional learning if they are not, or cannot be, used to assess performance.

A critical choice for any agency established to develop and promote professional learning toward high teaching standards is whether to focus its resources on accreditation of courses and course providers, or whether to focus them on providing a rigorous process for assessing and providing certification to teachers who meet the standards. In other words, the agency needs to decide whether to focus on assuring the quality of the course, or assuring the quality of the individual who gains professional certification. The evidence from the review is that standards bodies that focus on providing rigorous certification will have greater impact on the quality of professional learning. They are also more likely to engage most teachers in effective professional learning.

Recognition

Three of the four systems - the Threshold, the Standard for Chartered Teacher and the WA Level 3 Classroom Teacher position - provided recognition, in terms of higher status and salary increases, for successful candidates. As employers, the DfES and the WA Department of Education were able to provide immediate salary increments for successful applicants (Chapter Six).

Effective organisations ensure that careers and status in the organisation are aligned with the knowledge and skills needed to achieve the organisations' objectives. Building capacity within an organisation is facilitated by incentives for evidence of professional learning and improved performance. The Threshold in England, the WA Level 3 Classroom Teacher position, and the Scottish Chartered Teacher

reform each represents an effort to implement this principle. Each country (or state) reformed career pathways to recognise and reward teachers based on attaining advanced teaching standards, and to build capacity in schools as organisations for teaching and learning.

However, if the status of teaching well is to be lifted substantially in this way, certain conditions need to be in place, chief of which is that assessment processes need to be valid and consistent. If an assessment sets out to identify accomplished teaching it should do just that. If it fails, the people who 'succeed' in the assessment will access the pay rise, but their performance may not be 'accomplished'. The Threshold provides a good – if negative - example of this point. The results of research quoted in the review (Chapter Six) showed that the Threshold amounted to little more than an additional automatic step on the incremental pay scale. It thus defeated its own stated purpose of "modernising" the teaching profession and encouraging evidence of professional development. As a result, schools failed to reap the benefits of improved teacher performance. The Chartered Teacher status and the WA Level 3 Classroom Teacher position, on the other hand, are examples of a career step founded on genuine attempts to reward evidence of professional learning. To succeed in these processes, teachers need to demonstrate that they have attained a high level of professional knowledge and skill.

In contrast, NBPTS certification is a voluntary certification awarded by a professional body. It is not a step in a career structure with any particular employer. Employers may choose, however, to recognise certification in a variety of ways. Whether they choose to do this or not, depends on the credibility of the certification. Employers who value quality teaching, and who recognise Board certification as providing guarantees of quality are prepared to reward teachers who hold Board certification substantially, because they believe the process leads to effective professional development and that these teachers add value to schools. National Board certified teachers are akin to professionals in other fields who can access intrinsic and extrinsic career rewards based on demonstrated excellence.

Of the four systems reviewed, the NBPTS and WA Level 3 Classroom Teacher appeared to provide the most respected guarantees that teachers who completed their certification processes satisfied the respective standards for advanced teaching. Both processes involved peer review in their assessments of teaching standards. The review showed that when Districts and schools in the USA employ a Board certified teacher, they have confidence that the teacher will be of high value to the students and the school community. This is also the case for schools in Western Australia that employ Level 3 Classroom Teachers.

In our investigations for this review, we made honest attempts to find some value in standards systems where the assessment and certification processes were undeniably weak. We found that such systems not only fail to meet the key aim of identifying teachers of advanced practice, but that they also fail to improve teachers' professional learning.

This review was guided by a vision for the teaching profession in Australia that many have held for many years. Chapter One set out a rationale for that vision and Chapter Three traces the vision from the Karmel Report in 1973 to the present. Others could certainly trace sources of the vision to even earlier years. It is a vision based on the belief that the quality of learning opportunities that students receive in our schools is a shared responsibility between governments and the profession. The profession's part is to undertake responsibility for developing and ensuring high standards for practice, particularly standards for entry to the profession, standards for those who train teachers and standards for highly accomplished practice. Professional bodies usually play a major role in these key quality assurance mechanisms. That has not been the case for teaching.

It is a vision of profession-wide standards that embraces all teachers and school leaders. It is a vision of a profession gaining sufficient confidence in its knowledge base to articulate standards for what its members should know and be able to do; standards that enable the profession to play a stronger role in determining long-term professional learning goals for its members. It is a vision of a profession gaining the self-respect required to expect its members to demonstrate commitment to those standards. It is a vision of a profession that gains the trust needed from other stakeholders to develop a system for giving recognition to its members who reach advanced standards of practice. It is a vision of a profession that can be trusted to establish an independent national professional body with the capacity to carry out that function rigorously.

The aim of this literature review was to examine national and international approaches to standards and certification for advanced teaching. This advice was to inform and guide the Institute's continuing work on professional standards and certification. We found three countries apart from Australia that had made concerted efforts to develop advanced standards for teachers. While none of the international systems represents a model that could be translated to the Australian context, as a group they have provided a valuable basis on which to clarify issues that will need to be addressed if the vision of teaching as a profession is to become a reality.

References

Atkinson, A., Burgess, S., Croxson, B., Gregg, P., Propper, C., Slater, H., & Wilson, D. (2004). *Evaluating the impact of performance-related pay for teachers in England. Working Paper No. 04/113*. Bristol: Centre for Market and Public Organisation, University of Bristol.

Bond, L., Smith, T., Baker, W., & Hattie, J. (2000). *The certification system of the National Board for Professional Teaching Standards: a construct and consequential validity study*. Greensboro: Centre for Educational research and Evaluation, University of North Carolina.

Brinkworth, P. (2004). *AAMT teaching standards assessment evaluation project 2004*. Canberra: Quality Schooling Branch, Department of Education, Science and Training.

Brophy, J. (Ed.). (1991). *Teacher's knowledge of subject matter as it relates to their teaching practice* (Vol. 2). London: JAI Press Inc.

Brophy, J., & Good, T. (1986). Teacher behaviour and student achievement. In M. Wittrock (Ed.), *Handbook of research on teaching* (pp. 340-370). New York: Macmillan.

Carnegie Taskforce on Teaching as a Profession. (1986). *A nation prepared: teachers for the 21st century*. New York.

Cavalluzo, L. (2004). *Is National Board Certification and effective signal of teacher quality?* Washington DC: The CNA Corporation.

Chadbourne, R., & Ingvarson, L. C. (1998). Some effects of the Professional Recognition Program in Victoria's schools of the future. *Australian Educational Researcher, 25*(20), 61-95.

Crowley, R. C. (1998). *A class act: inquiry into the status of the teaching profession*. Canberra: Report from the Senate Employment, Workplace Relations, Small Business, and Education reference Committee.

Croxson, B., & Atkinson, A. (2001). *The implementation of the performance threshold in UK secondary schools*. Bristol: University of Bristol.

Department of Education Science and Training. (2003). *Australia's teachers: Australia's future*. Canberra: Department of Education, Science and Training.

Dwyer, C. A. (1994). *Development of the knowledge base for the Praxis III: Classroom performance assessments assessment criteria*: Educational Testing Service.

Ewing, M. (2001). *An evaluation of the assessment processes used to select Level 3 classroom tecahers in Western Australian Government schools.* Nedlands: Department of Education of Western Australia and University of Western Australia.

Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record, 107*(1), 186-213.

Fullan, M. (1982). *The meaning of educational change.* New York: Teachers College Press.

Garet, M. S., Porter, A. C., Desimone, L., Birman, B. F., & Yoon, K. S. (2001). What makes professional development effective? Results from a national sample of teachers. *American Educational Research Journal, 38*, 915-945.

Getzels, J. W., & Jackson, P. W. (1963). The teachers' personality and characteristics. In N. L. Gage (Ed.), *Handbook of research on teaching* (pp. 506-582). Chicago: American Educational Research Association.

Goldhaber, D., & Anthony, E. (2004). *Can teacher quality be effectively assessed?* Seattle: Centre on Reinventing Public Education, University of Washington.

Hattie, J. (Forthcoming). Validating the Specification of Standards for Teaching: Applications to the National Board for Professional Teaching Standards' Assessments. In L. C.Ingvarson and J. Hattie, (Eds.). *Assessing Teachers for Professional Certification: The National Board for Professional Teaching Standards.* Amsterdam: Elsevier Press.

Hawley, W., & Valli, L. (1999). The essentials of effective professional development: a new consensus. In L. Darling-Hammond & G. Sykes (Eds.), *Teaching as the learning profession. Handbook of Policy and Practice.* San Francisco: Jossey-Bass Publishers.

Ingvarson, L. C., & Chadbourne, R. (1997). Reforming teachers' pay systems: the advanced skills teacher in Australia. *Journal of Personnel Evaluation in Education, 11*(1), 7-13.

Interim Committee for the Australian Schools Commission. (1973). Schools in Australia: Report of the Interim Committee of the Australian Schools Commission (the "Karmel Report"): Australian Government Publishing Service.

Irving, E. (2005). *The development and validation of a student evaluation instrument to identify highly accomplished mathematics teachers. PhD Thesis.* The University of Auckland, New Zealand.

Jaeger, R. M. (1982). An Iterative structured judgment process for establishing standards on competency tests: theory and application. *Educational Evaluation and Policy Analysis, 4*(4), 461-475.

Jaeger, R. M. (1995). Setting performance standards through two-stage judgmental policy capturing. *Applied measurement in education, 8*(1), 15-40.

Jaeger, R. M. (1998). Evaluating the psychometric qualities of the National Board of Professional Teaching Standards' assessments: a methodological accounting. *Journal of Personnel Evaluation in Education, 12*(2), 189-210.

Kennedy, K. (1999). Constructing the teaching profession for the new millennium. *Unicorn: Journal of the Australian College of Education, 25*(2`), 3-4.

Mahoney, P., & Hextall, I. (2000). *Reconstructing teaching: standards, performance and accountability*. London: RoutledgeFalmer.

McRae, D., Ainsworth, G., Groves, R., Rowland, M., & Zbar, V. (2001). *PD 2000 - Australia: a national mapping of school teacher professional development*. Canberra: Commonwealth Department of Education, Training and Youth Affairs.

Menter, I., Mahoney, P., & Hextall, I. (2004). Ne'er the twain shall meet? modernising the teaching profession in Scotland and England. *Journal of Education Policy, 19*(2), 195-214.

Ministerial Council for Education Employment and Training (MCEETYA). (2003). *A National Framework for Professional Standards of Teaching*. Carlton: MCEETYA.

National Council of Teachers of Mathematics. (1991). *Professional Standards for the Teaching of Mathematics*. Reston, Virginia: National Council of Teachers of Mathematics.

National Project on the Quality of Teaching and Learning (NPQTL). (1996). *National competency framework for begining teachers*. Leichardt, NSW: Australian Teaching Council.

National Union of Teachers. (2005). *Threshold applications in round 6: practical advice from the NUT to NUT members in England*. England: National Union of Teachers.

Organisation for Economic Cooperation and Development (OECD). (2005). *Teachers matter: attracting, developing and retaining effective teachers*: Organisation for Economic Cooperation and Development (OECD).

Ramsey, G. (2002). *Quality Matters. Revitalising teaching: critical times, critical choices. report of the Review of Teacher education*. Sydney: NSW Department of Education.

Richardson, V. (Ed.). (2001). *Handbook of research on teaching (4th ed.)*. Washington: American Educational Research Association.

Scriven, M. (1998). Empowerment evaluation examined. *Evaluation practice, 18*(2), 165-175.

Skilbeck, M., & Connell, H. (2003). Attracting, developing and retaining effective teachers. Australian country background report: Commonwealth Government Department of Education, Science and Training.

Sykes, G. (2001). Educational reform and the National Board for Professional Teaching Standards. In L. Ingvarson (Ed.), *Assessing teachers for professional certification: the National Board for Professional Teaching Standards*. Amsterdam: Elsevier.

Sykes, G., & Plastrik, P. (1993). *Standard setting as educational reform*. Washington DC: American Association of Colleges for Teachers of Education.

Tracz S. & Associates. (1995). Improvement in teaching skills: perspective from National Board for Professional Teaching Standards field test network candidates, *Annual Meeting Educational Research Association*. San Francisco.

Vandevoort, L. G., Amerin-Beardsley, A., & Berliner, D. (2004). National Board Certified Teachers and their students' achievement. *Educational Policy Analysis Archives, 12*(26).

Wragg, E., Haynes, G., Wragg, C., & Chamberlain, R. (2001). *Performance related pay: the views and experiences of 1000 primary and secondary headteachers*. Bristol: School of Education, University of Exeter.

Appendix 1: A Summary of Advanced Professional Standards Activity in Teacher Registration Bodies and Colleges and Institutes of Teaching in Australia

TEACHER REGISTRATION AUTHORITIES IN AUSTRALIA AND ADVANCED STANDARDS FOR TEACHING	
Registration Authority	Position on advanced standards for teaching
NSW Institute of Teachers	The Institute has developed standards at four levels: Graduate Teacher; Professional Competence; Professional Accomplishment; Professional Leadership. The Institute is currently planning evaluation processes to 'accredit' teachers as having met the standards for Professional Accomplishment and Professional Leadership.
Board of Teacher Registration Queensland (Queensland College of Teachers)	The new College will develop standards for newly graduated teachers and teachers moving from provisional to full registration. There is no intention at this stage to develop advanced teaching standards, but a spokesperson for the Board said that such a development was not to be ruled out in the future.
Teachers Registration Board of South Australia	The Board is currently involved in a consultation process for developing new professional teaching standards for graduate teachers; provisionally registered teachers moving to full registration; and renewal of registration. A spokesperson for the Board said that developing Advanced Teaching Standards was not part of the Board's role, and that the subject associations were better placed to take this on.
Teachers Registration Board of Tasmania	The Board does not intend to develop Advanced Teaching Standards. A spokesperson said that this was seen as role that could be usefully played by NIQTSL.
Teacher Registration Board of the Northern Territory	The Board has developed draft standards of professional practice for graduate teachers. There is no

	intention at this stage to move towards the development of advanced teaching standards.
Victorian Institute of Teaching	The VIT has developed standards for teachers moving from provisional to full registration. It also has a draft set of graduate standards that are currently in a consultation phase. The Institute does not currently intend to develop advanced teaching standards.
Western Australian College of Teaching	Standards and processes under development. No intention at this stage to develop advanced teaching standards.

Appendix 2: Performance through Annual Performance Review Processes

This table shows which Australian state education systems require teachers to demonstrate satisfactory teaching performance through Annual Performance Review processes before they can advance on the incremental salary scale. It also shows which states have established a higher salary position for teachers who are able to demonstrate advanced teaching standards.

State education system	Satisfactory Annual Performance Review outcome required for advancement on incremental salary scale?	Position and higher salary for teachers who have demonstrated advanced teaching standards?	Type of assessment for position for teachers who have demonstrated advanced teaching standards?
Australian Capital Territory	Yes	No	N/A
New South Wales	Yes	No	N/A
Northern Territory	No	Yes (Teacher of Exemplary Practice) (TEP)	School based and system verified assessment
Queensland	No	No	No
South Australia	No	AST 2	School based and system verified assessment
Tasmania	No	No	N/A
Victoria	Yes	No	
Western Australia	No	Yes. (Level 3 Classroom Teacher position).	Peer assessment process external to schools verified by system.

Appendix 3: A Summary of State/Territory Advanced Teacher Classifications and Standards in Non-Government Sector Schools (Awards/Agreements)

State	Advanced Teacher Classification	Advanced teacher standards/ criteria	Appraisal/ validation process	Duties
NEW SOUTH WALES Independent Schools Award	Senior Teacher 1	Yes	Yes	No No
NEW SOUTH WALES Several non systemic Catholic schools. (In CEO Catholic schools classification has been absorbed into automatic scale)	Similar to Independent Schools Award	Yes	Yes	No
QUEENSLAND Brisbane Catholic Education Schools	Advanced Skills Teacher Level 1 (classroom) and Level 2 (school context)	Yes	Yes	No
QUEENSLAND Regional Catholic Diocesan Schools	Leading Teacher 1	Yes	Yes	No
QUEENSLAND Anglican schools EB Agreement	Senior teacher 1	Yes	Yes	No formal duties but expectation to undertake duties at a higher level of skill
QUEENSLAND Lutheran Schools Certified Agreement (CA)	Leading Teacher 1 and 2			
SOUTH AUSTRALIA Non-government Schools (Award) – Catholic and Independent school teachers	Advanced Skills Teacher 1	Yes	Yes	No
VICTORIA Catholic Schools Certified Agreement	Level 2 Teacher	Yes	Yes	No, except for expectation to be role model etc.

VICTORIA Independent schools CAs	68 separate school Certified Agreements (more being negotiated). Most contain an advanced teacher classification.	Yes for most CAs	Yes	Varies from school to school CA
WESTERN AUSTRALIA Catholic Schools EB Agreement	Senior Teacher 1 and 2 Exemplary Teacher (Catholic School)	Yes Yes (and quota)	Yes Yes	No Yes
WESTERN AUSTRALIA Independent Schools Award	ST1 and ST 2	Yes	Yes	No

Where to find us:
We are located in the Australian National University campus at:
5 Liversidge Street
Acton   ACT   0200

How to reach us:
Phone: 1800 337 872
Fax: 02 6125 1644
Email: info@teachingaustralia.edu.au

More information:
www.teachingaustralia.edu.au