Policy Briefs

A review of standards of practice for beginning teaching*

1 Introduction

Over the past decade, teachers and teacher organisations in a number of countries and education systems, including Australia, have developed standards of professional practice. All aim to explicate what teachers should know and be able to do. Although these standards are serving several practical purposes, two remain central – quality assurance and professional learning.

One of the main messages emerging from this review is that these two purposes are interdependent and complementary. Teaching standards are more useful for professional learning when they are designed with assessment in mind. This renders them more helpful for self-assessment as well as feedback from colleagues and, thereby, professional learning. Although it may seem counter intuitive, the most coherent and valid sets of teaching standards emerge when they are designed to be tools for the assessment of teacher performance. "Coherent" as used

here refers both to the fact that the standards hang together logically and provide an economical representation of teachers' work, with as little overlap and redundancy as possible. "Valid" means they are grounded in research, thereby providing teachers with challenging representations of quality practice and a guide to what their profession expects them to get better at.

Teachers understand these things when they design student activities and methods for assessing student learning. Quality student assessments are designed to provide useful feedback and to provide avenues for learning. The same applies to teacher learning. New methods for assessing teacher performance against standards are emerging that, in themselves, are excellent vehicles for professional learning. Formative assessment is most useful in a context where the criteria for feedback and summative assessment can be clearly articulated. Insightful and accurate feedback, as some great coach once said is the breakfast of champions. The best mentor

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teachers know how to use standards to provide effective feedback.

A complete set of teaching standards needs at least three components. First, it requires a definition of good teaching. This specifies what is to going to be assessed. This component is often referred to as "content standards". Second, it needs to specify rules for gathering evidence about practice; that is, how teaching performance is going to be assessed. This component usually specifies the kinds of tasks that teachers will be asked to perform to provide evidence that they can meet the standards. And third, it needs to specify how this evidence is going to be interpreted and judged against the content standards in ways that are fair and reliable. This third component requires clarity about what counts as meeting the standards (how good is good enough to meet the standards). In other words, the third component involves setting standards. It requires the development of a scoring system grounded in many examples of "benchmark" teaching performances (there will be many ways to meet the standards). In other words it requires the development of rubrics for scoring performance to operationalise the standards and make them meaningful.

Most of the existing teaching standards we have been asked to review do not include these three elements. They have not been designed as tools to aid valid interpretation of evidence and reliable judgments against standards. For this reason they are of little use as a guide to professional learning or for quality assurance.

As well as having the common purpose of articulating a knowledge base for teaching, most sets of standards developed so far share common structural features, such as the articulation of standards at taxonomic levels of specificity. But there are also differences between sets of standards: some appear to be more coherent than others, some include a great deal of text, others are very economical in their choice of words. There are also important differences in the contexts within which standards were developed and in the purposes for which they are used. These different contexts and uses seem to have a defining influence on the standards themselves.

2 Overview

This paper aims to provide a critical review and comparison of the following sets of standards of practice for teachers:

- The Victorian Interim Teacher Class Standards (ITCS), especially Interim Teacher Class Standards for Beginning Teachers. These were developed to guide teacher performance management processes in Victorian government schools and are part of the industrial agreement between the Victorian Department of Education and Training and the Australian Education Union.

- Professional Standards for Teachers. These standards were developed by the Queensland Education Department for use in state schools.

- The National Competencies for Beginning Teaching. These were developed in Australia in the early 1990s as a project of the federally funded National Project on the Quality of Teaching and Learning.

- The Ontario College of Teachers Standards of Practice for the Teaching Profession.

- The Teacher Training Agency in England (TTA) standards for "Quality Teacher Status and Induction." The TTA is "an executive Non-Departmental Public Body established by the Education Act

1994. Its purpose is to raise standards in schools by attracting able and committed people to teaching and by improving the quality of teacher training."

- The National Board for Professional Teaching Standards. The NBPTS is an independent national professional body in the US established for the purpose of providing certification to teachers who attain its standards for highly accomplished practice.

- The Interstate New Teacher Assessment and Support Consortium (INTASC). INTASC is a project of the Council of Chief State School Officers in the USA, roughly equivalent to AESOC and MCEETYA in Australia. The purpose of the INTASC project has been to develop standards and assessments that individual state professional standards bodies can adapt and use in making their own licensing decisions.

- Praxis III/Pathwise. The PRAXIS is a series of assessments developed by the Educational Testing Service in the USA for use by state and local education authorities. Praxis I is a test of basic competencies for entrants to teacher education courses. Praxis II is a set of tests of content knowledge and pedagogical content knowledge of graduates from teacher education courses. Praxis III is a framework of standards for guiding teacher learning during induction and assessing performance for registration. Pathwise is a modification of PRAXIS III devised as a general framework of standards for professional learning and performance assessment for all teachers.

The paper provides an analysis of the similarities and differences of these standards in terms of:

1. Their structure and coherence.
2. The ways in which they conceptualise dimensions or stages of teacher growth and development, or levels of expertise /proficiency in performance.
3. The methods used to determine whether teachers have met the standards, i.e. the ways in which the standards are applied or used to assess performance.
4. The ways in which the standards make links with professional learning, to how the links are conceptualised and what is done to ensure that they are followed in practice.

It concludes with a proposal for an interim set of standards based on a combination of the current Victorian interim model with PRAXIS III. It is hoped that the paper will assist the VIT to establish an effective system for the promotion of teachers' professional learning during the induction period, and reliable quality assurance mechanisms for determining eligibility for full registration with the Institute.

3 Structure and coherence of standards frameworks

Writing standards well is a more complex task than many imagine. "Content" standards define teachers' work are usually expressed as a series of statements about what teachers are expected to know and be able to do. These statements are usually arranged in a hierarchy, moving from general statements to statements of increasing specificity (see Tables 1 and 2). Lower level statements must link to, and elaborate on statements at higher levels. They should relate logically to the higher level standards of which they are a part.

3.1. Level 1 statements

As illustrated in Table 1, Level 1 statements

are statements of principles and educational values that infuse the articulation of the standards at all levels.

As an example, the National Board for Professional Teaching Standards (NBPTS) has developed in detail nearly thirty subject and stage of schooling specific sets of standards, all of which are infused by the same set of five Level 1 statements. Although NBPTS standards were developed by teachers for the purpose of accrediting teachers of accomplished practice (see Table 4), their Level 1 statements are quoted here as examples of statements of principles or values.

- Teachers are committed to students and their learning
- Teachers know the subjects they teach and how to teach these subjects to students
- Teachers are responsible for monitoring and managing student learning
- Teachers think systematically about their practice and learn from experience
- Teachers are members of learning communities

A major advantage of these statements is that they provide a concise, comprehensive and insightful set of "easily held" principles. They set the scene and establish both a vision and a context within which to develop more specific standards in fields such as early childhood, primary and secondary teaching.

3.2. Level 2 statements

These statements stand at the top of a taxonomy or "tree" of statements expressed at levels of increasing specificity. Variously called "Domains", "Areas of Competence" "Dimensions" they are very important because they define the main categories of teachers' work under which the various elements of teachers' knowledge and practice are arranged. All sets of standards reviewed contained statements at this level. In fact most of them, including the Victorian Government's Interim Teacher Class Standards, actually start with Level 2 statements, and do not include Level 1 statements.

Table 3 compares Level 2 type statements in seven of the eight sets of standards reviewed. The Queensland standards are not included in this table because a number of statements were thought to have more in common with Level 3 than Level 2 statements. It can be seen that there are many commonalities across the standards.

Table 3 shows that most sets of standards include between four and ten Level 2 statements. Statements that appear at Level 2 in some sets of standards are expressed as Level 3 statements in others. For example "Assessment and reporting of student learning", which is a Level 2 statement in the Victorian interim standards, is found as a Level 3 statement under the Level 2 statement, "Teaching Practice" in the Ontario College of Teaching standards.

3.3. Level 3 statements

Level 3 statements provide the criteria to be used in interpreting and judging evidence about a teachers' performance. Level 3 statements are crucial because they are statements about observable, appropriate teacher behaviour. They should describe and elaborate Level 2 statements and should reflect the values and principles expressed in Level 1 statements. Some sets of standards become level- or subject-specific at this stage and aim to describe the unique, as well as common, features of what teachers need to know and be able to do to teach effectively in specific curriculum fields, or to teach students at different levels of schooling (eg. INTASC and NBPTS standards).

Table 2 uses Praxis III and the Ontario College of Teachers (Table 2) to illustrate how Level 3 statements relate to and elaborate Level 2 statements. A close look at the Queensland standards reveals some confusion between Level 2 and Level 3 statements. Several Level 2 statements (eg. ICT) are clearly sub categories of other Level 2 statements.

3.4. Structure of the Interim Teacher Class Standards Victoria

These standards do not include Level 1 statements. (They are not alone in this respect among the standards reviewed.) The Victorian standards contain five statements at Level 2, expressed as "Dimensions". These include:

1. Content of teaching and learning
2. Teaching practice
3. Assessment and reporting of student learning
4. Interaction with the school community
5. Professional requirements

For each Dimension of the Victorian interim standards there are four to nine Level 3 statements (called "chief characteristics."). As mentioned above, Level 3 statements should be useful in making judgments about a teacher's performance. There is room for improvement in the statements at this level if they are to become more useful for professional learning and as performance criteria.

The Victorian Interim Standards are divided into two sections. The first section, as described above is a generic set of standards for teachers at all career stages. It articulates Level 3 type statements within each of five Level 2 "Domains". The next section is headed "Interim Professional Standards." This section contains separate sets of Level 3 type statements that are grouped in

accordance with the teacher pay and career structure within the Victorian Education Department. There is one set for each of the classifications, "Beginning teachers," "Experienced teachers," "Experienced Teachers with Responsibility", "Leading teachers" and "Leading teachers, (head of school.). These statements are not expressed as elaborations of the Domains. Rather than describing increasing levels of expertise in teaching, they give emphasis to the wider roles in management and leadership that teachers need to undertake for promotion within the current career structure.

Therefore, developing separate sets of performance standards for teaching at each of these career stages may not be necessary or realistic, at least in the immediate future. To proceed along this path may not even be useful in the longer term. A beginning teacher may carry out much the same kind of work as teachers who have been teaching for many years. (This is not true of countries such as France, where a new teacher may have only a one third load. The other two thirds are spent observing on professional development in other schools and in gaining higher academic qualifications related to their teaching specialism.)

4 Conceptualisations of "growth and development" in teaching

Conceptualising stages of teacher growth and development is one of the hardest tasks confronting standards developers. This is the problem of defining what teachers should be expected to get better at. We know that most teachers get better with experience, but we also know that some teachers start out with higher levels of expertise than others - and that some teachers are better in their first or second year than others who a nearing the

end of their careers. We also know that some teachers become "stuck" at a certain level of development and that some even regress. But we are still unclear about what we mean when we use such terms as "development". There has been some helpful research on differences in the ways novice and expert teachers think and go about their work, but it is has not reached a point where it is ready for inclusion in teaching standards.

Some of the standards reviewed here make no attempt to differentiate stages of growth or development. The Ontario College of Teaching standards and the Queensland standards have been written to reflect the work of all teachers in all subject areas at all stages of schooling. These standards, although they specify the areas in which teachers can be expected to improve, do not identify particular stages of teacher development, e.g. "beginning" or "advanced." Nor do they make any provision for assessing how well teachers meet the standards. There is no possibility within these standards to make well-based judgements about teachers' levels of performance. They do not attempt to conceptualise growth and development. The Ontario model states in its "principles" that

> *The standards of practice are based on the premise that personal and professional growth is a developmental process and that teacher move through a variety of career and life stages (Ontario College of Teachers, p.3).*

But the Ontario content standards do not describe the nature of this development. This limits their capacity to serve as a model for professional learning based on conceptions of growth.

A second way of conceptualizing development is to build "levels of performance" into the scoring rubrics used to interpret and assess performance evidence. The Pathwise standards as used in California, for example, use a four-point scale ranging from "practice not consistent with the standard" to "practice that exemplifies the standard". The Pathwise content standards are the same for all classroom teachers, but the scoring system differentiates levels of development.

The INTASC and NBPTS standards are designed to complement each other. One defines standards for initial licensure; the other, further down the line, restricts itself to defining the nature of accomplished teaching practice for advanced certification. Each provides sets of standards that are both subject- and stage of schooling-specific. The NBPTS standards were developed for teachers who believe they have progressed well beyond basic levels of practice and seek professional recognition. Both INTASC and NBPTS rely on evidence provided through portfolios and use scoring rubrics and benchmarks to discriminate levels of performance against the standards. By providing challenging standards for highly accomplished practice, the NBPTS standards implicitly provide a guide to what teachers can aim to get better at. They thus present an aspirational model for all teachers – and more and more teachers are taking up the challenge. There is abundant research evidence that Board certification provides a powerful avenue for professional learning and development.

The Praxis, INTASC and NBPTS standards and assessments operationalise the nature of teacher growth and development. Their performance assessments allow teachers to assess for themselves how well they meet the standards. In the Praxis assessments, four levels of performance are identified for each component of each Domain of the standards. Each level is described using statements of

performance that relate to the components. It is thus possible for teachers to "move through" the levels as their performance improves. The INTASC and NBPTS standards also use performance assessments to distinguish levels of performance and are similarly used by teachers to support their professional learning.

The UK Induction standards developed by the Teacher Training Authority (TTA) follow upon standards that teachers must reach at the end of their pre-service education in order to achieve Quality Teacher Status (QTS). Like the INTASC and Praxis III standards, they attempt to describe the knowledge and skills expected of teachers who are starting their careers. The assessment at the end of the induction period is "high stakes" because teachers must demonstrate that they meet the TTA's Induction standards before they are eligible to teach in a maintained school. The assessments for these standards are different from those for PraxisIII/Pathwise in that they do not indicate levels of performance. Teachers merely fill out a form that is assessed by the school principal. As yet, no system has been developed for ensuring that the standards are applied fairly and consistently across schools.

The Victorian interim standards for beginning teachers, as discussed above, are situated within a broader framework of standards for teachers at beginning, experienced and leading teacher levels. They make an attempt to distinguish what beginning teachers should know and do. But comparison of the standards for beginning teachers with those for teachers at more advanced levels shows that teacher development from beginning to more advanced levels of proficiency is conceptualised more in terms of extra jobs and additional responsibilities than

development of classroom teaching knowledge and skills. These standards reflect a traditional, hierarchical model of career structures for teachers rather than one based on professional growth.

As the example of the Victorian interim standards demonstrates, the context within which sets of standards are developed influences the articulation of the standards, especially in terms of how teacher growth and development are conceptualised. Table 4 shows how purposes and context influence conceptualisations of teacher growth and development.

5 Methods used to determine whether teachers have met the standards

Methods used to determine whether teachers have met the standards bear a direct relation to the purposes for which the standards are used. The National Competencies for Beginning Teaching and the Queensland Professional Standards for Teachers have been used for purposes that range from influencing university teacher education courses to use in school based teacher appraisal schemes. But no commonly agreed method of determining whether teachers meet these particular sets of standards has yet been developed. This is because the standards were not developed for a specific purpose. This probably explains why they have not gained wide usage.

The PraxisIII/Pathwise and INTASC standards, in contrast, were developed for state and local agencies to use in making teacher licensing decisions. Most US states base their local standards on the INTASC or the PRAXIS models. These standards were designed with assessment in mind and are

part of a comprehensive set of guidelines, task standards and performance standards with supporting resources for determining whether the teachers have met the standards. Teachers are required to demonstrate, through a range of task based evidence that they meet the standards. These tasks are what teachers normally undertake as part of their work, not artificial "add ons". These tasks provide a natural harvest of evidence, such as student work samples and teaching artifacts, that can be used in assessing performance.

The present Victorian standards for beginning teachers are embedded in a system of performance management that assesses teachers who teach in government at various intervals ("performance cycles") for particular purposes, (e.g. to determine eligibility to receive salary increments.) This context, and the manner of utilising the standards, has had an influence on the methods of determining whether teachers meet the standards. In both Victorian government schools (and in several other Australian state education systems) responsibility for the assessment rests with school principals. Documentation that sets out the standards, expressed as criteria, is provided to teachers and principals. At the start of each twelve month performance cycle, the teacher whose performance is being reviewed meets with another teacher who is at a higher level in the hierarchy. The purpose of the first meeting to plan strategies that will enable them to meet the standards. At subsequent meetings during the cycle the plans are discussed and refined. At the end of the cycle, a summative judgement is made as to whether the teacher has met the standards. This judgement is made by the school principal, usually on the recommendation of the assessing teacher.

Similar arrangements apply in the UK where

annual appraisals and assessments for teachers at various points on the salary scale are also part of a comprehensive performance management system for all teachers. During the induction period newly qualified teachers (who have satisfied the standards for Qualified Teacher Status) are supported by an "induction tutor." Requirements are laid down for appropriate training, monitoring, support and guidance. At the end of the induction period, the newly qualified teachers, like all other teachers, must satisfy principals, through the provision of suitable evidence that they meet the standards that apply at their level. No performance assessments or rubrics have been developed to indicate levels at which teachers meet the standards.

With the establishment of the Victorian Institute of Teaching, a line has been drawn between two purposes of teacher evaluation. The first purpose, which is the business of the employers, not the Institute, is to ensure that teachers have met the contractual obligations of their employment. This entails deciding whether teachers have met requirements that relate to the organisational goals of the school and system (such goals as, for example, are outlined in school charters). The second purpose, which is the role of the Institute, not the employers, is to ensure that teachers meet professional standards of teaching practice and are therefore eligible for employment in any school. While these purposes are quite distinct, the methods of assessments may still be similar.

Meeting standards, as laid down by the Institute, will be an essential condition for beginning teachers to become full members of the teaching profession in Victoria. As well as developing new standards of practice, the Institute will need, therefore, to devise appropriate means of judging, at the

conclusion of the Induction period, whether beginning teachers have met the standards. The core role of the Institute as a professional body is to provide a credible registration process. If it does this well, its registration process will lead to and support effective induction and mentoring programs for beginning teachers.

To reiterate, for a set of professional standards to be complete and useful, it needs to be more than a description of what good teacher should know and be able to do. The standards need to be written in a way that makes it possible to make decisions and judgements about teachers' competence in relation to the many and complex elements of their work. From the outset there has to be a clear understanding not only of what is to be assessed, but of how it is to be assessed and what evidence will count as meeting the standards. Fairness, as well as validity and reliability, will require consistency in the ways in which these procedures are implemented from system to system and school to school.

Charlotte Danielson, a program administrator for the Educational Testing Service (ETS) in Princeton New Jersey, (developers of PraxisIII/Pathwise) and the author of several major publications including Enhancing Professional Practice, a Framework for Teaching has provided us with the following advice:

I completely concur that standards are useful only when they are written with assessment in mind. I had not thought of it in exactly that manner, but I am sure that is correct. We know this from other contexts as well. For example, with student learning and assessment, that the assessments serve to operationalise the standards. It is only when we design assessments that we know for sure what we mean by the standards. Which is why

it is important not to finalise the standards before designing the assessments, since they will probably have to be revised sometime down the path.

Danielson gave two examples of states that had developed sets of standards without considering the assessments:

They developed their standards – and they were adopted by the respective state legislatures. They then asked people to design assessments, a virtually impossible task, since they had not been written with the need for assessment in mind. I have been involved in both.

6 Links with professional learning

There is growing evidence that teachers learn best when their learning is focused on the elements of the "technical core" of teaching and learning (Elmore 2000). This technical core comprises such central features of teaching and learning as knowledge of subjects, knowledge of students, knowledge of how to facilitate students' learning – features that are articulated in good sets of standards for teachers' practice. There is no need to "make" links between teachers' professional learning and standards of practice if the standards adequately, coherently and comprehensively express this technical core of what teachers should know and are able to do.

Under these conditions, professional development can be guided by the standards. And assessment tasks themselves become vehicles for promoting the collaborative dialogue and reflection on practice necessary for professional learning.

The standards that best promote teachers'

learning appear to be those that are integrated into professional learning systems, with performance and content standards, associated professional development activities and training in evaluation methods supported by effective resource materials (examples include Praxis III and INTASC). Standards that have been developed to serve specific purposes, such as registration, have also become an effective means of engaging all teachers in effective forms of professional development. "Stand alone" standards, (e.g. the Queensland standards) that serve no particular purpose do not have the same capacity to drive professional learning.

Case studies currently being undertaken by the ACER Teaching and Learning Division suggest that the use of the ITCS for teacher performance management is making a contribution to the professional learning of teachers in Victorian government schools. But because the processes serve purposes and agendas that are not entirely focused on teaching and learning – their prime purpose is to ensure that teachers are meeting organisational goals – their effectiveness as a means of advancing teacher professional learning appears to be limited.

One example of a model of a standards based professional learning system is that of the NBPTS. Like INTASC and Praxis III, the NBPTS standards integrate standards and assessments into a standards-based professional development system with these features:

- A clear practical purpose, e.g. teacher certification/licensing.
- Performance-based standards.
- Provision of comprehensive guidance and advice for teachers, based on the standards, about how to demonstrate that they have attained the standards.

- Clearly expressed expectations of what is required in terms of performance and evidence for teachers to reach the standards.
- Summative assessments carried out by trained evaluators, and standards based rubrics that differentiate levels of performance.

These models link standards to teacher performance in very practical ways. The standards are framed as action based statements of performance that are specifically designed for assessment. They form the first and seminal part of an assessment system that integrates standards and performance assessments, training programs for mentors/assessors, professional learning programs for teachers and assessment rubrics that differentiate levels of performance. There is extensive evidence now that completing NBPTS assessment tasks is a powerful method for engaging teachers in effective forms of professional learning.

7 Proposals for developing the new interim standards for Victorian teachers

Certain assumptions have guided the preparation of this paper. Registration is one of the main statutory quality assurance functions of the VIT. VIT registration will provide assurance to the public and the profession that a teacher has attained the competence to create an effective learning environment for all students and is ready to join the profession. These assumptions represent a significant shift from earlier conceptions of teacher registration as an event, not a process.

VIT registration will be a process that will aim to promote effective programs of professional induction and learning for beginning teachers, something that innumerable reports on teacher education have argued for over the past forty years. It will be a stage of professional learning that builds on and extends the learning that has taken place in university-based teacher education programs. The capacity of registration to engage all teachers in effective forms of professional learning will depend fundamentally on the quality and rigour of its system for making summative assessments of teacher performance.

Victoria already has a set of interim professional standards for beginning teachers that provide a basis for further standards development. We would not propose any radical departure from the contents of these standards at this stage, first because they are familiar to teachers and second because they do already mirror much of the teaching knowledge base, as the comparison with other sets of standards in this paper demonstrates. But we would suggest that the existing standards need some adaptation to enhance their usefulness for self-assessment and registration purposes. PRAXIS III/Pathwise and INTASC provide the most coherent and valid frameworks for professional learning we could find and are worth closer inspection for how the VIT might make them even better.

Our proposal is for an interim set of standards for beginning teachers that includes the following features:

- It will comprise performance-based statements at three levels.

- The statements will be expressed in language that is concise, action oriented and purposeful.

- The standards will begin with a Level 1 statement of vision/principles that will infuse standards at all levels.

- The Level 2 statements will define the teaching knowledge base and provide the basis of a coherent framework, "an architecture of practice".

- The Level 3 statements will be useful for making judgements about teachers' practice. These statements will point to elements of observable behaviour but will transcend reference to specific practices. They will elaborate the Level 2 statements they describe.

- The set of standards will provide the basis and substance of a professional learning system for teachers.

For the reasons given above, we believe that attention should be paid to developing a Standards-based professional learning system that will support formative and summative assessment strategies in conjunction with the standards. The formative assessment would be largely the responsibility of the employing authorities, with support to provided be by the VIT, unions and teachers professional associations. The summative assessment would be the responsibility of the VIT.

In a sense, the only thing that the VIT needs to do, and do well, is to set in place a professionally and publicly credible and rigorous assessment system for registration. No one else can play this role, or provide this service. This is the critical VIT function that will provide the essential incentive and recognition to stimulate beginning teachers to seek the best forms of initial professional learning opportunities they can find. And perhaps we should not forget that there needs to be some onus on beginning teachers as well to play an active role in demonstrating that they have attained performance

standards for entry to the profession. This seems a reasonable expectation. It may be of interest that the Queensland Board of Teacher Registration has moved in this direction recently.

We therefore suggest that:

- In developing a new set of interim standards for beginning teachers the VIT consider the best elements of Praxis III/Pathwise to inform a reworking of the present interim standards for Victorian teachers

- During the induction period, there should be continuing formative assessments of the work of beginning teachers. These should be based on the professional standards, thereby ensuring that the standards are the core of a holistic professional learning and assessment system. During this period, the beginning teacher should have the guidance of at least one teacher/mentor in the school.

- Mentors, or the equivalent, should receive comprehensive training in standards-based formative and summative teacher evaluation. They should learn how to participate in and conduct evaluations that are valid, reliable, useful and fair. The training would reflect profession-wide values and beliefs about teaching. In time, many experienced teachers who so wished could be trained as mentors. This would be a powerful form of professional learning in itself. The Victorian Institute of Teaching would be responsible for ensuring that this training was provided.

- Training in teacher evaluation and the application of the VIT standards should also be provided for school principals.

- There should be a summative assessment at the end of the induction period. The purpose of the assessment would be to decide whether applicants meet the VIT standards for full teacher registration.

- This summative assessment should be carried out by a panel of trained mentors/evaluators, based on a range of evidence including observations of practice, student work and teaching artifacts and materials. In order to maximise objectivity and provide a wider educational perspective for the processes, the panel should include at least one trained mentor who is a teacher at a school other than that of the person being evaluated.

- Responsibility for the fairness, validity and reliability of this assessment must reside with the Victorian Institute of Teaching. Only individuals who have completed the Institute's training in teacher evaluation should be eligible to be members of the panel carrying out the assessments. The assessments would be clearly distinguished from other school-based assessments, such as those for performance management purposes.

It may not be possible for mentor/evaluator training programs to be fully implemented in the first years of the VIT. But it would be possible to fully train at least one group of evaluators in 2003 in a pilot scheme that could be further developed and more broad-based, e.g. as a "train the trainer" scheme. It takes the National Board four days to train mentors and assessors to an acceptable level of consistency. Similar periods apply for Praxis and Pathwise. Effective training packages need to include benchmark examples, scoring rubrics, procedures for bias training and so on.

We know something of what it takes for teachers to learn how to use standards-based assessments of student performance and it needs to be recognised that assessment of

teacher performance is even more complex. Given the central importance of teacher quality, it is also vital that it is done well. One "positive" is that teachers themselves understand the central role that assessment, especially self-assessment plays in any kind of learning.

The scale of the task of developing a credible and productive assessment system for teacher registration across the state is large and the level of investment should not be underestimated, but the flow on benefits can be considerable. For example, US states such as California, which have invested in the kinds of induction/mentor/assessor programs recommended here, have cut attrition rates for young teachers significantly.

The important thing at this stage is to build public and professional respect for the credibility of VIT registration. Achievement of this will require a valid and fair assessment system that is implemented consistently across all schools and school systems. This implies that the VIT will need to retain central control over assessment principles and procedures, and ensure that these are followed by agencies who may carry out assessments on its behalf.

TABLE 1 Standards Design

Most sets of standards are arranged in ways that aim to explicate what teachers should know and be able to do. Most sets of standards are articulated in frameworks that comprise at least three "levels" of statements as in the examples below:

		Examples
Level 1	**Statements of vision, core principles, propositions** Statements at this level are highly generalised, abstract. They are important as statements of values, but are not designed for making valid inferences from evidence of practice.	Highly accomplished teachers are committed to their students and their learning (NBPTS) Effective teacher understand that learning is and active process of constructing knowledge (Praxis)
Level 2	**Statements of category** These statements define the main categories of teaching practice. Together they should represent a coherent framework of what teachers know and do – an "architecture" of practice. They should reflect the Level 1 norms and values. *Variously called "Domains" "Areas of competence" "Dimensions"* These statements constitute the main components of the in the "domain" of what is to be assessed.	Communicating interacting and working with students and others (National Competency Framework for Beginning teaching Organising content knowledge for student learning (Praxis III)
Level 3	**Statements of elements** Statements at this level are descriptions and elaborations of Level 2 statements. They should elucidate the Level 2 statements and reflect the Level 1 norms and values. Statements at Level 3 should be useful in making judgements about a teacher's performance. They point to elements of observable appropriate behaviour, but transcend references to specific practices. *Variously called "Elements" "Indicators" "Components" "Criteria"*	Establish learning environments that acknowledge the concerns, values, and priorities of students' families, cultures and communities (Professional Standards for Teachers, Queensland) Take account of ethnic and cultural diversity to enrich the curriculum and raise achievement (Induction standards, UK)

TABLE 2 Examples of statements at the three levels

Example from *Praxis III*

Level 1	Effective teaching requires both action and decision making Learning is a process of active construction of knowledge
Level 2 (Four "domains")	Domain A Organising Content Knowledge for Student Learning Domain B Creating an Environment for Student Learning Domain C Teaching for Student Learning Domain D Teacher Professionalism
Level 3 Five "criteria" (Developed from Domain C Teaching for Student Learning)	C1 Making learning goals and instructional procedures clear to students C2 Making content comprehensible to students C3 Encouraging students to extend their thinking C4 Monitoring students' understanding of content through a variety of means, providing feedback to students to assist learning, and adjusting learning activities as the situation demands C5 Using instructional time effectively

Example from *Standards for the Teaching Profession* **Ontario College of Teachers**

Level 1	Members of the College, as members of the teaching profession, foster student learning through a variety of roles in education. Effective teaching requires the use of a range of teaching styles and techniques. These variations afford teachers the opportunity to make choices, accommodate change, and most student needs.
Level 2 (Five "Standards")	Statements/Standards 1. Commitment to Students and Student Learning 2. Professional Knowledge 3. Teaching Practice 4. Leadership and Community 5. Ongoing Professional Learning
Level 3 Four "key Elements" Developed from Standard 2 Professional Knowledge	1. Knowledge of the student 2. Knowledge of the curriculum 3. Knowledge of teaching practice 4. Knowledge of the learning environment

TABLE 3 Comparison of Level 2 statements ("Domains" "Dimensions" etc.)

Praxis III/ Pathwise	Interim Teacher Class Standards Victoria	National Competencies Australia	Standards of Practice for the Teaching Profession Ontario College of Teachers	NBPTS Adolescence and Young Adulthood Mathematics	INTASC	Induction standards UK
Organising content knowledge for student learning (Planning and preparation)		Planning and managing the teaching and learning process			Planning/ Integrated Instruction	Planning and setting expectations
Creating an environment for student learning (The classroom environment)				Learning environment	Learning environment	Managing resources
Teaching for student learning (Instruction)	Teaching practice	Planning and managing the teaching and learning process	Teaching practice	The Art of Teaching Knowledge of Teaching Practice	Instructional Strategies	Teaching and managing pupil learning
Teacher professionalism (Professional responsibilities)	Professional requirements	Using and developing professional knowledge and values Reflecting, evaluating and planning for continuous improvement	Professional Knowledge	Reflection and Growth Contributing to the Professional Community	Self Reflection/ Professional Development	Knowledge and understanding Managing own performance and development
	Assessment and reporting of student learning	Monitoring and assessing student progress and learning outcomes		Assessment	Assessment	Assessment and Evaluation
	Interaction with the school community	Communicating interacting and working with students and others	Leadership and Community	Families and Communities	Communication Community involvement	Relations with parents and wider community
				Knowledge of students	Child development Diversity of learners	
			Commitment to students and student learning	Commitment to students and their learning		
	Content of teaching and learning	Using and developing professional knowledge and values		Knowledge of Mathematics Reasoning and Thinking Mathematically		
						Pupil achievement
						Managing and developing staff and other adults

TABLE 4 Purposes and contexts of standards (1)

Note: All standards serve the overarching purposes of quality assurance and teacher professional learning.

Standards	Purposes/contexts	Basis of *an integrated professional learning/teacher evaluation system?**	Person/authority responsible for carrying out assessment processes
Praxis III/Pathwise	State licensure for teachers	Yes	State professional licensing bodies
Interim Professional Standards for Beginning Teachers Victoria	Judging teachers eligible for ongoing employment at end of induction period	No	School principals or delegates
National Competencies for Beginning Teachers Australia	Are used by schools, education systems and teacher education institutions for a variety of purposes.	No	N/A
Professional Standards for Teachers Queensland	Are used by schools, education systems and teacher educations institutions for a variety of purposes	No	N/A
Standards of Practice for the Teaching Profession Ontario College of Teaching	Accreditation of pre service education courses Accreditation of in service professional learning	No	N/A
NBPTS	Certification of teachers of accomplished practice	Yes	NBPTS
INTASC	State licensure for teachers	Yes	State professional licensing bodies
Induction standards UK	Eligibility to continue to teach in a maintained school	No	School principals

An "integrated professional learning/teacher evaluation system" integrates standards, performance assessments, training programs for mentors/assessors, professional learning programs for teachers and assessment rubrics that differentiate levels of performance.

TABLE 5 Purposes and contexts of standards (2)

Standards that are part of an integrated performance assessment system	Standards that are being systematically used for teacher professional learning	Standards that are being used to make "high stakes" decisions about teacher performance	Standards that are being used for a variety of purposes
Praxis III/Pathwise (Beginning teachers)	Praxis III/Pathwise	Praxis III Pathwise	National Competencies for Beginning Teaching (Australia)
INTASC (Beginning teachers)	INTASC	INTASC	Standards for Professional Practice
NBPTS (Advanced certification)	NBPTS	Induction standards (UK)	Education Queensland
		Interim Professional Standards (Victoria)	
		NBPTS	

TABLE 6 How standards are used for "high stakes" beginning teacher assessments

Standards	Purpose of assessment	Evaluation methods/procedures	Person/authority responsible for carrying out assessment processes
Praxis III/Pathwise	Teacher licensure	Training programs for mentors/assessors Standards based performance assessments Formative appraisal and professional learning programs for teachers (standards embedded) Scoring rubrics which differentiate levels of performance	State licensure bodies using trained mentors/assessors
Beginning Teacher Interim Professional Standards for Beginning Teachers Victoria	Determining eligibility for ongoing employment at end of induction period	Mentoring and formative appraisal during induction period Summative evaluation at end of induction period	School principal or delegate(s)
INTASC	Teacher licensure	Training programs for mentors/assessors Standards based performance assessments Formative appraisal and professional learning programs for teachers (standards embedded) Scoring rubrics which differentiate levels of performance	State licensure bodies using trained mentors/assessors
Induction standards UK	Eligibility for teachers with Qualified Teacher Status (QTS) to continue to teach in a maintained school	Summative evaluation at end of induction period	School principal