Research on Performance Pay for Teachers

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ACRONYMS

API Academic Performance Index (API)

APR Annual Performance Review

ATL Association of Teachers and Lecturers

ACT Australian Capital Territory
AEU Australian Education Union
AST Advanced Skills Teacher

AWA Australian Workplace Agreements

CMPO Centre for Market and Public Organisation

CPA Certified Practicing Account

CPRE Consortium for Policy Research in Education

CPD Continuing Professional Development

DoE Department of Education

DECS Department of Education and Children's Services

DfES Department for Education and Skills

ET Executive Teacher

ETWR Experienced Teachers with Responsibility
GTCS General Teaching Council for Scotland
ISCA Independent Schools Council of Australia
IEUA The Independent Education Union of Australia

KSBP Knowledge and Skills-Based Pay LEA Local Education Authorities

NASUWT National Association of Schoolmasters and Union of Women Teachers

NB National Board

NBPTS National Board for Professional Teaching Standards

NSW New South Wales

NUT National Union of Teachers

NT Northern Territory

OECD Organisation of Economic Co-operation and Development

PRP Performance Related Pay

Pro-Comp Professional Compensation System for Teachers QIEU Queensland Independent Education Union

SA South Australia
Tas Tasmania

TEP Teachers of Exemplary Practice
TURN Teachers Union Reform Network

TVAAS Tennessee Value Added Assessment System

Vic Victoria

WA Western Australia

EXECUTIVE SUMMARY

This report falls into three main sections, in accordance with the project brief (See Appendix 1). The first provides an overview of current pay arrangements and collective enterprise bargaining agreements for teachers in Australian schools. Within these arrangements, the report gives particular attention to provisions for performance-based pay schemes and to identifying potential impediments to the introduction of performance-based pay for teachers.

The second part of the brief called for an overview of recent Australian and international research on the attitudes of stakeholders to performance-based pay schemes for teachers and the impact of these schemes on, for example, teacher retention, improved teaching standards, improved student outcomes and recognition of accomplished teachers.

The third part of the brief asked for gaps in the Australian and international evidence base on performance pay to be identified and for suggestions about further research that would be valuable in assessing the value and/or acceptance of performance-based pay for teachers in the Australian context.

This report focuses on published research about performance pay. There have been many examples of performance-related pay schemes over the past one hundred years or so, especially in the USA. More recently, many more are being encouraged by President Bush's US\$500 million *Teacher Incentive Fund* for states and school districts that choose to introduce merit pay schemes. The *Teacher Incentive Fund* will provide a \$5,000 award to approximately 100,000 teachers across the country. Many more schemes have appeared in recent years in other countries as well, such as England, Sweden and Singapore. While many of these schemes have received considerable publicity, such as the Special Teachers are Rewarded (STAR) scheme initiated by the Florida Department of Education, this report will only give detailed attention to schemes that have been subject to systematic research.

This report does not review in detail the advantages and disadvantages of particular methods of gathering evidence about teacher performance, such as student evaluations, classroom observations or measures of student achievement and many more. Although these considerations are clearly important, they are not the focus of this report. However, there is general agreement among experts in teacher evaluation that a valid and reliable scheme for assessing teacher performance for high stakes¹

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¹ The term "high stakes" refers to decisions that lead, for example, to significant financial rewards, promotion, access to further career stages as well as registration and certification by professional bodies. In contrast, evaluations of teacher performance for professional development or improvement purposes alone are regarded here as "low stakes".

decisions must draw on several types of evidence (Joint Committee on Standards for Educational Evaluation, 1988; Shulman, 1988; Scriven 1994; Pearlman, 2000; Stronge, 1997). This is because such schemes need to encompass the full scope of what a teacher is expected to know and be able to do, not only to ensure their professional credibility, but increasingly, their legal defensibility.

Teaching standards are increasingly used to describe the full scope of what teachers are expected to know and be able to do. A set of standards typically includes a wide range of elements such as "creating productive learning environment", "knowledge of content", "promoting student learning" and "contribution to school and professional community", among others. Assessment of a teacher's performance against each of these standards for high stakes decisions calls for very different types, as well as multiple forms, of evidence. To illustrate, student evaluation instruments (and parent feedback) can provide reliable measures of class environment. Paper and pencil tests are a valid means of gathering evidence about the currency of a teacher's content and pedagogical knowledge. Direct evidence that students are learning what the teacher is expected to teach is also essential. Contribution to school and professional community requires documentation of activities and outcomes, verified by colleagues and principals.

A valid and reliable scheme for assessing individual teacher performance for high stakes decisions therefore requires multiple, independent sources of evidence and multiple, independent trained assessors of that evidence. This means that any single measure, such as measures of student achievement on standardised achievement tests cannot alone provide a reliable basis for making performance-related pay decisions about the efforts of individual teachers. Performance pay schemes also need to include evidence about the context in which a teacher is teaching in making judgements about the quality of teaching (Fenstermacher & Richardson, 2005).

There is an increasing desire among all stakeholders in Australia to develop policies for "revitalising" the teaching profession (DEST, 2003). This includes pay systems that are more effective in giving incentives for highly accomplished teaching, for keeping excellent teachers working in classrooms and for providing professional leadership to colleagues. There is increasing recognition, nationally and internationally, that career paths and pay systems can be, and need to be, linked to evidence of increasing capacity to promote valued student learning outcomes and, thereby, stronger levers for ensuring professional development and quality learning outcomes for all students (Sclafani & Tucker, 2006; OECD, 2005). Representatives of eight countries, including Australia, recently attended an international seminar on Teaching Policy to Improve Student Learning convened by the Aspen Institute. Australia stood out as a country where teachers' careers plateau very quickly and at a relatively modest salary. A report summarising the conference proceedings (Olson, 2007) concluded:

Each of the nations participating was seeking ways to recognise expert teachers, reward them for their abilities, and take advantage of their skills. Creating a stronger connection between individual teacher contributions and what they are paid lies at the heart of redesigning teaching for the next generation. (p. 5)

Pay arrangements for teachers in Australia under current awards and agreements

The guiding question in this section of the report is, "To what extent is teachers' pay based on the quality of their professional performance within current Awards or Agreements?" Attention focuses first on the relationship between teaching performance and teachers' pay progression along the incremental scale. The second part of this section focuses on the extent to which current awards and agreements provide career pathways for teachers beyond the incremental scale, based primarily on rigorous evidence of their teaching performance.

The Incremental Scale

Almost all teachers work within negotiated industrial awards and collective agreements between unions and employers. In common with most OECD countries, the majority of Australian teachers begin their careers on an incremental scale along which they move one step each year to a higher salary level. Scales usually include from 8 to 10 steps. Progression to the top of the ladder is rapid in Australia - it takes only 9 years on average for most Australian teachers to reach the top of the scale compared with 24 years on the average for teachers in OECD countries. The 2006 edition of the OECD's report, *Education at a Glance*, indicates that whereas the average ratio of the salary at the top of the incremental scale to the starting salary is 1.70, it is only 1.47 in Australia.

The typical requirement to progress through the incremental scales in most school systems is satisfactory completion of an annual performance review with a 'supervisor', such as a head of department or principal. Each of the state and territory departments of education has produced comprehensive documents that set out how to conduct annual performance management processes schools. According to recommended procedures, performance appraisals are to be conducted by the principal or supervisor. These evaluations usually focus on the extent to which teachers are fulfilling their contractual duties, rather than the extent to which they are progressing toward higher standards of professional knowledge and performance.

School systems, such as Victoria, SA and WA, are increasingly using sets of generic teaching standards as a framework for annual performance management reviews. These standards have often been developed by registration agencies, such as the Victorian Institute of Teaching. Anecdotal

evidence from key informants for this study indicates that there is considerable variation from school to school in terms of the rigour with which these annual performance reviews are implemented. More systematic surveys are needed here, but teachers, principals and system administrators contacted in the course of this study pointed out that, although annual reviews are increasingly accompanied by independently gathered data about teacher performance, such as student evaluations, observations of classrooms and student progress, it is rare for increments to be withheld. Some states and territories, such as Victoria and the Northern Territory, provide for accelerated progression up the scale based on classroom performance evidence, but this is also rare.

In non-government systemic and most independent schools, the basis for determining progression through the incremental scale is similar to progression in the government systems. As in government schools, available evidence suggests that it would be rare for a principal to withhold an increment from a teacher, although some non-government independent schools employ teachers under contracts in which there is a "subject to satisfactory performance" provision. Almost all Agreements also provide for the denial of an annual increment if a teacher does not have a satisfactory annual appraisal.

All Awards and Agreements have guidelines and procedures in place to address unsatisfactory performance. These may include a pathway offering support and guidance to teachers who are performing below the expected level, but will also include formal discipline and/or dismissal procedures in cases where programmed support has not been successful in bringing a teacher to an acceptable level of competence, or in cases of serious misconduct. Once again, it is difficult to find systematically gathered evidence about underperforming teachers in most school systems. However, reports such as the recent NSW Auditor General's report (2003) indicate that the numbers of teachers who are dismissed or deregistered each year for poor performance is small.

In summary, it would be stretching the concept to call the incremental pay scale, in its current form in most states and territories, "performance-based pay." Evidence of performance, in relation to teaching standards for example, is rarely gathered in systematic ways. Recent US research suggests an incremental scale based mainly on years of experience over the first five to ten years or so may be warranted, provided a rigorous registration system is in place and teachers are fulfilling their contractual duties satisfactorily (Clotfelter, et al., 2007). This research indicates that Australia lacks: (1) a rigorous performance-based assessment at the point of registration and entry to the profession (Gordon, Kane and Staiger, 2006); and (2) a rigorous advanced certification system that provides teachers with clear direction as to what they should get better at over those ten years or so, and strong incentives for all teachers to reach those standards.

Promotion positions for classroom teachers beyond the incremental scales

The guiding question here is the extent to which preparation for promotion beyond the top of the salary scale provides strong incentives to demonstrate attainment of high standards of professional performance and contributions to the professional community.

As the average age of Australian teachers is around 45², most teachers have been sitting at the top of the incremental scale for at least ten years. The number of promotion positions beyond the top of the incremental scale in each school is strictly limited, meaning many experienced teachers are unable to access higher salary levels, regardless of their teaching performance. In the recent *Education at a Glance* (OECD 2006), 13 out of 32 OECD countries reported that they adjusted the base salary of teachers according to evidence of outstanding performance in teaching or successful completion of professional development activities. Australia was not one of them.

In reviewing current arrangements for career progression, three approaches to paying teachers beyond the top of the incremental scale were identified:

- 1. paying for jobs (e.g. executive or managerial positions);
- 2. paying for evidence of increased knowledge and skills; and
- 3. bonus pay or merit pay schemes for individual performance.

The main career pathway for Australian teachers beyond the top of the incremental scale is through application for jobs or positions with specific responsibilities, such as head of a subject area, or coordinator of curriculum or professional development. As the number of promotion positions of this type is limited, the application process is necessarily competitive.

The second and third approaches are much less common. Only three state and territory education departments have developed classifications that carry higher pay for teachers based primarily on systematically gathered first-hand evidence of "accomplished" teaching performance. These include the Level 3 Classroom teacher position in WA, the Advanced Skills Teacher in SA and the Teacher of Exemplary Practice (TEP) position in the NT. While the WA and NT schemes provide a substantial pay rise of around 10 per cent, the SA AST scheme provides a small increase in pay. The Association of Independent Schools in NSW is introducing in 2007 a "performance-based remuneration system" based on evidence of attaining increasing levels of knowledge and skills, as defined by standards developed by the NSW Institute of Teachers (Newcombe, 2006). The AISNSW has set up the

² The National Survey of Teachers (MCEETYA, 2002) found that 51.5% of teachers were 45 years of age or over.

"Independent Schools Teacher Accreditation Authority" to develop procedures whereby evidence will be gathered to assess a teacher's performance against the standards.

The new classifications in WA, SA and the NT are not linked directly to advertised executive positions in specific schools. Rather, teachers usually gain these portable classifications as a result of applying to a central agency for an assessment of their performance. Teachers do not have to be at the top of the salary scale to apply for these positions. Methods of assessment usually rely on a range of evidence about performance gathered together in a portfolio. South Australia is noteworthy for including evidence gained from classroom observations by observers trained to use teaching standards.

Little information is available about the psychometric quality of the methods used to assess teacher performance in these schemes, or the methods used to determine the required level of performance in relation to the standards. Teacher evaluation is a relatively embryonic field in Australia. Those involved in these schemes recognise that there is further room for development to ensure their validity and reliability. A quota is used in the case of the WA Level 3 Classroom teacher position, which contradicts the concept of standards-based performance assessment. However, Level 3 teachers who run the assessment process reported that the number of successful applicants so far has never exceeded the quota.

There is also little research evidence yet about the impact of these schemes on teachers' attitudes to performance pay, or their impact on professional development, practice, staff relationships, leadership and retention. While the impact that these teachers have on their students is likely to be significant, the impact that these schemes have in a wider sense across schools and school systems is probably small as the numbers of teachers in these positions is quite small. A challenge for those responsible for these schemes is to find ways to capitalise on the expertise these teachers have through the creation of new roles and career paths for them as leaders in the improvement of teaching.

Case studies conducted for this report indicate that a variety of above-the-Award and performance pay schemes is in operation in independent schools. These include the schemes outlined above, though annual bonus pay schemes based on the quality of classroom teaching are rare. As with government schools, the majority of these schemes fall into the category of extra pay in recognition of extra work and responsibilities, rather than extra pay for evidence of improved performance in relation to teaching standards. The AISNSW plan to provide a system for certifying teachers who attain higher levels of professional standards is a significant initiative. Schools can use this certification to provide more attractive performance-based career paths for accomplished teachers. This is an example of a

performance pay scheme based on evidence of increased knowledge and skill, on which it will be valuable to conduct research.

To what extent do current arrangements impede, limit or prevent the introduction of performance-based pay arrangements for teachers?

The overview indicates that there is nothing inherent in current processes for determining industrial awards and enterprise agreements that prevents the introduction of performance-based pay arrangements for teachers. Although they are limited in scope, the existence of the three current schemes for offering promotion positions based on classroom performance demonstrates this. These three schemes were developed as part of negotiations for current industrial awards and enterprise agreements. They also owe their origins to the Advanced Skills Teacher (AST) concept, which was promoted by the teacher unions and employing authorities as part of the Award Restructuring reforms in the early 1990s. Although the concept was consistent with the idea of building stronger links between teachers' salaries and evidence of improved performance, implementation of the scheme was not

Since the AST experience, understanding of what is involved in developing credible methods for assessing teacher performance has grown considerably. The development of professional standards has been strongly supported by all stakeholders in Australia (DEST, 2003). The standards developed recently by subject associations for English, mathematics and science teachers are much more sophisticated than earlier sets of generic standards developed for the AST position. A clear impression emerges from surveying current initiatives and major stakeholders that there is a strong desire to provide greater recognition to teachers who can show evidence of attaining high standards of professional performance. All stakeholders recognise they have a mutual interest in promoting quality teaching through rewarding evidence of enhanced knowledge and skill.

This desire currently manifests itself, however, in a wide range of different schemes that vary in quality from school to school and from school system to school system. There is no system, as there is in other professions, whereby the profession provides a credible certification service to the public and employers that members have reached a certain level of performance. There is no consistent pattern to the definition of highly accomplished teaching or methods for assessing performance. There are, however, some promising examples of embryonic certification systems developed by mathematics and science teachers, as summarised in a recent report prepared for Teaching Australia (Ingvarson & Kleinhenz, 2006a). With some refinements, these systems could become operational within a short period.

The case studies of performance pay arrangements in independent schools show this varied character clearly. Like so many independent schools, each of these schools is attempting to develop career pathways for highly accomplished teachers and teacher leaders. However, they find it difficult to develop, on their own, credible systems for standards-based performance. Nor can their systems provide, or lead to, a portable certification with profession-wide respect and currency. Developing valid teacher evaluation systems is complex work. In other professions, national bodies usually set standards and conduct assessments for professional certification. Their performance assessments thereby provide a valuable independent service, both to employers and individual professionals.

What characterises current arrangements in education, compared with most professions, is equivalent to every business developing its own CPA system for accountants, or each hospital administration developing its own certification system for doctors who reach high standards in their field of medicine, or each engineering firm creating its own 'Chartered Engineer' standards. Unlike these professions, teaching as a profession lacks its own system for providing an independent, authoritative performance assessment service to schools and school systems seeking to provide incentives to teachers to attain high standards of professional performance and retain those that do. Without such a system, it is difficult to create a strong and credible market for highly accomplished teachers.

This review suggests that the type of industrial or workplace relations system is not the deciding factor in developing viable schemes for linking teacher pay and career paths more closely to performance. There is evidence that some of the most viable teacher evaluation systems in the USA have been initiated by teachers' organizations (Kerchner & Koppich, 1993). The Teacher Union Reform Network is a group of 21 major school districts and union leaders who are creating new models of teacher 'compensation' that have stronger links to improvements in student learning outcomes. The models include school-based performance award programs, National Board Certification and knowledge- and skills-based pay systems.

Rather than impediments to performance-based pay schemes, what appears to be lacking is the courage to create financially rewarding career paths based on increasing ability to teach well and promote valued student learning outcomes. Creating such career paths requires changing the way teachers' work is organized in schools and creating more differentiated roles for expert teachers in supporting school improvement. Current salary scales and career paths send a strong message that the most important thing for an ambitious teacher to be doing is preparing to move out of teaching into school executive positions. The incremental pay system says, in effect, that teachers are worth more each year for about nine years. After that nine or ten years it says, in effect, we do not expect you to get any better as a teacher (or, that there will not be differences in the effectiveness of individual

teachers). There are few extrinsic incentives for teachers to show evidence of professional development and improved performance.

What does recent research reveal about the impact of performance-based pay schemes for teachers?

Performance-based pay schemes take a variety of forms and make use of different sources of evidence. This makes it difficult to generalise about their impact. One of the major distinctions between pay schemes lies in how they define what counts as 'performance'. Proponents of some schemes argue that standardised tests of student learning outcomes should be the main indicator of teacher performance. Others argue that performance should focus more directly on evidence about what students are doing in classrooms as a result of conditions for learning established by teachers. As indicated earlier, a scheme that relies on one form of evidence is unlikely to be reliable.

For the purposes of this report, performance-based pay schemes were classified into three main types: merit pay; knowledge and skills-based; and certification-based approaches. Distinguishing features of each are identified in more detail in Section A of the report, but there are also features they have in common. The report concentrates mainly on schemes that focus on indicators of an individual teacher's performance in the classroom rather than their contribution to wider aspects of school functioning.

Merit pay schemes

The term 'merit pay' is still used in some quarters, but as used here refers mainly to the many schemes developed in the 1970s and 1980s in the USA. Merit pay schemes in the past were usually developed within particular schools or employing authorities, and operated by school administrators. Typically, such schemes evaluated teachers against one another for a fixed pool of funds, usually delivered in the form of bonus payments. They were not standards or criterion based. The methods of gathering evidence were usually of doubtful validity and unreliable, such as classroom observation checklists or one-off tests of student achievement, often leading to staff dissatisfaction (Murnane & Cohen, 1986).

It is worth including mention of these earlier schemes, both because there is a substantial body of research about their impact (e.g. Johnson, 1986; Murnane & Cohen, 1986), and because, despite this body of research, similar schemes still bob up today. (See, for example, the Florida *Special Teachers are Rewarded Scheme*, which will distribute awards of at least 5 per cent of the base pay to the best performing 25 per cent of teachers within cooperating school districts. "Performance" in this scheme

has to be based on measures of student achievement, but the precise nature of these measures is left to school districts to define.)

Knowledge- and skills-based pay schemes

Knowledge- and skills-based pay schemes come from a different tradition. They have emerged in response to the ineffectiveness of traditional salary structures that focus rewards on additional course credits and university degrees rather than direct measures of knowledge and performance. Proponents of knowledge- and skills-based pay schemes aim to provide a basis for reforming career structures (Odden & Kelley, 2002).

The typical salary structure for teachers in the USA for example, unlike Australia, includes a substantial component based on accumulating further academic credits or qualifications. Although these payments are well entrenched, research indicates that the investment has little impact on student learning outcomes.

In knowledge- and skills-based pay schemes, pay increases are based on demonstrated improvements in the knowledge, skills and expertise needed to provide quality opportunities for student learning. Unlike merit pay schemes, knowledge and skills-based pay schemes are based on criterion- or standards-based approaches to the assessment of teacher performance.

Knowledge- and skills-based pay schemes aim to ensure that the salary scale is a much stronger instrument for improving student outcomes than the traditional incremental scale. These schemes aim to provide stronger incentives for professional development and reinforce the development of a workplace culture that values employee growth and development.

The development of new methods for developing teaching standards and assessing teacher performance has greatly facilitated the development of knowledge- and skills-based approaches to teachers' pay. These new approaches may still include interviews, classroom observation and student evaluations, but they may also include portfolio entries containing videotape evidence and evidence of improved student knowledge and skills over time.

These approaches invite teachers to provide the evidence that their teaching has met the standards, unlike old inspection methods. Knowledge- and skills-based pay schemes usually distinguish several levels of teacher performance, from registered to highly accomplished teacher, reflecting increasing proficiency and widening responsibilities.

Certification approaches

Professional certification is an endorsement by a professional body that a member of that profession has attained a specified standard of knowledge and skill. It is usually voluntary. The National Board for Professional Teaching Standards in the USA is perhaps the best-known example. The NSW Institute of Teachers is an embryonic Australian example; Teaching Australia, potentially, could be another. Professional certification can provide a basis for knowledge- and skills-based pay schemes in jurisdictions that accept its validity. With professional certification, the professional body is responsible for developing standards and methods for assessing performance rather than a single employing authority. The teachers' role is to supply the evidence, within guidelines, that they promote quality learning in students.

Attitudes to performance-based pay schemes

So far as earlier merit pay schemes are concerned, their limitations are well documented (Johnson, 1986; Odden & Kelley, 2002). These schemes were often introduced with insufficient understanding of what was involved in developing fair and valid methods for teacher evaluation. As a result, they often led to staff dissatisfaction and dissension (Murnane & Cohen, 1986). Morrow (1992) studied performance-based pay plans in several states and districts in the USA and found that "there was no evidence in this study to support the position that it was pay-for-performance which improved student achievement" (p.285-286). Incentives in themselves did not necessarily improve what teachers knew and could do, or lead them to teach more effectively. Improved student learning outcomes were more likely to result from long-term, high quality professional learning promoted by knowledge- and skills-based approaches to performance-based pay (Solmon, et al., 2007).

Methods of assessing teacher performance have advanced considerably since the 1980s. Recent research (Heneman, et al. 2006; Urbanski & Erskine, 2000) indicates teachers are less sceptical about the possibility of fair, valid and useful performance assessments in knowledge and skills-based pay schemes. They are most positive about the methods for assessing performance used in external certification processes such as those for the WA Level 3 classification (Ewing, 2001) and National Board Certification (NBPTS, http://www.nbpts.org/resources/research).

Knowledge- and skills-based schemes represent a better 'fit' with professional communities (Louis, Kruse & Marks, 1996) and the needs of professional organisations that focus on evidence of service to clients. These organisations depend on people with the expertise to apply values and professional standards to often non-routine client needs and problems (Weick & McDaniel, 1989). They also depend on the continuing development of expertise - and recognition that the development of

expertise in professions only begins with initial training. In professional organisations, it is expected that the full expression of professional expertise will depend on experience and evolve over time. Most professions have some form of certification system that embodies this expectation and rewards attainment of higher levels of expertise.

Several knowledge- and skills-based pay systems are reviewed in the main report. Teachers view these new approaches to assessing their performance as more valid, rigorous, and therefore fairer, than those used in earlier merit pay and performance management schemes. Employing authorities, school principals and unions in the USA increasingly view these schemes as a rigorous and therefore a sound basis on which to negotiate new pay scales that better reward evidence of developing knowledge and skill (Odden & Kelley, 2002).

The evidence indicates that teachers' attitudes to performance pay depend very much on how "performance" is defined and the validity and reliability of the measures used to assess it. The level of scepticism among teachers appears to decline the more that teachers play a part in developing the standards and performance measures. The evidence is that the most valid and challenging teaching standards extant have been those developed by teachers' professional associations. The National Council for the Teaching of Mathematics led the way in 1989. More recent examples include standards developed by the National Board for Professional Teaching Standards and those developed by several Australian teacher associations (Ingvarson & Kleinhenz, 2006a).

Few studies were found of public attitudes to merit pay. The 2000 edition of the Phi Delta Kappan/Gallup poll asked the American public how closely teacher salaries should be tied to student achievement. Only 25 per cent of the public said "very closely," while 24 per cent said "not at all" and 35 per cent said "somewhat".

Under what circumstances do performance-based pay systems gain professional commitment and improve student learning outcomes?

This review indicates that performance-based pay systems are more likely to have a positive impact when their development and operation is seen as a mutual responsibility between employing authorities and professional associations. There are complementary roles to be played here in the development of standards, assessments, professional development, certification and employer recognition. In other words, performance-based pay schemes for teachers are more likely to be successful when:

- a) their guiding purpose is to give substantial and valued recognition to teachers who provide evidence of professional development to high teaching standards (which includes evidence of student learning outcomes);
- b) valid (research-based) standards have been developed by expert teachers in their specialist field of teaching to provide long-term goals for professional development;
- c) appropriate research has been completed to develop reliable and valid procedures for gathering evidence to indicate whether teachers have met those standards;
- d) the assessment of performance procedures are conducted by an agency external to the school to ensure reliability, comparability and fairness;
- e) teachers have adequate opportunities to learn the knowledge and skills required to put the standards into practice;
- f) a teacher's ability to demonstrate that they have met the relevant standards leads to valued professional recognition, enhanced career opportunities and significant salary increases;
- g) teachers who reach high standards of performance gain access to interesting, challenging and well-supported positions in schools where they can provide leadership to improve teaching and learning; and
- h) Governments and other employing authorities become convinced that the assessment system is valid and reliable and make long-term commitments to support the system.

Suggestions for further research on attitudes to performance pay

The brief for this report asked, "What other research would have been valuable in assessing the value and/or acceptance of performance-based pay for teachers in an Australian context?"

Stakeholder attitudes to performance pay depend mainly on what they have had the opportunity to experience. As mentioned earlier, the legacy of payment by results and inspection is deep in the collective consciousness of the teaching profession and is passed down from generation to generation. Even the word "performance" can bring down the shutters with many teachers.

However, when Australian teachers have been part of well-conceived schemes to develop standards and assessments of teachers' knowledge and skills, their attitudes are very different. For example, the Australian teachers who were part of the development of standards for highly accomplished English, mathematics and science teachers became very committed to those standards. They found that they could write standards for what teachers should know and be able to do - standards that they had pride in. They also found that it was possible to create valid methods to assess teacher performance against the standards. As a result, attitudes changed with experience.

It is doubtful that there would be value in conducting more surveys of teachers' attitudes in general to performance-based pay. The usual answer to these surveys is, "it depends on how it is done". The most rigorous system for identifying accomplished teachers that we found in our review, the NBPTS, is the one that most involved teachers and their professional associations and organisations in all phases of developing the performance assessment system. It is also the system most respected by all major stakeholders (all 50 states recognise National Board Certification).

It is likely that the attitudes of most Australian teachers to the concept of performance-based pay will remain sceptical without similar participation in the processes of developing and trialling methods of gathering evidence and assessing performance. While there is little doubt that most stakeholders recognise that pay systems and career paths need reform, a cultural change in attitudes needs to happen in parallel with any reform initiative. Such reforms would need to be seen as a shared responsibility between teachers, governments and employing authorities.

This review of performance pay schemes indicates the need to move gradually, in a developmental way, toward building capacity. Based on the assessment of the available evidence, it would seem unlikely that there is any one model that could be readily adopted for application in Australia at this time. Hands on experience with well researched and carefully developed assessment processes will lead to better informed decisions about how to make the pay system a more effective instrument for improving the quality of teaching and improving student learning outcomes.

Therefore, it is suggested that two research and development programs on performance pay be initiated: one focused on developing valid and reliable systems for gathering evidence for individual performance pay decision; the other focused on learning how to operate team or school-based performance award programs.

Individual approaches to performance-based pay

Successful implementation of performance-based pay schemes for individual teachers is unlikely to become a reality without a major research program to develop our capacity for measuring teacher knowledge and skill.

There is much to learn about reliable methods for assessing teacher performance from research and development work conducted overseas, but local capacity is definitely growing to conduct this kind of work. The heart of any significant performance-based pay scheme is the system for assessing teachers' knowledge and skill. That system must be sound. It must focus primarily on direct

(including measured) evidence about what students are learning, doing and experiencing as a result of the conditions for learning established by the teacher.

While teachers' attitudes to earlier merit pay schemes are well known, we only have limited knowledge about their attitudes to the concepts of knowledge- and skills-based pay and professional certification. Pilot programs on performance pay in a few jurisdictions, with accompanying research projects would test the acceptability and feasibility of these approaches in the Australian context.

These research projects should be designed in such a way as to greatly increase the numbers of teachers and other stakeholders who have direct experience with standards-based methods for assessing teacher performance. We suggest that a national pilot project on standards, performance assessment and certification in two or three well-defined specialist teaching fields, such as primary teaching, and secondary mathematics and science teaching, be initiated with these purposes:

- To conduct research and development work on standards-based methods for assessing teacher performance.
- To trial these assessment methods with teacher volunteers to test their feasibility and reliability.
- To evaluate the acceptability and credibility of these methods with stakeholders.
- To examine the effects of the assessment process on teachers' professional learning.

Projects such as these will need sufficient consideration before it will be possible to go to scale. It is vital to avoid the mistakes made by so many performance pay schemes in the past where there was little understanding about the importance of getting the performance assessment system to acceptable levels of reliability.

At later stages, if such a project moved from a pilot stage to wider implementation, there would be a need for further research on the consequences of awarding recognition in salary terms to teachers who met designated standards or levels of performance. Interest might focus, for example, on the level of teacher engagement in more effective modes of professional development, on the staff relationships in schools and on effective ways of organising schools to capitalise on the leadership that such teachers might provide.

School or team-based performance awards

The prospects for performance-based awards for teams of teachers look promising, although the research so far is limited. After reviewing several examples, Odden and Kelley (2002) claim that the evidence indicates that school-based performance award programs do improve student performance. However, there are cautions. Improvement is greatest in areas of the curriculum measured by the assessment instruments, so measures need to be monitored to ensure they are valid representations of what is valued in the curriculum. In addition, teachers need to believe the goals are achievable with given resources and that the system will be administered fairly.

There is probably greater justification for using student outcomes, as measured on state wide standardised tests of student achievement, for team-based than individual performance bonuses. Other measures of performance related to student welfare, engagement and satisfaction are also more appropriate to team-based awards.

Several jurisdictions in Australia have programs designed to strengthen professional community, but to our knowledge no team-based or school-based performance pay schemes have been developed as yet. Developing and implementing such a scheme would be a major enterprise. This is also an area where a collaborative pilot scheme might be initiated so that research could be conducted on the feasibility and viability of group-based performance award schemes.

SECTION A: BACKGROUND

There is a long history surrounding the performance pay issue in Australia. Perhaps the first example of a performance-related pay scheme for teachers in Australia was the "payment-by results" system in the nineteenth century, conducted by visiting school inspectors (Selleck, 1982). One of the most recent was the "Advanced Skills Teacher" (AST) concept that emerged from the Award Restructuring reforms of the late 1980s. Examples of the AST concept continue in the Level 3 Classroom Teacher Classroom Teacher Classification in Western Australia (WA), the AST1 and AST2 positions in South Australia (SA) and the Teachers of Exemplary Practice program in the Northern Territory (NT).

England introduced a payment by results scheme for primary school teachers in 1862, which lasted until 1895. In 1862, the then newly established Victorian Board of Education submitted a set of rules and regulations grafting payment by results on to the Common Schools Act in Victoria's parliament, an Act that had implicitly rejected that innovation. Whereas the Common Schools Act envisaged a classified teaching service, with rewards based on qualifications, payment by results made pupil test results the basis of remuneration. It took more than forty years to remove this system, whose detrimental effects on the breadth of the curriculum and the quality of teaching were widely understood and universally condemned (Selleck, 1982; Pawsey, 1994). Since then, incremental pay scales for teachers have been based mainly on years of experience, rather than the quality of a teacher's classroom performance. However, visitations from school inspectors (or superintendents), continued to play a significant role in evaluating teachers and determining their career progression well into the 1980s (Connell, 1989; Holloway, 2000).

These experiences have left a legacy deep in the collective memory of teachers. Teachers want to be assured that proposals to differentiate pay on the basis of classroom performance will be feasible and valid, and supportive of productive working relationships with colleagues. Many teachers are quick to equate any proposal that involves gathering evidence about teaching with an attempt to reintroduce 'inspection' and justify rejecting it on that basis, even proposals for peer observation. The teaching profession has been slow, compared with other professions, in developing its own systems for evaluating professional performance. As a result, 'promotion' in career terms has usually been seen in terms of extra pay for extra responsibilities or extra work, rather than extra pay for better teaching. The former practice creates less controversy, but leaves quality teaching undervalued.

The Advanced Skills Teacher

The Advanced Skills Teacher (AST) reforms of the early 1990s in all school systems were arguably the most serious and pervasive attempt Australia has seen to introduce performance-related career paths for teachers. These reforms aimed to reward evidence of professional development and keep

the best teachers in the profession and close to students. Remnants of the AST reforms remain in some awards and agreements, such as the Level 3 Classroom Teacher classification in WA, the Teacher of Exemplary Practice position in the NT and the Advanced Skills Teacher classification in SA. These relative successes are discussed in more detail later in this report.

The fate of the AST reform provides valuable lessons for future attempts to link pay systems to performance. Conceptually the AST reform was sound, but its implementation flawed (Ingvarson & Chadbourne, 1996). The reasons need to be understood if the same mistakes are not to be made again. One of the main reasons was that the time and effort required to develop credible standards and methods of assessing teacher performance was considerably underestimated. Also, the assessment of performance was usually left to untrained school-based panels. The resulting inconsistency in assessments across schools and systems helped to undermine the credibility the AST process as a means of identifying highly accomplished teachers. Lack of confidence in the reliability of the assessment process meant that the AST Level 1 step became automatic in most states and was absorbed into the incremental scale. It was hard to convince teachers, who knew that their salaries had declined over the long term relative to comparable occupations that they needed go through the motions of performance assessment to justify a pay rise.

An unintended consequence of several AST schemes was the negative effect they had on the very thing they were trying to foster and reward – quality teaching. Some schemes removed supposedly better teachers from the classroom because AST positions became tied to other duties. What was supposed to be a pay for performance scheme transformed into a traditional pay for extra work scheme. The attachment of jobs to the positions was perhaps the major factor in the 1990's AST failure to retain exemplary teachers in the classroom, particularly with the higher-level AST positions. In the words of one union leader, 'The death of the AST was the attaching of jobs to it – that killed the whole concept of the developmental model of it'. As one AST teacher tellingly reported during an interview for a research study in 1995, "Look, I don't have time to teach well anymore" (Ingvarson & Chadbourne, 1997, p.15). Schools also found it difficult to incorporate the idea of better pay for better teaching into their organisational structures and make effective use of advanced skill teachers as leaders of teachers working together to improve student learning outcomes.

Types of performance based pay schemes

There is no simple typology of performance pay schemes as applied to individual teachers, but common categories that appear in the literature include:

1) Merit pay,

- 2) Knowledge and skills-based pay, and
- 3) Professional certification.

The main features of each of these schemes will be described briefly here, but it is important to keep in mind that there may be as much variation within schemes as there is between them. Examples of each scheme are provided in Section D. It is also important to keep in mind that the brief for this report focused on performance pay schemes for individual teachers rather than groups of teachers. There have been significant developments in group-based performance pay schemes in which bonuses are provided to all school staff or staff teams in schools that meet pre-set performance improvement targets, but these will only be described briefly in Section D.

Merit pay

Merit pay is a pay system in which workers' pay is based on their performance. Merit pay schemes in the USA were usually developed within particular schools or employing authorities, and operated by school administrators. Merit pay schemes for teachers have a long history in the USA, using a range of methods, akin in some respects to methods used by inspectors and superintendents in Australia in the past. When applied to teaching merit pay schemes usually took the form of one-off special or annual payments to a quota of teachers, based on idiosyncratic methods of evaluation used by school administrators. Typically, schemes in the USA evaluated teachers against one another for a fixed pool of funds, usually delivered in the form of bonus payments. They were rarely standards- or criterion-based. The methods of gathering evidence were usually of doubtful reliability, such as a few classroom observations or one-off tests of student achievement.

Classroom observation has been the main method for assessing performance in merit pay schemes in the past, using a variety of observational checklists of dubious validity (Scriven, 1994: Stodolsky, 1990). More recently, merit pay schemes have sought to use measures of student achievement. In 2001, under its No Child Left Behind Act, the new Federal Government in the USA mandated that states use "test-based accountability" systems. Complying with this act has posed major difficulties for states, and the main approach used, called the "cohort-to-cohort gain" approach, has been widely criticised (McCaffrey et al., 2006). In this approach, the performance of one cohort of students in a given grade is compared with previous cohorts in the same grade; individual students are not tracked over time, unlike value-added schemes.

Knowledge and skills-based pay schemes

The idea behind knowledge and skills-based pay is similar to that of the AST reforms in Australia, though far more challenging of the assumptions that underpin the traditional incremental pay scale.

Pay increases are based on demonstrated improvements in the knowledge, skills and expertise needed to provide quality opportunities for student learning. Unlike the earlier merit pay schemes, knowledge and skills-based pay schemes are based on criterion- or standards-based approaches to the assessment of teacher performance. According to Odden and Kelley (2002, p.94):

Knowledge- and skills-based pay is useful in organisations such as schools, for which the knowledge, skills and professional expertise needed are sufficiently complex that it takes years of training and experience for their full development.

Knowledge and skills-based pay schemes aim to ensure that the salary scale is a much stronger instrument for improving student outcomes than the traditional incremental scale. These schemes aim to provide stronger incentives for professional development and evidence of attaining high standards of performance. They also aim to give more status than traditional career ladders to those front-line teachers whose knowledge and skills are critical to the achievement of student learning outcomes. Proponents claim these schemes reinforce the development of a workplace culture that values employee growth and development (Lawler, 2000)

The concept of "knowledge and skills-based pay" has been strongly influenced by a number of organisational theorists, such as Lawler (1981; 1990), who have studied the relationship between pay systems and organisational effectiveness. According to these theorists, effective organisations have been shifting from steeply hierarchical organisational (job ladder) structures to flatter, more egalitarian structures. Rather than linking pay to specific job descriptions, new approaches were linking pay increments to the acquisition of knowledge and skills that the organisation needed to meet its objectives. Pay for the job or position was shifting to "pay for the person" (Odden & Kelley, 2002, p.57). These more flexible pay structures aimed to support the needs of organisations where teams are conducting work and where each individual performs many jobs over the course of a day, a week or a year. Knowledge and skills-based pay systems aim to support the collaborative way in which effective professional organisations work and the need in schools for teachers who can take up wider roles and responsibilities.

Methods for developing teaching standards and assessing teacher performance have improved greatly over the past fifteen years or so. This has greatly facilitated the development of knowledge and skills-based approaches to teachers' pay. A set of teaching standards aims to cover the full scope of what effective teachers know and do, including knowledge of content and students, ability to manage and monitor student learning as well as contribute to the wider school and professional community. This means that a number of different approaches to gathering evidence of performance need to be brought together in evaluating teachers if all the standards are to be covered, unlike merit pay schemes. These

new approaches may still include interviews and classroom observation and student evaluations, but they may also include portfolio entries containing videotape evidence and evidence of improved student knowledge and skills over time.

One of the main differences between the new forms of standards-based assessments of teacher performance and the previous merit pay schemes is that the former invite teachers to provide the evidence that their teaching has met the standards. The old schemes tended to be based on someone like an inspector or principal visiting the classroom to collect the evidence, or student test scores. They placed the teacher in a passive role. In addition, test scores in themselves did not provide very useful feedback for a teacher about how they should teach differently to improve student outcomes. Because these new standards-based schemes gather a wider range of independent pieces of evidence about a teachers' knowledge and skill they are more likely to provide teachers with valid and useful assessments of performance.

Knowledge and skills-based pay schemes usually distinguish several levels of teacher performance; for example, from novice to expert, as defined for example, by the widely used *Framework of Teaching* developed by Danielson (1996). These levels might reflect standards expected of teachers who gain full registration and entry to the profession and two or three further levels reflecting increasing proficiency and widening responsibilities, such as those described in standards developed by the NSW Institute of Teaching. Odden and Kelley (2002) provide several models of knowledge and skills-based salary schedules, the most radical and fully-fledged of which completely replace incremental salary scales based on years of experience or academic courses credits with levels of performance based on professional standards.

Certification-based pay schemes

Merit pay schemes and most knowledge and skills-based pay schemes are developed by particular education employing authorities and implemented by school administrators. The teaching standards and methods of assessment used in knowledge and skills-based pay schemes are usually developed by employing authorities or consultants hired by those authorities, not teachers' own professional associations.

Unlike teaching, most established professions have developed their own performance standards and a system for giving some form of "certification" to members who can demonstrate that they have attained those standards. The "Certified Practicing Accountant" (CPA) and "Chartered Engineer" are two familiar examples of professional certification. Professional certification is portable from employer to employer, as employers have come to recognise it as a credible indicator that a certain

level of professional knowledge and skills has been attained. While initial certification (or registration) may be compulsory, more advanced levels of professional certification are usually voluntary.

Professional certification is, in principle, similar to a knowledge- and skills-based pay system, except that the assessment of performance is conducted by an independent professional body. Perhaps the most well-known example of a professional certification system for teachers is that developed by the National Board for Professional Teaching Standards in the USA. Teachers and their associations play a central role in the development and operation of at every stage of the NBPTS's certification procedures, from developing standards, to assessing the evidence of performance.

These three approaches to performance pay system are described in more detail in Section D.

Teacher policy and performance pay: recent developments

Although the AST in its 1990's incarnation came to be viewed generally as a disappointment and a lost opportunity, the concept persists. The OECD Report, *Teachers Matter: Attracting, Developing and Retaining Effective Teachers* (OECD, 2005) documents major trends related to teacher quality. The report indicates a general concern about the declining capacity of teaching to provide career paths and opportunities that attract and retain its share of the ablest graduates. Relative salaries for teachers have steadily declined over the past ten years. Most OECD countries report problems with teacher retention. The Australian report prepared for this OECD project (Skilbeck & Connell, 2003) documents a similar situation for Australia.

The typical salary scale for teachers in Australia is a weak instrument for providing incentives for professional development and rewarding evidence of attaining high standards of performance. The 2006 edition of the OECD's report, *Education at a Glance*, indicates that whereas the average ratio of the salary at the top of the incremental scale is 1.70, it is only 1.47 in Australia. Thirteen out of 32 OECD countries report that they adjust the base salary of teachers based on outstanding performance in teaching, or successful completion of professional development activities. Australia is not one of them.

While progression to the top of the ladder is rapid in Australia – it takes only 9 years for most Australian teachers to reach the top of the scale compared with 24 years on the average in OECD countries – the implicit message in the salary scale is that teachers are not expected to improve their performance after nine years. The salary scale provides few incentives for continued development of expertise in teaching. The relationship between professional development and career progression is weak in teaching. A recent synthesis of research on attitudes to teaching as a career indicated that

many able were not choosing teaching because it was perceived as a low status job (DEST, 2006). A recent national survey of public opinion in New Zealand revealed that, although teachers were highly regarded, teaching was seen as un unattractive career "because the pay is not commensurate with the effort (and) because outstanding performance is not rewarded" (Hall and Langdon, 2006, p.8).

This problem has been understood for many years. There have been many reports over the past thirty years advocating the development of standards for accomplished and highly accomplished teaching and their use in reforming teacher career structures. Examples include: the Karmel Report in the early 1970s; the NBEET reports on teacher quality and award restructuring in the late 1980s; *A Class Act*, the report of the Senate Inquiry into the Status of Teaching (1998); the Report of the Review of Teacher Education (Ramsey, 2000); the *National Statement from the Teaching Profession on Teacher Standards, Quality and Professionalism* (2003); and the report *The Status and Quality of Teaching and Learning of Science in Australian Schools* (Goodrum, Hackling & Rennie, 2000).

Several of these reports have advocated the development of a national system for giving certification to teachers whose performance has reached standards for highly accomplished teaching. The profession has been active in developing standards for this purpose over recent years. This work is documented in Ingvarson and Kleinhenz (2006). For example, after extensive national consultation, the recent Review of Teaching and Teacher Education (DEST 2003) announced an 'agenda for action' in its report, *Australia's Teachers: Australia's Future*. One of its central themes was a call to 'revitalise the teaching profession'. The report recommended that:

- National standards for different career stages should continue to be developed by the profession.
- A national, credible, transparent and consistent approach to assessing teaching standards (should) be developed by the teaching profession with support from government.
- Teacher career progression and salary advancement (should) reflect objectively assessed performance as a teaching professional.
- Recognition, including remuneration, for accomplished teachers who perform at advanced professional standards and work levels (should) be increased significantly.

Consistent with the research on performance pay schemes for teachers, this report indicates the importance of embedding such schemes within a broader set of policies for attracting, developing and retaining effective teachers, and creating conditions in schools that enable teachers to teach as well as they can. Performance pay schemes are more likely to have a positive impact on student learning

outcomes when integrated within a broader policy framework for supporting quality teaching over the long term than when introduced in isolation (Wilson et al., 2000).

Darling-Hammond found that states in the USA where student achievement had improved had invested more in teacher salaries, established professional standards bodies, created better career paths for teachers, invested more resources in professional development, and provided incentives for advanced certification from bodies like the National Board for Professional Teaching Standards. Gaining a full license to teach was delayed in these states until successful completion of standards-based performance assessments during the first few years of teaching (Darling-Hammond, 2000). Improving performance in teaching is not so much a matter of incentives that make teachers work harder as increasing profession-wide capacity to provide quality opportunities for students to learn (Cohen & Hill, 2000).

An example of a performance pay scheme that is embedded in a wider reform program is the Teacher Advancement Program (TAP) introduced by the Milken Family Foundation in 1999 and supported by the US Department of Education and eight states and school districts. The program includes four main elements:

- "Multiple career paths give qualified teachers opportunities to take on more responsibility as mentors and teacher leaders and get compensated for doing so.
- Ongoing applied professional growth provides teachers with school-based professional development during the school day.
- Instructionally focused accountability ties teacher evaluations to teaching skills and student achievement. Evaluations are fair because criteria are clearly defined, and they are conducted four to six times during the year by multiple evaluators whom TAP trains and certifies.
- Performance-based compensation provides bonuses to teachers who demonstrate their skills
 through classroom evaluations and who increase their students' academic growth over the
 course of the year.

TAP's professional development is designed to support teachers in achieving these goals. The Program provides additional compensation to teachers according to their roles and responsibilities, their performance in the classroom, and the performance of their students. TAP currently involves about 4000 teachers. A recent in-house research report claims that teachers in the TAP Program are producing "higher student achievement growth than similar teachers not in TAP schools" (Solmon, White, Cohen & Woo, 2007).

Performance based pay schemes for teachers have been relatively rare in Australia, compared with the USA. Research there indicates that performance pay schemes have emerged periodically over the past one hundred years (Popham, 1997), usually during periods of economic downturn, and subsequent scapegoating of the education system (Protsik, 1996). There can be a strange tendency at times to blame the profession itself for its limited ability to offer salaries and working conditions that attract the ablest graduates and to offer high quality preparation and continuing professional learning, when these are factors largely beyond the control of teachers.

This brief background on performance pay and the following report indicate that there is an increasing desire, shared among all stakeholders, to develop policies that are more effective for keeping excellent teachers working in classrooms and providing professional leadership to colleagues. Evidence gathered for this report indicates that there is increasing recognition, nationally and internationally, that pay systems can be, and need to be, stronger levers for ensuring quality learning outcomes for all students.

The Australian Education Union (AEU) and the Independent Education Union of Australia (IEUA) strongly support the development of professional standards for teachers and the close involvement of the profession in the development of these standards. A recent AEU professional standards paper notes:

The AEU strongly supports the development of appropriate professional standards for all involved in teaching....Their development provides an opportunity for professional recognition and public support, and will enhance the status of the profession.....

Where there exists a clear level of professional support, understanding and consensus for any proposal to enhance professional teaching standards, teacher unions will endorse those initiatives in the appropriate professional and industrial forums (AEU Teaching Standards Kit).

In addition, a recent AEU (ACT branch) paper invites members to revisit the AST concept and discuss the need for a system that rewards teaching excellence:

Despite the short-lived existence of the Master Teacher and AST classifications in most systems, teachers and their unions have long held a belief that there needs to be a system that recognises and rewards excellence in classroom practice. . . . This debate has shied away in the past from expressing itself as part of a discussion of performance pay issues but that agenda is not one that can be sidestepped any longer. There are pressures from

among teachers themselves to develop systems that recognise and reward those who demonstrate excellence in their practice . . . (ACT AEU, 2005)

Summary

This section has provided a brief background to performance pay. Data gathered for this report indicates that there is an increasing desire among stakeholders in Australia to develop policies for "revitalising' the teaching profession (DEST, 2003). This includes pay systems that are more effective in giving incentives for highly accomplished teaching, for keeping excellent teachers working in classrooms and for providing professional leadership to colleagues. There is increasing recognition, nationally and internationally, that career paths and pay systems can be, and need to be, linked to evidence of increasing capacity to promote valued student learning outcomes and, thereby, stronger levers for ensuring professional development and quality learning outcomes for all students (Sclafani & Tucker, 2006; OECD, 2005).

Representatives of eight countries, including Australia, recently attended an international seminar on Teaching Policy to Improve Student Learning convened by the Aspen Institute. Australia stood out as a country where teachers' careers plateau very quickly and at a relatively modest salary. A report summarising the conference proceedings (Olson, 2007) concluded:

Each of the nations participating was seeking ways to recognise expert teachers, reward them for their abilities, and take advantage of their skills. Creating a stronger connection between individual teacher contributions and what they are paid lies at the heart of redesigning teaching for the next generation. (p. 5)

SECTION B: CURRENT PAY ARRANGEMENTS AND PROVISIONS FOR TEACHERS ACROSS AUSTRALIA

This section of the report provides an overview of current pay arrangements for teachers in Australian schools, according to jurisdiction and sector. Its purpose is to identify the extent to which teachers' pay is currently based on the quality of their professional performance within these Awards or Agreements.

Data about current enterprise bargain agreements was collected mainly from relevant websites and other material in the public domain. Further information, particularly with regard to some of the practical applications of the agreements, was collected from interviews with industrial officers from the major government and independent school unions. This was particularly helpful in gaining an Australian overview and in developing the tables provided in this report. Other officers of government departments and representative groups such as the Independent Schools Council of Australia (ISCA) also provided valuable advice and assistance.

Almost all teachers in Australia work within industrial Awards and Collective Agreements negotiated between unions and employers. Awards apply to all workers in the particular field and define basic conditions and terms of employment for a group of workers no matter where they are employed. Awards can be Federal or State. Agreements are made between an employer and a specified group of employees. They define negotiated changes to work arrangements that apply to all employees in the specified group; for example, all teachers employed by a particular state government. Awards operate as a kind of "safety net" for workers in that the same or better salaries and/or conditions than those in a 'parent' Award may be provided for within particular Agreements. If there is a difference between the relevant Award and Agreement, the Agreement prevails. Agreements differ from jurisdiction to jurisdiction, from sector to sector and sometimes from school to school.

Awards and Agreements in the government sectors

All government schools in Australia currently operate under an Award and/or a Collective Agreement. These arrangements are common to all government schoolteachers in each state and territory. Table 1 summarises the types of awards and agreements that currently apply for each state and territory.

Three jurisdictions operate under a Federal Award and five under a State Award. Government schools in Victoria, Australian Capital Territory and Northern Territory fall within Federal 'parent' Awards and State Agreements. Teachers in all other states work under State Awards and/or collective Agreements. South Australia and Tasmania have recently returned from Federal to State Awards.

Whether a state is working under a Federal or State Award is now more significant than previously, as schools under Federal Awards can operate under Australian Workplace Agreements and, in theory, pay differentiated salaries to teachers based on performance.

Table 1: Negotiated Awards and Agreements in Australian government schools

State/territory	Industrial relations framework
Australian Capital Territory	Federal award and collective agreement
Northern Territory	Federal award and collective agreement
New South Wales	State Award
Queensland	State award and collective agreement
South Australia	State award and collective agreement (recently moved to state award)
Tasmania	State award and collective agreement (recently moved to state award)
Victoria	Federal award and collective agreement
Western Australia	State award and collective agreement

Source:

ACER, 2007

Current Awards and Agreements in each state and territory

The relevant sections of the eight state and territory government school Agreements are described in detail in Appendix 2. These Agreements cover the majority of teachers in Australia. The content of the Awards is often mirrored in the systemic Agreements. While education authorities have many policy documents related to various items in the Agreements, there is variation in the extent to which performance appraisal and management is outlined or described in the Agreements themselves.

While there are variations in the different Agreements, all Agreements cover and are binding on government school teachers in the particular state. This may be variously specified as persons employed under a particular Act, or as persons who are members of, or eligible to be members of, the AEU. The parties to the Agreements are the state (specified in various ways) and usually the state branch of the AEU.

Awards and Agreements in the non-government sectors

Non-government schools are broadly of two types: those that belong to a sector, such as the Catholic schools sector; and those that are independent, corporate entities. The latter range in type from the traditional independent schools, such as Melbourne Grammar School or the King's School in Sydney, to small local 'Community' schools. The independent schools category includes a number of non-systemic Catholic schools (about 80) and about 1100 other schools across Australia.

Many independent schools operate within the 'safety net' of a relevant Award, but may in practice pay higher than Award salaries and operate under system or school specific agreements. To our knowledge, only one school in Australia is currently operating under an Australian Workplace Agreement. A spokesperson for ISCA, estimated that there would be about 500 payment models across Australian non-systemic independent schools. "Virtually all of the 1100 schools would pay award wages and would follow State Awards. Very few would pay less, with agreement of staff. Some would pay more; the big difference between the Award salary and actual salary would be at the principal level, with some principals being paid way above the Award. These salaries are not usually in the public domain."

Current industrial frameworks in the non-government Awards tend to mirror those of the government sector. The ACT, the NT and Victoria have federal Awards and the other five jurisdictions have State Awards. This situation is, however, currently in a state of flux. For a number of schools it is unclear whether the school is in fact constituted as a trading corporation under the terms of new industrial legislation. In Queensland, for instance, Catholic education employing authorities have removed the system from federal legislation restrictions through a Memorandum of Understanding. A Deed of Settlement would then follow that would include conditions and rights under state industrial laws for the Queensland Independent Education Union (QIEU) members.

Typical salary scales under current awards and agreements

In common with most OECD countries, the majority of Australian teachers begin their careers on an incremental scale whereby they move one step each year to a higher salary level. Table 2 summarises the incremental pay arrangements for government school teachers in each state and territory as at 30 June 2006. The entry point for qualified beginning teachers is indicated in bold print.

Table 2 also shows that that all systems have promotion positions beyond the top of the incremental scale. These are positions with responsibilities beyond classroom teaching that usually include both extra pay and a reduced teaching allocation. These positions will be discussed later in this section of the report. (Most schools also provide allowances of various sizes for specific jobs beyond classroom teaching, but these are not included in Table 2.)

The incremental salary scale

The incremental scales in Table 2 typically range from eight to thirteen steps, sometimes arranged in groups or bands. Some scales include early steps for teachers who have yet to complete their qualifications or gain registration, such as emergency teachers. Teachers who have graduated from

accredited teacher education courses usually enter a few steps up the scale. Incremental salary scales for teachers in systemic Catholic and independent schools operating under specific Awards or Agreements are similar to those in Table 2 and are summarised in Appendix 2.

Table 2 does not tell the full story about the pay received by most Australian teachers. The teaching service in government schools across Australia is a 'veteran' service. The average age of Australian teachers is over 45. In New South Wales, for instance, few teachers are below Step 11 on the incremental scale. Thirty thousand teachers are on Step 13. According to an AEU source, the pay system is 'absolutely top heavy'. Because the number of promotion positions in each school is strictly limited, many highly experienced quality teachers are unable to access higher salary levels.

Typical features of teacher pay scales in Australia

Table 2 indicates that the salary scales for teachers in Australia are relatively "flat". Salaries at the top of the salary scale are usually no more that 1.4 to 1.5 times the starting salary. This ratio is relatively low compared with several OECD countries where the steps on the incremental scale can rise to salaries more than twice the starting salary (OECD, 2006). If this condition applied in Australia, most teachers would be on salaries between \$80–90,000. Teachers in Australia now reach the top of the scale relatively quickly – often by 30 years-of-age – and survey a situation where advancement depends mainly on competing for a limited number of positions or jobs, not an evaluation of the quality of their professional performance.

Most Government school systems now have a form of performance pay associated with the incremental scale in that annual salary increments for teachers are subject to satisfactory annual reviews by school administrators. These increments are rarely withheld, and the need to withhold them would probably also be rare. Most annual review procedures are based on interviews and do not involve systematic procedures for gathering evidence about classroom performance. Few studies have been conducted on the reliability and rigour of processes used in annual reviews. Because of the shaky foundation of many teacher evaluation procedures, it can be difficult for school principals to withhold annual increments. The NSW Auditor General conducted a critical review of the Education Department's performance management in 2003 (NSW Auditor-General, 2003).

It is important to clarify the implicit messages in the typical incremental salary scale for teachers. It is also important to keep in mind the long industrial history that has lead to this common salary denominator - for male and female teachers, for primary and secondary teachers – as a means of minimising disputation.

Table 2: Classroom teacher salary rates in A\$ (courtesy of the AEU - table adapted for this report)

(Note) The ACT has not negotiated a new Agreement and teachers are currently working under the Agreement that expired in March 2006. The figures in the ACT section of Table 2 are from the expired Agreement.

NORTHERN TERRITORY	VICTORIA	QUEENSLAND	SOUTH AUSTRALIA
30/1/06		1/5/2006	From 1/4/06
	1/1/06 1/10/06	4.0 per cent	
T1 37,652	Graduate Classroom Teacher	Band 1	Special Authority
T2 41,647	G-1 44,783	1 39.943	40,173
T3 44,539	G-2 46,060	2 41,078	,
T4 47,656	G-3 47,372	3 42,455	BAND 1 TEACHER
T5 50,992	G-4 48,722	4 43,916	1 46,077
T6 54,561	Accomplished Classroom Teacher	Band 2	2 48,454
T7 58,382	A-1 51,539	1 45,145	3 50,831
T8 62,468	A-2 53,008	2 47.647	4 53,206
T9 66,839	A-3 54,519	3 50,141	5 55,587
	A-4 56,072	4 52,643	6 57,964
Teachers of Exemplary Practice (TEP)	A-5 57,671		7 60,340
reactives of Exemplary Tractice (TET)	l		8 62,709
Allowances:	Expert Classroom Teacher	Band 3	02,707
1110 wantes.	E-1 59,458	1 57,243	AST 1/KEY TEACHER
TEP $1 = 7.5$ per cent of salary to max of	E-2 61,302	2 59,345	65,477
96 per cent of ET2	E-3 63,202 3/4/5YT max	3 61,432	AST 2
70 per cent of E12	E-3a 64,531	4 63,645	68,542
TEP $2 = 12.5$ per cent of salary to max	Leading Teacher	Senior Teacher (4 Year Trained)	08,342
of ET2	LT1-1 66,371	66,562	
01 E12	LT1-2 68,262		
TEP $3 = 20$ per cent of salary to max of	LT1-3 70,208		
ET4	LT2-1 72,209		
E14	LT2-2 74,266		
	LT2-3 76,383		
TASMANIA			
	AUSTRALIAN CAPITAL TERRITORY	WESTERN AUSTRALIA	NEW SOUTH WALES
From: 9/3/06	From: 1/7/05	WESTERN AUSTRALIA From: August 2006	NEW SOUTH WALES From: 1/1/06
From: 9/3/06	From: 1/7/05		From: 1/1/06
From: 9/3/06 1 40,860	From: 1/7/05 1.1 43,073 3YT min	From: August 2006 Level 1 1 34,704	From: 1/1/06 Step 1 36,936
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min	From: August 2006 Level 1	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min	From: August 2006 Level 1 1 34,704	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222	From: August 2006 Level 1 1 34,704 2 36,507	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551	From: August 2006 Level 1 1 34,704 2 36,507 3 38,614	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460	From: August 2006 Level 1 1 34,704 2 36,507 3 38,614 4 40,278	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282	From: August 2006 Level 1 1	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282	From: August 2006 Level 1 1	From: 1/1/06 Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341 Step 12 64,798
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341 Step 12 64,798
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341 Step 12 64,798
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341 Step 12 64,798
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341 Step 12 64,798
From: 9/3/06 1	From: 1/7/05 1.1 43,073 3YT min 1.2 46,565 4YT min 1.3 48,894 5YT min 1.4 51,222 1.5 53,551 1.6 56,460 1.7 59,370 1.8 62,282 1.9 66,353 3/4/5YT max	From: August 2006 Level 1 1	Step 1 36,936 Step 2 (2YT) 40,259 Step 3 (3YT) 42,943 Step 4 45,167 Step 5 (4YT) 47,621 Step 6 (5YT) 50,072 Step 7 52,527 Step 8 54,983 Step 9 57,435 Step 10 59,888 Step 11 62,341 Step 12 64,798

Source: AEU in ACER, 2007

One of the assumptions implicit in these scales is that teachers improve in what they know and can do over a number of years – in other words, that teachers become more effective as they become more experienced. Therefore, they are worth more. However, the scale also implies that they reach their peak of effectiveness after 8 –10 years or so. After that, the message implicit in the salary scale is that they are not expected to get any better. In fact, few teachers will say they learned everything they need to know to be an effective teacher by that early stage in their career.

For teachers at the top of the incremental scale, which is the majority, annual performance reviews are of, course, no longer linked to salary. There is no direct relationship between the level of pay and the quality of classroom teaching performance for most teachers. Performance pay in this sense is not a reality for most teachers in Australian government schools. The salary scale on offer says, in effect, there are no material incentives just for more effective teaching.

A long-standing feature of pay scales for teachers in Australia is their lack of recognition for teachers who gain higher or further academic qualifications. Table 3 shows a typical salary schedule for teachers in the USA includes increments for academic credits and higher degrees (Odden & Kelley, 2003). Table 3 indicates that a Classroom Teacher may reach a salary that is 120 per cent above the beginning salary in this schedule by step 13 and after completing academic courses. The typical salary scale for Australian teachers is only 42 per cent more than the starting salary. It provides them with relatively few incentives to deepen or update their core professional knowledge through further academic study, though this knowledge may be important to their effectiveness. It tells them neither what they should get better at, nor rewards them for doing so.

Table 3: Typical Teacher Single-Salary Schedule in the USA 1999 – 2000

Step	Bachelor's	BA + 15	Masters	MA + 15	PhD
1	29,885	30,421	32,884	34,662	37,661
2	31.973	32,326	34,770	36,548	39,547
۲,	44		دد	"	"
13	54,606	55,142	59,212	60,990	63,989
14	56,229	56,755	60,834	62,613	65,611

Source: Odden & Kelley in ACER, 2007

Like Australia's incremental scales, there is a lot of history behind the structure of the USA "Single salary scale". It provides an objective basis for paying teachers different amounts – for years of experience and for extra study. Although this type of schedule is firmly locked in place in most USA school districts, it is important to mention that many USA commentators express strong reservations about its effectiveness as an instrument for improving student learning outcomes. The courses that teachers study are often unrelated to their current field of teaching. Hanushek (1994) found limited evidence that graduate coursework was related to teacher quality or classroom performance. Murnane (1983) found that teachers with bachelor's degrees were just as effective as those with master's degrees.

The main problem with the typical USA salary schedule is that it locks so much money up into an inefficient method for promoting professional development and higher standards of teaching (Little et al., 1987). Advanced coursework and degrees are unreliable indicators of improved performance. Commentators such as Odden and Kelley (2003) point out that the money could be used much more effectively as a mechanism to improve student learning outcomes by developing standards for accomplished teaching performance and rewarding teachers who can demonstrate they have reached those standards in their everyday practice.

Teachers' starting salaries stand up well in relation to those in several other professions. However, when teachers' salaries after ten to fifteen years are compared with those who chose other professions, major disparities become strikingly evident. Whereas members of other professions reach a stage, such as a Certified Practicing Accountant (CPA) in accountancy, or some such equivalent, where they "kick on" in terms of the professional recognition and the value placed on their knowledge and skill, teachers' salaries plateau. The salary scale sends a clear message that remaining in teaching, developing teaching skills and teaching well is not the way to gain high status in a school's organisational hierarchy.

In this respect, it is worth comparing teachers' salary scales in different countries. Figure 1 is derived from the 2002 OECD report, *Education at a Glance*. It compares salary structures in Korea and Japan, countries whose students performed significantly better in the IEA TIMSS studies of student achievement in mathematics and science than Australia, the USA and England. Noteworthy is the relatively strong plateauing of teachers' salaries in Australia and England compared with Korea and Japan (teachers' salaries in England have improved significantly since the data for this OECD report was

gathered). Also noteworthy, but not shown in Figure 1, are the strong quality assurance filters that apply in Korea and Japan regarding entry to teacher education programs, qualifications, entry to the profession and promotion at key points along the incremental salary scale.

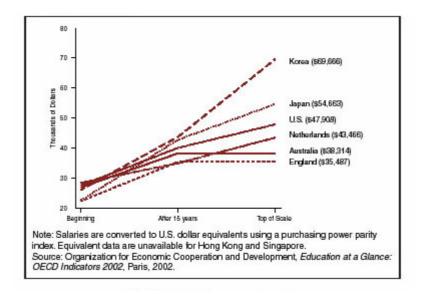


Figure 1: Annual Salaries for Lower Secondary Education Teachers in USA Dollars, 2000

Progression through the incremental scales in Australian government schools

Table 4 summarises the current arrangements for teachers to move through the incremental scales in each state or territory government school sector. (In reading these scales, note that in some states former AST classifications have been absorbed into the incremental scale.) As mentioned above, progression through the incremental scales, in most states, is subject to processes of annual performance review/appraisal in schools.

The typical requirement to gain an increment is satisfactory completion of an annual performance review with a 'supervisor', such as a head of department or principal. These reviews may be based on independently gathered data about teacher performance, such as student evaluations, observations of classrooms or student performance. Typically they are not. State and territory departments of education have produced comprehensive documents that set out how performance management processes should be conducted in schools. According to recommended procedures, performance appraisal/management is to be conducted by the principal or nominee. Increasingly, school systems are using teaching standards as a framework for annual performance management reviews.

Table 4: Progression through the incremental scale for teachers in Australian state and territory government schools

	What are the requirements to move up a step?	What evidence of satisfactory performance is required?	Can an increment be withheld?	Can a teacher 'jump' steps in the incremental scale?
Australian Capital Territory	Satisfactory performance in bi-annual review.	Twice yearly satisfactory appraisal through Participation in <i>Professional Pathways Plan, 3</i> categories in scale.	Yes	Yes, one step if extra approved qualification completed, also recognition of prior experience.
Northern Territory	Increment can only be withheld as an outcome of inability or discipline procedures in accordance with the Act.		Yes	Beginning teachers meeting service requirements and with extra professional learning, one step.
New South Wales	Annual review.	Continuing efficiency – conference, program observation, review of documentation.	Yes	In recognition of prior relevant experience.
Queensland	Satisfactory performance, not as yet a separate appraisal process.	Developmental standards currently being developed.	Yes	No
South Australia	Satisfactory performance.	Ongoing appraisal.	Yes	No
Tasmania	Satisfactory performance.	"objective agreed criteria" at school level, no generic process.	Yes	*Yes
Victoria	Satisfactory performance.	Meeting standards linked appraisal processes for different levels.	Yes	*Yes. Teachers on the incremental scale may also apply for promotion positions above the scale.
Western Australia	Satisfactory performance.	Meeting standards linked appraisal processes.	Yes	*Yes

Source: ACER, 2007

Progression through the incremental scales in non-government schools

Teachers' progression through the incremental scale in non-government systemic (e.g. Catholic) schools and most Independent schools is similar to progression in the government systems. As in government schools, available evidence suggests that it would be rare for a principal to withhold an increment from a teacher, although some independent schools employ teachers under contracts in which there is a "subject to satisfactory performance" provision. In some cases it is possible for a teacher to move through the scale more quickly, but, as in the government systems, this is unusual. As in some government systems, teachers can be promoted from a place within the incremental

^{*}Note that while it is possible in some government systems to accelerate teachers on an incremental scale, there would be budgetary issues and procedural issues, given that government school salaries, budgets and procedures are transparent.

scale to a promotion position beyond the top of the scale (Independent Education Union of Australia [IEUA]).

Almost all Agreements also provide for the denial of an annual increment if a teacher does not have a satisfactory annual appraisal. In order to progress through the incremental scale in both government and non-government sectors, teachers are usually required to demonstrate satisfactory performance based on meeting standards. While an annual increment can be withheld in some cases, thus providing a further type of 'deficit model' for performance pay, in practice increments appear to be rarely withheld.

Provisions in Awards and Agreements for unsatisfactory performance

It is important to note that all Awards and sighted Agreements have guidelines and procedures in place to address unsatisfactory performance. These may include a pathway offering support and guidance to teachers who are performing below the expected level, but will also include formal discipline and/or dismissal procedures in cases where program support has not been successful in bringing a teacher to an acceptable level of competence or in cases of serious misconduct.

Thus, there are usually two possible paths already in place to address unsatisfactory performance; withholding of an increment, or instigating disciplinary/dismissal procedures. These procedures appear to be seldom used, but negotiated frameworks are in place. This is very relevant to the current debate, where some commentators seem to assume that there are no processes in place to manage teachers whose performance may have fallen below competent standards. The fact that these procedures are rarely used could indicate that they rarely need to be and/or that there are problems with implementing them, not that there are legislative impediments to addressing these issues.

Promotion positions for Classroom Teachers beyond the incremental scales

There are three approaches to paying teachers beyond the top of the incremental scale:

- 1) paying for jobs;
- 2) paying for evidence of increased knowledge and skills; and
- 3) bonus pay or merit pay schemes for individual performance.

Some approaches represent combinations of these approaches.

The main career pathway for teachers beyond the top of the incremental scale is through application for jobs or positions with specific responsibilities, such as head of a subject area, or coordinator of curriculum or professional development. As the number of promotion positions of this type is limited, the application process is necessarily highly competitive. The total number of promotion positions in Victorian secondary schools (including principals and deputy principals), for example, is set at about 30 per cent of the total staff. Applications for these positions usually take the form of CVs, and applicants are judged primarily through interview processes in terms of their suitability for the advertised position, rarely through direct evidence of their performance as teachers. It would be unusual for applications to include direct and systematic evidence of teaching performance for interview panels to consider.

The second approach, pay for skills and knowledge, is less common. There have been several attempts to introduce pay schemes that give recognition to teachers who can demonstrate professional development to high teaching standards. In most cases, these were introduced as part of the AST reforms introduced in the early 1990s. Some government school systems have maintained the AST concept to provide career pathways based on increases in a teachers' knowledge and skills. Examples include the Level 3 Classroom Teacher position in WA, the Advanced Skills Teacher in SA and Teacher of Exemplary Practice (TEP) position in the NT. Schools and school systems in NSW are considering the introduction of a career ladder model based on the evidence of increasing knowledge and skills.

These pay schemes might be called "evidence of professional development" based pay schemes. Their defining feature is that they are standards-based. However, in practice, employers often impose quotas on the number of promotion positions in schemes such as the Level 3 Classroom Teacher position in WA, thereby contradicting the concept of standards-based pay on which they are based. Fears of cost blow outs have proved to be unfounded. The teachers who operate the central assessment process have set high performance standards. The quota has yet to be filled.

Individual performance or "merit pay" schemes are rare in government schools. They are not usually part of industrial agreements. The case studies in this report (Appendix 4) indicate that the practice is more common in Independent schools. Merit pay schemes, as defined here, use one-off annual bonus payments to individuals as part of school-based performance management schemes. These schemes, which may reward a wide variety of

types of performance, are usually run at the discretion of the school principal. Schools are increasingly using teaching standards in these schemes.

Promotion positions for teachers in government schools

Table 5 lists the promotion positions available in government schools. The first column lists positions based on application for specific jobs. All systems present opportunities for this kind of career progression, which is usually based only indirectly on evidence of highly accomplished teaching. The second column lists positions based on evidence of attaining high teaching standards – knowledge and skills-based pay. Not all systems have such positions.

It should be noted that there is a very large range of 'allowance' positions in schools, but these may not involve promotion to a different classification. While the Northern Territory TEP is an allowance position, it is one of the few examples of extra payment based on high quality classroom teaching. The allowance is paid as a percentage of salary and is included in superannuation calculations.

For teachers at the top of the salary scales shown in Table 5, there are various conditions for access to promotion positions with higher salary levels, such as the position of Senior Teacher in WA. There is also provision for access to a number of allowances both within and beyond the incremental salary scales. These provisions vary widely within jurisdictions and sectors. Access to salary classification levels beyond the incremental scale is usually tied to particular positions of responsibility, to leadership positions and/or to school administrative or managerial positions.

Promotion beyond the top of the incremental scale usually depends on a teacher applying successfully for a position of responsibility or a specific job such as a head of subject department or year level coordination. While job selection criteria in schools usually include a criterion relating to teaching competence, applicants are not usually required to supply direct evidence of their performance as teachers. Instead, the focus of these selection panels is usually on capacity to fulfil the position in the future.

Table 5: Summary of promotion positions beyond the incremental scale in government schools

State/territory	Promotion positions based on application for a specific job	Promotion positions based on teaching performance
Australian Capital Territory	 School Leader C – Executive Teacher School Leader B – Deputy Principal Principal 	No positions above incremental scale
Northern Territory	 Executive Teachers, 9 levels (Principal positions) 	Teacher of Exemplary Practice 1,2,3 (Note: Teachers can apply for TEP from within the incremental scale, with increased salary as a percent of specified ET level – paid as an allowance
New South Wales	 Senior Assistant Head Teacher Assistant/Deputy Principal Principal 	No positions at present (Proposal for a four level certification system based on NSWIT standards)
Queensland	 Senior Teacher Head of Curriculum Head of Department Deputy Principal Principal Executive Principal 	No positions above incremental scale
South Australia	 Co-ordinator 1, 2, 3 Assistant Principal 2 levels Deputy Principal/Principal 8 levels 	Advanced Skills Teacher levels 1 and 2
Tasmania	Band 2 teacherBands 3 and 4Principal class - 8 levels	No positions above incremental scale
Victoria	 Leading Teacher 1, 2, 3 Assistant Principal - 4 levels Principal 6 levels 	No positions above incremental scale
Western Australia	 Senior Teacher 1, 2 Deputy Principal 3 levels Principal 4 levels 	Level 3 Classroom Teacher (quota applies, no more than about 3-400 positions at any one time)

Source: ACER, 2007

Many teachers in government and non-government schools receive additional payment for specific educational tasks apart from classroom teaching. This payment may be in the form of promotion to a higher classification, or in the form of an allowance. In almost all cases, the extra payment also carries a time allowance and thus means time away from classroom teaching. In terms of career structure, there is a further important consideration in that allowances are not always deemed to be part of salary for purposes of superannuation. In some cases (e.g. Victoria), certain allowances (Special Payments and Higher Duties) may be treated as part of superannuation salary after a certain period. However, allowances, unlike promotions in general, are not necessarily 'permanent'.

In schools that select their own teachers, job specific criteria are usually attached to the advertised position. It is worth noting that in some instances relatively junior teachers (at lower points on the incremental scale) who successfully apply for these positions are paid at a level well above the top of the (first level) incremental scale. There are few promotion positions that are not tied to a specific job or set of responsibilities. This

means that Classroom Teachers have relatively few opportunities to apply for a position at a higher level where the main selection criterion is proven high quality of their classroom teaching. Or, put another way, it is rare for Classroom Teachers to be promoted on the basis of excellent teaching, and even rarer for such teachers to remain in classroom teaching on a higher salary.

Table 5 shows how teaching is unusual compared with many professions that rely on advanced professional certification as the main basis for career progression. Getting on in career terms in professions such as accountancy, engineering and medicine is based on gaining some form of certification by an independent professional body, such as a CPA, or a Chartered Engineer or a medical college. These certifications are usually based on assessments of relevant professional knowledge and records indicating that high standards of performance have been attained.

There is no equivalent in teaching. Getting on in teaching generally means getting out of teaching and moving into school management. Status is attached more to teaching less rather than teaching better. There are few roles or promotion positions that place expert teachers in roles that enable them share their expertise and work shoulder to shoulder with other teachers in ways that might enhance student learning outcomes. Few teachers at the top of the incremental scale in Australia have the opportunity to further their career and status because of their expertise as teachers.

The NT, SA and WA education departments have developed classifications that carry higher pay for teachers who have demonstrated superior ("accomplished") teaching performance. These states and territories and the positions are listed in Table 6. These classifications are not linked directly to advertised positions in specific schools. Rather, teachers usually gain these positions after applying to a central agency for an assessment of their performance. Teachers do not have to be at the top of the salary scale to apply for these positions. Methods of assessment usually rely on presenting portfolio 'entries'. South Australia is noteworthy for including evidence gained from classroom observations by observers trained to use teaching standards.

Little information is available on how each of these schemes sets the required level of performance in relation to the standards. The WA Education Department applies a quota in the case of the WA Level 3 Classroom Teacher position, which is inconsistent with the concept of standards-based performance assessment. Their caution is understandable perhaps, but the number of successful applicants so far has never exceeded the quota.

Table 6: Summary of selection methods for the promotion positions in government schools where teachers apply for recognition of quality teaching performance

State/ territory	Promotion position	Who is eligible?	What are the assessment methods?	Who performs the assessment?	Are there quotas?
Northern Territory	Teachers of Exemplary Practice 1, 2, 3 note: this position is not a classification but an allowance.	Teachers can apply from within scale from T6 and add percent to salary	Modelling of teaching, role in curriculum and professional learning	Assessment panels, moderation committee	No
South Australia	AST 1/2	All teachers, step barrier removed	Portfolio, lesson observation, presentation and discussion	Three member assessment panel(inc prin)	No
Western Australia	Level 3 Classroom teacher	All teachers	Portfolio of evidence and reflective practice discussion, assessment against standards	Level 3 Classroom Teacher: Panel, moderation committee. External component	Level 3 Classroom Teacher quota but it has not at this stage been filled

Source: ACER, 2007

Performance pay for teachers in non-government schools

It is not so easy to provide a summary of current arrangements for promotion positions and performance pay in non-government schools. Some schools are understandably reluctant to provide details about arrangements they have made with individual staff. Instead of tabulating these arrangements, a set of brief case studies of current practices in six independent schools is provided in Appendix 4.

For some years, the Independent Education Union of Australia (IEUA) and employing Catholic and Independent authorities have negotiated various classifications and salary levels based on Advanced Teaching Standards. These agreements vary within jurisdictions. Sometimes a specific leadership role or other duty is attached to the position; sometimes a teacher is expected to act as an exemplar for other teachers by demonstrating and sharing advanced skills and practices.

As in the government systems, the Awards contain relatively few promotion positions or allowances in non-government schools that require evidence of quality teaching performance measured against standards. Within the Agreements themselves, there may be "room for movement." In Western Australian Catholic schools, for instance, promotional positions and allowances may, after consultation and agreement, "introduce a school-based system of promotional positions to replace these arrangements." Independent non-systemic schools may operate within the 'safety net' of the relevant

Award, but have their own methods of recognising and rewarding high quality teaching performance. Many may contain an 'advanced' teacher classifications.

One representative of the sector expressed the view that very few independent schools would be paying performance pay. 'Most cannot afford the extra payments and live from day to day, relying on increasing enrolments. Many are in debt because capital is paid for by parents not government. Enrolments are the key; there is not a lot of leeway.'

Some independent schools however are paying performance pay in various forms such as bonuses, advanced placements in a salary range, or higher salary levels than provided for under the particular Agreement or Award. In many cases these arrangements are confidential between the teacher and the school principal. (See Appendix 3)

In Victoria, of 150 independent schools, 70 are under industrial agreements. Salaries differ from jurisdiction to jurisdiction. Of the 70 schools, only a handful has AST levels for highly accomplished teachers (standards classification), with additional salary payments of between \$2,000 and \$6,000.

Most Catholic schools (except some non systemic Catholic schools) still have a 'common rule award' and are in the NSW industrial relations system. A number of Independent schools, including Christian and Uniting Church schools, have collective agreements, or the independent schools common rule award (revised), in the state system.

A significant number of independent schools, including some independent Catholic schools, and a few Christian schools are now covered by 'collective federal agreements' - although there are 2 different outcomes in the structure of these agreements. For instance, one collective federal agreement looks like the independent state award with incremental steps. The other has 3 bands with criteria to be met (except for teachers who are already at the top of the scale - they will automatically be at the top of band 3). The requirements to move from Band 1 to Band 2 match the current requirements for a beginning teacher under the NSW Institute of Teachers requirements to be accredited at the 'Professional Competence' level; that is, meeting the Institute's requirements meets the school's requirements. To move from Band 2 to Band 3 (with one salary rate) teachers will in the future have to demonstrate that they meet the Institute's 'Accomplished Teacher' standards. While these standards are agreed on and in place, the formal Institute assessment processes are not – consequently the NSW Association of Independent Schools will oversee an appraisal approach that will hopefully be endorsed by the

Institute in the future. In the interim, teachers who meet the Institute standards, as appraised by the employer, will receive Band 3 status (called Experienced Teacher) worth an additional \$ 6100 currently.

One of the 14 - 15 independent schools in the ACT has a Master Teacher allowance concept. (It is understood that nearly all teachers receive this allowance). In independent schools in general, bonuses are not common.

In non-government systemic schools, as in government schools, the Awards and Agreements include relatively few promotions or allowances that relate to quality teaching performance measured against standards that do not involve time out of the classroom. Independent non-systemic schools may operate within the 'safety net' of the relevant Award, but have their own methods of recognising and rewarding high quality teaching performance. Many may contain an 'advanced' teacher classification.

Summary

Using the typology of performance pay schemes described in Section A it is clear from this overview of current industrial arrangements in Australia that performance-based pay schemes of any type are uncommon.

The incremental scale

There is considerable commonality across the jurisdictions in terms of starting salaries for teachers and progression to the top of incremental salary scales. Almost all awards and agreements have some provision for performance pay in that teachers receive an annual increment based on their perceived level of performance and that in almost all cases this increment can be withheld. Most teachers also undergo some kind of performance appraisal on an annual basis.

It takes from eight to ten years for most qualified and registered teachers to reach the top of the initial incremental scale. While progression along these scales is not automatic, it is rarely withheld. Procedures are being developed by the Victorian Institute of Teaching and the NSW Institute of Teachers where teachers only gain full registration after one to three years provisional registration period and a rigorous standards-based assessment of their performance.

A recent US research suggests an incremental scale based mainly on years of experience over the first five to ten years or so is warranted, provided teachers a rigorous licensing system is in place and teachers are fulfilling their contractual duties satisfactorily. Based on state-wide tests of student achievement in literacy and mathematics, this evidence suggests that most teachers get better with experience over the incremental salary range (Clotfelter, Ladd & Vigdor, 2007). Rockoff (2004) also found that years of experience was a determinant of student achievement. What this research indicates is that Australia would benefit from a professional certification system that provides teachers with clear direction as to what they should get better at over those ten years or so, and strong incentives for all teachers to reach those standards.

Promotion positions and performance

When we look at arrangements beyond the top of the incremental scale across the jurisdictions, there is more variation. As described earlier, three government systems, WA, SA and the NT, have promotion positions based on an assessment of performance. These schemes were introduced through industrial negotiations. While the validity of the assessment methods used in these schemes has not been tested, in the context of this report, these are undoubtedly examples, albeit limited examples, of attempts to introduce performance-based pay. Locally arranged schemes for over-award payments and bonuses can be found in many independent schools (See Appendix 4).

The WA Agreement is the most specific with regard to performance pay in its description of the requirements for becoming a Level 3 Classroom Teacher. This Agreement was successfully negotiated between the Director General for the WA Department of Education and Training and the State School Teachers' Union of Western Australia (the WA Branch of the AEU). The differences in the content of Agreements, and the specificity of the WA Agreement in this context, suggest that performance pay arrangements can be introduced with a shared understanding of -- and agreement about -- what constitutes fair and effective measures. While it is not possible to draw definitive conclusions in this report about the reasons for the wide variety of performance appraisal/management across states, possible reasons for this disparity could be the presence of "drivers" – persons in different positions in the industrial landscape who have the knowledge, the will and the energy to develop effective and acceptable schemes.

SECTION C: FACTORS AFFECTING THE INTRODUCTION OF PERFORMANCE-BASED PAY ARRANGEMENTS FOR TEACHERS

The previous section of this report summarised arrangements for teachers' pay scales across the jurisdictions under current industrial awards and agreements. The guiding question was about the extent to which current arrangements could be described as performance-based pay. Attention turns in this section to identifying policy or legislative frameworks that may impede, limit or prevent the introduction of performance-based pay arrangements for teachers.

The existence of the promotional schemes based on classroom performance in WA, SA and the NT indicates that there is nothing inherent in the current processes for determining industrial awards and enterprise agreements that prevents the introduction of performance-based pay arrangements for teachers. Although they are limited in scope, the existence of the three current schemes for offering promotion positions based on classroom performance demonstrates this. These three schemes were developed as part of negotiations for current industrial awards and enterprise agreements. They also owe their origins to the AST concept, which was promoted by the teacher unions and employing authorities as part of the Award Restructuring reforms in the early 1990s. Although the concept was consistent with the idea of building stronger links between teachers' salaries and evidence of improved performance, implementation of the scheme was not.

There are no legislative or other frameworks currently in place that prevent the implementation of performance pay schemes. There seems to be no in-principle impediment, therefore, to other school systems introducing this type of performance pay system. In practice, of course, there may be other difficulties to overcome; performance pay schemes, for example, have major cost implications in terms of developing standards, training assessors, operating the assessment system, not to mention the cost of increased salaries.

The development of professional standards has been strongly supported by all stakeholders in Australia. Both the major government school union, the AEU and the major non-government school union, the IEUA have supported the development of professional standards for teachers and the close involvement of the profession in the development of these standards. An IEUA summary statement about standards notes that:

The union's effective negotiation with employers around the criteria/standards and appraisal processes associated with the Advanced Teacher classifications has been based on the union's deep knowledge and understanding of the professional role and work of their members.

A clear impression emerges from surveying current initiatives and major stakeholders that there is a strong desire to provide greater recognition to teachers who can show evidence of attaining high standards of professional performance. All stakeholders recognise they have a mutual interest in promoting quality teaching through rewarding evidence of enhanced knowledge and skill.

This desire manifests itself, however, in a wide range of different schemes that vary in quality from school to school and from school system to school system. There is no system, as there is in other professions, whereby the profession provides a credible certification service to the public and employers that members have reached a certain level of performance. There is no consistent pattern to the definition of highly accomplished teaching or methods for assessing performance. There are, however, some promising examples of embryonic certification systems developed by mathematics and science teachers, as summarised in a recent report prepared for Teaching Australia (Ingvarson & Kleinhenz, 2006a). With some refinements, these systems could become operational in a short period.

The case studies of performance pay arrangements in independent schools (Appendix 4) clearly show this ad hoc character. Like so many independent schools, each of these schools is attempting to develop career pathways for highly accomplished teachers and teacher leaders. However, they find it difficult to develop on their own credible systems for standards-based performance. Their methods do not lead to portable qualifications with profession-wide respect and currency. This is complex work. In other professions, national professional bodies usually conduct professional assessment and certification. What characterises current arrangements is equivalent to every business developing its own CPA system for accountants, or each hospital administration developing its own certification system for doctors who reach high standards in their field of medicine. Teaching as a profession lacks its own system for providing an independent, authoritative certification service to schools and school systems seeking to provide incentives to teachers to attain high standards of professional performance and retain those that do.

Our impression from reviewing current arrangements and interviews conducted for this report is that there is an increasing desire among school principals for a service that provides them with an independent assessment and certification that teachers have attained high standards of practice. An advantage of such a service would be the comparability of the standards and assessments. These schools are trying to provide incentives and recognition to teachers who attain high standards, such as the Level 3 classification in WA. They want the assessment to be credible, but know that this is very difficult for them to achieve at the level of the single school.

Some independent schools in NSW have been looking toward the NSW Institute of Teachers as a possible provider of this service in the future. There is no body that provides this service nationally or profession-wide at present, although this is a role that Teaching Australia has been considering for the future. Leaders of principal organisations interviewed for this report indicated that there would need to be consistency from school to school in the meaning of terms such as "Highly Accomplished Teacher" if the aim of creating a stronger market for such teachers was to be created. They remember that the inability of processes for identifying Advanced Skills Teachers to ensure comparability from school to school and system to system undermined the credibility of that classification.

Conditions affecting the introduction of performance-based pay arrangements

While current legislative frameworks do not prevent the introduction of performance pay schemes, this is not to say that the introduction of performance-based pay arrangements would be a straightforward matter. Of course, it all depends on the type of performance pay in question. The average life of merit-pay schemes in the USA, for example, has been about 4 to 5 years (Murnane & Cohen, 1986). In comparison, schemes based on evidence of professional development, such as those above in WA, NT and SA, and the NBPTS in the USA, appear likely to be more long-standing. The NBPTS has now been operating for nearly 20 years. Original proponents said it would take at least that long to become accepted.

It is clear from the extensive literature on performance pay that the success of these schemes is critically dependent, first, on the level of preparatory research, experimentation and field trials to ensure that methods of gathering evidence and assessing performance are valid, reliable and fair. Without this kind of credibility the system quickly loses credibility and respect (Protsik, 1996). Murnane and Cohen point

out that for a merit-pay plan to be effective, an employer must be able to provide answers to the following two questions that employees will inevitably ask:

- 1) Why does worker X get merit-pay and I don't?
- 2) What can I do to get merit- pay?

These questions can not be answered without a valid system for assessing performance. A scheme which is unable to provide satisfactory answers to these questions is likely to fail.

The second need is to ensure there is long term funding to support the new salary arrangements. The third, related to the first, is to ensure that these schemes are not left to individual schools to implement in their own way. Schools rarely have the internal capacity to conduct fair and reliable high stakes assessments of teacher performance against professional standards. Consequently, they may face charges of bias and cronyism - and staff relationships usually suffer as a result (Protsik, 1996, p.285-6).

Many individual merit-pay plans were adopted as a means to increase teacher accountability and improve teacher performance. For the most part, these plans not only failed to improve student achievement, but also destroyed teachers' collaboration with each other and their trust in the administrators in charge of evaluating their performance.

Consistency in application of the standards and assessments across schools often becomes a major issue that undermines the credibility of such schemes. It is noteworthy that the most enduring and effective performance pay schemes are based on an external system for managing the assessment process such as the WA Level 3 and NBPTS systems.

Who pays for better performance?

The issue of performance pay in government schools bears a close relation to how schools are funded and managed. State and territory funding allocations for all Australian government schools are decided centrally at the level of the state or territory jurisdiction, but how the allocations are spent in schools depends in part on the level of management independence granted to schools. Government schools in Victoria, for example, have a high degree of self-management: principals select teaching staff and are able to operate more freely under their own 'global budgets' than their counterparts in

some other states. But even in Victorian schools there are competing budget priorities and little flexibility to pay teachers extra by, for example, creating extra positions, or allocating bonuses for superior performance. While, in theory, self-managing schools may appear to have more capacity to provide performance pay, budget constraints mean that this capacity remains limited.

Government schools may also raise their own funds to be used at the discretion of the principal and school council. A major source of such revenue in some schools is the enrolment of overseas full fee-paying students. This may provide some schools with sufficient funds to reward some teachers or to increase the number of promotion positions, but even then budgeting priorities would still be an issue.

School self-management also generally includes local merit selection of staff. This may increase staffing flexibility and allow schools to select teachers who best meet their requirements, but again, central transfer requirements and teacher placements across a system can be highly restrictive, even in schools that have locally generated extra funding. For example, a Victorian government school which has a large number of full fee-paying overseas students, and is therefore able to hire more staff still has to meet the system's requirement to prefer displaced teachers already in the system over other applicants.

State and Territory government schools vary in their ability to select teaching staff. These arrangements can be quite complex although all have some kind of central component. WA has a 'mixture' of local and central appointment; South Australia has recently introduced local merit-based selection in a range of positions. Graduate teachers in different states/territories may be offered beginning teacher positions under a range of schemes.

Assessing teacher performance

Assumptions underlying performance pay schemes

While there is a shared desire among interested parties to reward accomplishment in teaching, there are very different assumptions about how incentives motivate improved performance and indeed, what should count as evidence of improved performance. The literature on theories and research about the relationship between pay and motivation is complex and extensive. In reviewing this literature, Odden and Kelley (2002, p.69) point out that:

The fact is that many previous attempts to change teacher compensation were ineffective at motivating higher teacher performance because most of these programs were implemented with flawed understanding of the psychological theories of worker and teacher motivation and poor understandings of the school organisational context.

In developing a performance pay scheme, it is important to be clear about its purpose and the problem that the scheme is attempting to solve. It is also important to be aware that performance pay schemes can generate unintended consequences, or distort performance, if they place more value on some aspects of a teacher's responsibilities than others. For some proponents, the assumption appears to be that teachers are withholding their best efforts for want of money incentives. For them, the aim of performance pay is to increase the work rate. For others, the problem that needs to be addressed is the lack of incentives and recognition for reaching high teaching standards. For these people, performance pay aims to reward evidence of increased professional expertise.

A key question to ask of any scheme is how engagement in the scheme will increase teachers' knowledge and skill in ways that lead to improved student achievement. Research indicates that earlier merit pay schemes of the former type had little impact on improving student learning outcomes (Johnson, 1986). They did not provide useful feedback as to how to teach more effectively. Similarly, schemes that only provide feedback on a teacher's performance in the form of student scores on standardised achievement tests may give teachers limited information about how they could teach better (Darling-Hammond, 1992). Teachers are more accepting of pay schemes that provide recognition for reaching high teaching standards. And evidence is mounting that such schemes can improve performance and identify teachers who are more effective in terms of student learning outcomes (Ingvarson & Kleinhenz, 2006a).

For still other proponents, performance pay schemes aim to address the difficulty teaching has in competing effectively with other professions for high quality graduates and keeping them. Research in this area reminds us that intrinsic and extrinsic incentives are both important to quality teaching. The primary motivator for teachers is the prospect of improving student achievement and enjoyment of school. However, better pay and career prospects do attract better quality graduates (Chevalier et al., 2007), and poor relative salary ranks high among the reasons good teachers leave the profession. While it is important to distinguish incentives designed to attract and retain good teachers from

those that will improve their teaching, policies are needed to ensure incentives of both types are in place (Johnson, 1986; 2006; Odden & Kelley 2002).

Defining "performance"

The brief for this report (see Appendix 1) focuses on current arrangements for performance pay in Australia, as well as national and international research on the impact of performance pay schemes. The latter includes impact on stakeholder attitudes, teacher retention, teaching standards, student outcomes, and relationships between staff.

Addressing these questions is not as straightforward as it may seem. It will be clear that the impact of performance pay schemes varies widely with the type of scheme in question. There is no one approach to performance pay, hence it is not possible to generalise about stakeholder perceptions of these schemes. What is needed is a typology of performance pay schemes. In other words, we need to ask, "what is being assessed when we claim to be assessing teacher performance?" Is this the same as assessing teacher quality? Another way of framing this question, which is central to the issue of performance pay, is, "On what bases should teacher performance be evaluated?"

Fenstermacher and Richardson (2005) remind us that quality teaching is about more than whether something is taught. It is also about how it is taught (p.189). Successful teaching in the former sense may not be good teaching in the latter sense. Teaching is undeniably a moral enterprise.

What counts as "performance" varies. For some the main indicators of performance should be measures of student outcomes, based on standardised tests of student achievement. This is what Fenstermacher and Richardson call "successful teaching".

By successful teaching we mean that the learner actually acquires, to some reasonable and acceptable level of proficiency, what the teacher is engaged in teaching. (p.191)

For others, the evidence of a teacher's performance should be based on observations of the quality of opportunities they provide for student learning in their classrooms in relation to teaching standards. This is what Fenstermacher and Richardson call "good teaching".

By good teaching we mean that the content taught accords with disciplinary standards of adequacy and completeness, and that the methods employed are age appropriate, morally defensible, and undertaken with the intention of enhancing the learner's competence with respect to the content studied. (p.191)

This distinction points to two different approaches to determining teacher quality – and two different views on the aspects for which teachers should be held accountable. It also reflects different policy imperatives.

Although it seems plausible to use student learning outcomes as a measure of "good teaching" and a basis for evaluating teacher performance, the direct relationship between good teaching and learning is uncertain. The relationship between the two is far from a simple 1:1 causal relationship. Successful teaching, as defined above, depends not only on good teaching, but three other conditions as well:

- 1) willingness and effort by the learner;
- 2) a social surround supportive of teaching and learning; and
- 3) opportunity to teach and learn (Fenstermacher and Richardson, p.190).

Good teaching is only one of the ingredients necessary for successful teaching: a teacher may be good, while unsuccessful in certain contexts. While it may be reasonable to hold teachers accountable for good teaching in the sense above, it is clear that successful teaching depends also on conditions being in place for which others are accountable. Standards for good teaching need to go hand in hand with standards for quality teaching conditions and school resources. This indicates the importance of recognising that successful teaching is a shared responsibility between governments and the profession.

Assessing performance

In any assessment of performance, whether it be Olympic diving or gymnastics or teaching, it is clearly important to describe what is to be assessed and how. This is the role of standards. The purpose of standards in performance assessment is to:

- define what is to be assessed (i.e. what is good teaching; what should teachers know and be able to do?)
- describe how it will be measured (i.e. what counts as valid evidence about teaching performance and how will it be gathered?), and

• specify the level of performance that meets the standards (i.e. how will the evidence be judged?)

The purpose of teaching standards is to describe the full scope of what teachers are expected to know and be able to do. A set of standards typically includes a number of domains and sub-domains such as those listed in Table 7. (A committee of science teachers developed this particular set of standards for the National Board of Professional Teaching Standards (NBPTS) in the USA. The table only summarises the main elements in this set of standards. The full set of standards with elaborations of each element is nearly 30 pages long – good teaching is complex work)

Table 7 illustrates the wide array of potential sources of evidence that *might* be gathered in assessing a teacher's performance for each of the 13 sub-domains (N.B. The NBPTS uses only portfolio entries and assessment centre exercises). These sources include *people* such as students and supervisors, existing school *records*, and teacher *products*. In other words, they include sources already available in most schools, some that might be gathered by trained observers and some that teachers can be asked to provide themselves to show how they meet the relevant standard.

Student evaluation instruments (and parent feedback) can be used to provide reliable measures of class environment (Irving, 2005). Paper and pencil tests can provide a valid means of gathering evidence about the currency of a teacher's content and pedagogical knowledge (Pearlman, 2000). Direct evidence of student learning of what the teacher is expected to teach, such as student work samples over time or repeated measures on valid measures of student growth, provide essential evidence of increasing understanding. Documented accomplishments, verified by colleagues and principals, can provide evidence of contribution to school and professional community.

In summary, valid and reliable assessment of teacher performance requires:

- (i) evidence that taken together covers all of the standards. Clearly, any assessment of teacher performance based on one or two forms of evidence only cannot provide a valid or reliable measure across all the standards
- (ii) more than one form of evidence for each of the standards
- (iii) evidence that is *directly* (not statistically) related to the quality of teaching by the individual being evaluated

Table 7: Teaching standards and methods of assessment

Standard domains	Standard sub-domains	Appropriate forms of evidence about teacher performance
Domain 1:		
Preparing the way for productive student learning	Understanding students	Student evaluations; classroom observations/video- based portfolio entries; supervisor reports; school records/ personnel files; former students; communications with parents/parent surveys
	Knowledge of science	Paper and pencil tests of science and science pedagogy knowledge; classroom observations/videotape-based portfolio entries; teacher set tests/assessments of student work /feedback to students; participation in up-grading courses
	Instructional Resources	Teacher products: Samples of units of work; lesson plans; portfolio entries based on classroom activities and student work samples
Domain 2:		
Establishing a favourable context for learning	Engagement	Classroom observation; videotape-based portfolio entries; Student evaluations; Parent survey
	Learning	Classroom observation; videotape-based portfolio
	environment	entries; Student evaluations; Parent survey
	Equitable	Classroom observation; videotape-based portfolio
Domain 3:	participation	entries; Student evaluations; Parent survey
Advancing	Science	Teacher produced units of work; student work over
student learning	inquiry	time; videotape-based portfolio entries of student activity, classroom interaction/ discussion and student analyses of their data
	Expanding fundamental understanding s	Samples of student work over time; student evaluations; repeated measures of student understanding of science concepts
	Contexts of science	Examples of teacher planned units of work, including aims, activities, assessments and samples of student work over time; videotapes of class discussion/interaction around key issues in science
Domain 4:		D (C1)
Supporting teaching and learning	Assessment	Portfolio entries based on assessment of student work samples over time; range and depth of assessment strategies used, teacher feedback and annotations of student work; samples of assessment tasks and student responses with teacher commentary
	Family and	Documented accomplishments with evidence of
	community	impact and verifications from supervisors, parents,
	outreach Contributing	community members Documented accomplishments with evidence of
	to the	impact; verifications from colleagues/
	profession	supervisors/principals/professional associations
	Reflective practice	Portfolio entries containing analyses and reflections on implications of student work samples and videotapes of student activities; Interviews following classroom
Source: ACED		observations

Source: ACER, 2007

- (iv) full coverage of the teacher's responsibilities; e.g. need to cover all curriculum areas if a primary teacher; need evidence from several classes if a secondary teacher
- (v) evidence that is reasonably accurate and objective, and (ideally) is readily available and easy to collect.

Multiple sources of data should be used, wherever possible, for each standard sub-domain. The use of multiple sources includes not only the use of several different types of evidence, but also several trained judges of each piece of evidence. Apart from mutual confirmation, however, the use of multiple data sources sometimes turns up entirely new information about a teacher's level of performance or range of contributions. These advantages have to be balanced against the increase in cost of evaluating teachers through using multiple sources.

When two or more sources of data or information on the same attribute conflict, an effort should be made to determine why they do not support each other (e.g., recheck the accuracy of the sources or measures, the currency of the information, the use of samples collected on different occasions, typical day vs. bad day).

There is general agreement among experts in teacher evaluation that a valid and reliable scheme for assessing teacher performance for high stakes decisions must draw on several types of evidence (Joint Committee on Standards for Educational Evaluation, 1988; Shulman, 1988; Scriven 1994; Pearlman, 2000; Stronge, 1997). This is because such schemes need to gather evidence that encompasses the full scope of what a teacher is expected to know and be able to do, not only to ensure their professional credibility, but increasingly, their legal defensibility.

Although it might seem simpler to use student test scores alone as a method for assessing teacher performance, it should be clear from the above that a fair and valid assessment needs to be based on *direct* evidence of performance. That is, it needs to be based on the quality of the conditions that a teacher is providing for students to learn in relation to valid teaching standards. Recent evidence indicates that standards-based assessments of teacher performance by trained teacher-assessors can reach high levels of reliability (Gitomer, forthcoming). The evidence also indicates that the students of teachers who do well on these performance assessments, such as those used for NBPTS certification achieve better on standardised achievement tests than students of teachers who do not

(Milanowski, 2004; Goldhaber and Anthony, 2004; Vandervoort, 2004). As a result of his research, Milanowski suggests that:

. . . scores from a rigorous teacher evaluation system can be substantially related to student achievement and provide criterion-related validity evidence for the use of the performance evaluation scores as the basis for a performance-based pay system . . . (p 34)

Value-added methods for estimating teacher effects on student performance

There have been significant developments in attempts to use student achievement as a measure for evaluating teachers. Millman (1997) reviewed four of these schemes in the USA, each using different kinds of student assessment. Two of them used "value-added" models for isolating and estimating school and teacher effects: the Tennessee Value Added Assessment System (TVAAS) and the Dallas Value-Added Accountability System. Proponents of these schemes claim that they are able to separate the effects of teachers and schools from the strong effects of factors such as family background. These two schemes are used, along with a range of other sources of information, to examine patterns of performance and to provide, for example, an indication of teachers who require professional development. While, these two schemes are not linked to salaries or bonuses, Pennsylvania has recently drafted a bill that proposes to use student achievement results to evaluate and reward administrators and teachers.

The consensus among those who are closely familiar with these schemes is that they do not provide, and are unlikely to provide, a valid basis for decision-making about the quality of teaching, such as that involved in making performance-related pay decisions (Kupermintz, 2002; McCaffrey et al., 2003; Raudenbush, 2004; Braun, 2005; Gordon, Kane & Staiger, 2006). Some experts in educational measurement regard schemes such as the TVAAS as flawed because they use national norm-referenced tests that are usually insensitive to detecting the effects of teachers "instructional efforts" (Popham, 1997, p. 270). A danger with such schemes is that they may use student assessment data for a purpose that was not initially intended. That is, they may use students' scores on a nationally standardized test to assess the performance of individual teachers when the test scores have not been validated for the latter purpose. Such tests are usually designed to discriminate between students, not teachers. In a recent review of the literature on the use of value-added modeling (VAM) in estimating teacher effects, McCaffrey et al. (2006) conclude:

. . . VAM-based rankings of teachers are highly unstable, and that only large differences in estimated impact are likely to be detectable given the effects of sampling error and other sources of uncertainty. Interpretations of differences among teachers based on VAM estimates should be made with extreme caution. (p.113)

The reliability of value-added estimates depends on the quality of the student achievement measures that underpin them, and the margins of error in most existing measures need to be understood. While there have been significant advances in our ability to measure educational growth, we are a long way from measures with anything like the reliability of, say, measures of growth in children's weight or height. In addition, measures available so far are limited mainly to reading and numeracy in the primary years. For most subjects in the primary curriculum, and for most teachers of the secondary curriculum, there are no measures to which value-added modelling could be applied. This means that value-added measures of student achievement, like any of the sources of evidence in Table 7, should only be used in conjunction with several other independent sources of evidence about a teacher's performance (and, of course, only where there is evidence of their reliability).

To our knowledge, only a few pay schemes, as yet, provide salary or bonus awards for individual teachers based on value-added measures of student learning (e.g. the Special Teachers are Rewarded (STAR) scheme initiated by the Florida Department of Education and the Teacher Advancement Program mentioned earlier). Consequently, there is little research to report on stakeholder attitudes to these schemes or their impact.

Standards-based methods for evaluating teacher performance

A major trend in reforming teacher pay systems is to define performance in terms of what teachers know and can do – the quality of the conditions they provide for learning – and evidence about what their students are doing as a direct result of their teaching, including what they are learning over time. These schemes are often referred to as knowledge and skills-based pay systems (Odden & Kelley, 2002).

Professional 'standards' provide the vehicle for defining what teachers should know and be able to do in these schemes. Knowledge and skills-based pay systems aim to provide stronger links between pay increases and evidence of capacity to meet standards of teaching. Progress in this area has been greatly facilitated by more sophisticated methods

of standards-based assessment of teaching performance. Teachers generally have a more positive attitude to these approaches to gathering evidence about their performance, such as those used for assessing teachers for Level 3 Classroom Teacher positions in WA or those used by the National Board for Professional Teaching Standard (NBPTS) in the USA, even though the standards are demanding and the assessment process rigorous. These schemes are discussed in more detail in Section D of the report.

The foregoing gives two views about the basis for teacher evaluation and accountability – whether teacher performance should be judged in terms of student learning outcomes, using national or state-level tests, or conformity with professional standards of the day. These two views apply across the professions, not just teaching, where practice depends on the application of expertise and judgment to what are frequently non-routine problems. When questions arise about a doctor's performance, for example, legal cases focus on whether that doctor followed procedures consistent with current standards for good practice based on research, not patient outcomes. This is not to say, of course, that variation in outcomes is not an important evidence of potential variation in professional proficiency. It is to say that variation in outcomes is not necessarily because of variation in professional performance.

Wider definitions of performance: teacher leadership

Going further, measures of performance will depend on how the scope and boundaries of teachers' work is defined. One of the characteristic features of teachers' work is that the scope of a first year teacher's work may be the same as that of a 30-year veteran teacher in the classroom next door. Teachers' work can be defined so that performance is assessed mainly in terms of the quality of classroom teaching. Or, it can be defined so that measures of performance include, for example, the development of skills in leadership and management, in new subject areas, in technology, in curriculum development and student assessment, and in building school-community links. Schools need teachers who perform well in all these areas, but traditional pay systems have rarely been designed deliberately to promote the development of knowledge and skills needed by schools. In other words, the pay system has not been "strategic". "Strategic pay," as Lawler (1990) calls it, is the means by which effective organisations ensure their pay system is aligned with their objectives -- that is, the extent to which the pay system encourages and rewards the development of the knowledge and skills that are central to achieving the organisation's central purposes. As with measuring classroom performance, however, the challenge here is to develop relevant standards and reliable and valid methods for gathering evidence about performance and outcomes beyond the classroom, not opinions and anecdotal evidence.

Linking pay to performance

Despite the seemingly obvious advantages of linking pay to performance, the concept has proved to be more difficult to apply to professional work in non-profit organizations, like schools and hospitals, than to work such as sales and piecework where "employees contribute independently to the effectiveness of the total group or organization" (Lawler, 1983 p.100). The historical record is clear that few merit based pay schemes have survived when applied to teaching (Murnane & Cohen, 1986: Johnson, 1986; Odden & Kelley, 2003).

The key challenge has been to find a valid basis on which to evaluate teacher performance (Scriven, 1994); in other words, a valid basis on which to hold teachers accountable for the quality of their practice. As this report indicates, this is by no means as straightforward a task as it may seem. Professional work is not as amenable to simple measures of outcomes as that of many other occupations. Rather than outcomes, professionals are held accountable for applying practices consistent with current research and best practice rather than one-dimensional outcome measures. The standards in Table 7 earlier illustrated the scope of responsibilities for which a teacher might be held accountable.

Consistent with this view, valuable new work has been done in Australia and overseas in recent years indicating that it is possible to develop a professional consensus around rigorous performance standards for teaching. Teachers' professional associations in Australia and in the USA have been demonstrating that they can develop standards that articulate what accomplished teachers should know and be able to do, based on research and best practice (Ingvarson & Kleinhenz, 2006a; National Board for Professional Teaching Standards: www.nbpts.org). It is this capacity that holds the greatest promise for building a stronger relationship between teachers' career advancement and their professional performance.

Understandably, teachers have been more likely to support teacher evaluation schemes that they see as recognising the complexity of good teaching, when they perceive that the underpinning standards have validity, when the methods for gathering evidence about their performance are broad-based and sensitive to context, and when judges of their

performance have adequate training and expertise in their field of teaching (Bacharach, et al., 1990; Ingvarson & Chadbourne, 1998).

One of the main lessons from over 100 years of efforts to introduce performance pay is the need to recognise the complexity involved in evaluating the performance of teachers. In the late 1980s, concern about the weaknesses of teacher evaluation systems in the USA was such that an expert panel made up of representatives from fourteen major professional associations in education was commissioned to develop a set of standards for evaluating systems for assessing teacher performance. The panel embraced representatives of school administrators, state governors, experts in educational measurement, school principal organisations, educational researchers, and school boards. The outcome of the Panel's collaboration became known as The Personnel Evaluation Standards (The Joint Committee on Standards for Educational Evaluation, 1988). The standards have been revised recently by the Committee, following an extensive consultation process with stakeholders. The 27 standards cover four main components that need to be in place for sound teacher evaluation systems: propriety standards (ethical and legal principles); utility standards (to ensure evaluations are informative, timely and influential; feasibility standards (to promote evaluations that are efficient and viable); and accuracy standards (to ensure interpretations of data are valid and assessments of performance are reliable.

SECTION D: RESEARCH ON THE ATTITUDES OF STAKEHOLDERS TO PERFORMANCE-BASED PAY FOR TEACHERS

With a few exceptions, most of the relevant research literature on attitudes to performance pay comes from the USA and the UK (and Europe to some extent). There is no simple typology of performance pay schemes as applied to individual teachers, but the common categories that appear in literature from the USA (e.g. Odden & Kelley) include 'merit pay', 'knowledge and skills-based pay' and 'professional certification'.

In England and Wales, the terms "performance management" and "performance-related pay" are more commonly used, especially since the Government's Green Paper reforms to 'modernise' teaching in the late 1990s. Their origins, and the assumptions behind these reforms and changes in teachers' work, are somewhat different from those in the USA. As Marsden and Belfield (2006) point out:

The performance management system for state schoolteachers, introduced by the government in 2000, sought to address the need to reward teachers better for excellence in the classroom. Performance management sought to combine goal-setting and appraisal with performance pay, thus extending the growing practice of other parts of the British public services. (p.3)

After 2000, all teachers were subject to annual goal-setting performance reviews. Experienced teachers were offered an extended pay scale beyond the top of the old incremental scale. Progression to this upper pay scale and passing through the "threshold" depended on a successful assessment of their performance by school principals (Ingvarson, 2002).

The main features of these schemes will be described below, but it is important to keep in mind that there may be as much variation within operational schemes as there is between them. In examining stakeholders attitudes towards performance pay it is therefore important to be clear about the type of performance pay scheme to which those attitudes refer, since attitudes will obviously vary according to the particular understandings of the concept of 'performance pay' reflected in each scheme.

It is also important to keep in mind that the brief for this report focused on performance pay schemes for individual teachers rather than groups of teachers. There have been significant developments in group-based performance pay schemes in which bonuses are provided to all school staff or staff teams in schools that meet pre-set performance improvement targets, but these will not be reported on here.

Following a brief discussion of the history of pay for performance schemes in the USA, the UK and Australia, this section of the paper presents an overview of performance-based pay schemes for teachers that are currently operating in the UK (England and Wales, Scotland), the USA, Sweden, Singapore and Australia. The overview includes an investigation of associated research that examines the attitudes of teachers and other stakeholders towards the schemes. Most of the research carried out has been on the attitudes of teachers and school administrators, rather than other stakeholders.

The section closes with a summary and discussion of the factors that seem to facilitate and inhibit the development of positive attitudes on the part of teachers and other stakeholders towards various kinds of performance-based pay systems.

Paying teachers for performance: brief history

In the last quarter of the 19th century, English, Australian and some USA teachers were paid according to pupils' 'results' as assessed in examinations, tests, and visits by 'Inspectors'. Introduced in England and Australia in 1862, the systems were designed largely as a cost cutting mechanism, but loftier hopes were also held for it, especially in Australia:

It stimulates the teacher, it promotes organization, it ensures uniform progress unto the pupil, and by an equitable distribution of this payment amongst the teachers, and by making this payment dependent on their exertions, it enlists them heartily into the service. (Austin, 1961, p.238)

Unfortunately the systems did not live up to these promises. They quickly became discredited on a number of grounds, not least of which was that teachers were found to be using practices of doubtful educational value, such as 'beating the three R's into their unfortunate charges' (Austin, 1961, p.237) in order to secure their incomes.

By the early 20th century, payment by results was officially discontinued in the England and Australia, and little more was heard, in those countries about paying teachers extra money for better 'performance' until the 1980s and 1990s, when governments and policy

makers started to show concern that poor education standards were contributing to poor economic performance (Hood et al., 1999).

Merit pay

The term "merit pay" is still used in some quarters, but as used here refers mainly to the many schemes developed in the 1970s and 1980s in the USA. It is worth mentioning these earlier schemes, because there is a substantial body of research about their impact (e.g. Johnson, 1986; Murnane & Cohen, 1986), and because, despite this body of research, similar schemes still appear today. (See, for example, the Florida *Special Teachers are Rewarded Scheme*, which will distribute awards of at least 5 per cent of the base pay to the best performing 25 per cent of teachers within cooperating school districts. "Performance" has to be in terms of test student scores, but the measures are left to school districts to define. The life span of such a project is likely to be no longer than the merit pay schemes of the past).

Classroom observation has been the main method for assessing performance in merit pay schemes in the past, using a variety of observational checklists of dubious validity (Scriven, 1994; Stodolsky, 1990). More recently, merit pay schemes have sought to use measures of student achievement. In 2001, under its No Child Left Behind Act, the new Federal Government in the USA mandated that states use "test-based accountability" systems. Complying with this act has posed major difficulties for states, and the main approach used, called the "cohort-to-cohort gain" approach, has been widely criticised (McCaffrey et al., 2003). In this approach, the performance of one cohort of students in a given grade is compared with previous cohorts in the same grade; individual students are not tracked over time, unlike value-added schemes.

These schemes came and went regularly during the 20th century in the USA, but they have been rare in Australia. Although a number of teacher "appraisal" or performance management schemes appeared in Australia over the past twenty years (Ingvarson & Chadbourne, 1994), few were linked to directly to decisions about pay.

'Merit' pay and 'performance' pay

The term 'merit pay' was commonly used to describe the use of financial incentives to encourage employees' efforts and lift productivity. It is still common to find the terms 'Merit pay' and 'performance pay' used interchangeably, with 'merit pay' being in more general use in the USA and 'performance pay' in Europe (OECD, 2005; Marsden &

Belfield, 2006). One distinction between the two terms is that 'performance pay' usually describes initiatives that strive for objectivity in assessment, while 'merit pay' schemes usually rely on the opinions and judgement of a supervisor:

Definitions are fluid, but merit pay is often seen as a system in which 'merit' is determined by a supervisor, whereas performance is supposed to be a more objective measure. In many instances, however, merit and performance may both be determined by a test, by some demonstration of teacher skill or knowledge, or by student achievement. No uniform definition exists, so arguments for and against are often confused. (Gratz, 2005)

Research on merit pay

Merit pay schemes in the USA have waxed and waned over the past 150 years. Interest in merit pay has tended to coincide with periods of concern about the US economy (Johnson, 1986). In 1953, only 4 per cent of schools had a pay for performance scheme. Following the then USSR's success with Sputnik, and subsequent scapegoating of the USA education system, there was a resurgence of interest in the 1960s, but by 1978 fewer than 4 per cent of schools had merit pay (Murnane and Cohen, 1986). Interest rose again in the Reagan 1980s, when education was targeted once more as the reason for a decline in the competitiveness of the USA economy. Once again, however, these schemes were short lived, so that by 1990 a National Centre for Education Services survey found that only 2 per cent of teachers in American schools received individual pay for performance, 3 per cent received group awards, and 16 per cent received some kind of career ladder award (Jacobsen, 1992).

Research that aimed to find out why the schemes were failing to attract support revealed few surprises. Teachers lacked faith in the fairness and validity of the school-based evaluation processes, objectives were ill-defined and funding was inadequate (Odden & Kelley, 1997; Johnson, 1984). There were also concerns about threats to teachers' collegiality, objections to including student achievement as a measure of performance (based on perceptions that there were many influences on students learning) and suggestions that some schools were cheating by misrepresenting students' results (Clees & Nabors, 1992).

Time and again, the record indicates that proponents treated teacher evaluation as if it was simple and unproblematic – something that could be left to untrained school

administrators. The basic requirements for reliable assessment of complex performance, such as valid teaching standards, multiple forms of evidence and multiple, trained assessors remained unmet. Despite their sometime confidence, the research indicates that school principals are not necessarily reliable judges of teacher performance, especially when that judgement is based on unstructured and occasional observations of classrooms (Medley & Coker, 1987; Stodolsky, 1990). The micro politics of life in schools also gave teachers concern whether sufficient steps had been taken to minimise bias and cronyism in assessments of their performance (Blase, 1991).

In the late 1980s and early 1990s, it became apparent that merit pay schemes rested on the assumption that incentives teachers needed to work harder if they were paid competitively on the basis of perceived (by school administrators) competence (Odden & Kelley, 2003). Policy makers and designers of performance-related pay schemes began to question this assumption, recognising that improving teacher quality is a complex endeavour that calls for much more than providing incentives designed to lift and reward effort (Johnson, 2006). Some recent attempts to design systems that overcome the weaknesses of previous efforts are described below.

Performance pay reforms in England and Wales

The Teachers Incentive Pay Project in England and Wales

A performance-related pay scheme, The *Teacher Incentive Pay Project* was introduced in England and Wales respectively in 2000 and 2001 in two phases – *Performance Threshold* and *Performance Management*. The scheme was envisaged on a large scale, as the Department of Education and Skills (DfES) employed over 650,000 teachers at this time. Unlike performance pay systems in other areas, such as local government, it was uniform across the whole system, rather than implemented in a piecemeal fashion. It was unusual in that it was limited to professionals: similar schemes introduced in the public health and other sectors excluded professionals and applied only to managers (Farrell & Morris, 2004, p.81).

The Green Paper (Department for Education and Employment, 2000), in which the scheme was proposed, identified low teacher motivation and difficulties with recruitment and retention as problems that the initiative would resolve. The source of these problems was perceived to be the prevailing 'culture' or 'tradition' in education in which teachers were not rewarded for performance (Richardson, 1999).

The Green Paper proposals envisaged the introduction of a performance-related pay scheme for individual teachers within a compulsory performance appraisal system. *The Teachers Incentive Pay Project*, introduced in 2000 implemented the Green Paper proposals in the following ways.

English and Welsh teachers who previously were unable to progress in pay beyond the top of the nine level salary spine became eligible to apply to cross a 'performance threshold'. To do this, they had to complete an application form in which they summarised evidence of accomplished teaching, using concrete examples from their day to day work, to show that they met the required level on a set of standards, developed by the DfES. They were asked not to attach any supporting evidence to the form, but to ensure that evidence was available upon request. Teachers were advised to provide no more than three examples of evidence for each standard and to limit their responses to 250 words per standard. The assessment processes were carried out under the authority of school governing bodies, which delegated the receipt and assessment of applications to the head teacher.

Initially, this scheme included a verification process involving external 'reviewers', but this was discontinued in 2006 because of the expense and a perception that it was unnecessary, since in almost 100 per cent of cases the reviewers agreed with the head teachers' judgements. Teachers who 'passed' the Threshold gained an immediate pay increase and access to levels of the higher pay spine.

The Threshold was the first part of the Teacher Incentive Pay Project to be implemented. The second part of the project, introduced after the first round of the Threshold, was 'Performance Management'. This depended on a regular appraisal process similar to that of the Threshold and also directed by head teachers. Only teachers who satisfied the requirements of the performance standards, at the appropriate level, in the annual performance review process were eligible to receive annual pay increments. This, in theory, meant that teachers who met the standards at the particular level were rewarded for their performance.

Research on stakeholder attitudes to the Green Paper proposals

In 2000, Storey evaluated stakeholders' initial reactions to the pay for performance initiative, as flagged in the Green Paper, by examining over 40,000 responses to a consultation document from teachers, school administrators and other 'interested parties',

including Local Education Authorities (LEAs) and school governors. In 2001, similar, but more limited research was carried out among teachers in Wales (Farrell & Morris, 2004). This research documented stakeholders' attitudes to the initiative before its introduction. It is relevant today, particularly in light of subsequent research conducted after implementation (see below), because it provides retrospective information about attitude factors that appear to have seriously inhibited the success of the program.

From her examination of an analysis of 36,000 questionnaire responses to the consultation document from teachers and head teachers Storey discovered that 62 per cent rejected the idea that new appraisal decisions arrangements should influence decisions on pay; 60 per cent disagreed that a new performance threshold for teachers was a good idea; 62 per cent opposed the plan for appraisals to be conducted by head teachers and externally validated; and 65 per cent disagreed with the proposal to provide whole school awards on the basis of achievement. Only 18 per cent of teachers and 22 per cent of head teachers agreed with the idea of a proposed 'fast track' reward scheme for good performance (p.514).

Similar attitudes were revealed in her study of an archive of 4,064 extended written responses to the Green Paper proposals, which showed that support of the proposals ranged 'at best from fragile and hopeful' on the part of many of the LEAs through 'concerned and doubtful' (the professional associations) to 'largely absent' (most teachers) (p.514).

Storey's research found that the question of who was to be responsible for the scheme at local levels was not clear to respondents. Many school governors felt 'ill equipped' and were reluctant to take on new responsibilities in this area. 'We are lay people, not educational experts. We cannot begin to make or endorse decisions about performance-related pay for our staff' (p.515).

Overall the responses indicated a strong, often 'passionate' belief that the new performance management and performance pay initiatives would not raise the standard of student achievement.

How to overcome difficulties in 'measuring' the many and complex tasks and aspects of teaching was a constant theme in the written responses. A major concern for most teachers was how to meet the requirement that they show how they had contributed individually to students' learning, given that many teachers might be involved in a

students' success (or lack of success), as well as parents and other family members and friends. What was to be valued and who were to be responsible for valuing it were questions raised in 'countless' archived responses.

Storey's concluding observations, based on the most common concerns raised in the written responses, were:

- Teachers were passionate in expressing their beliefs. Many felt 'wronged'. They
 interpreted the Green Paper's proposals as a demand for greater effort, deducing
 from this that their existing levels of effort were not valued. They were deeply
 aggrieved about this;
- 2. The responses indicated that the 'messages' of the Green Paper in relation to pay for performance were not well communicated;
- The responses indicated perceptions of an absence of trust between employer and teachers. Absence of trust is of high concern, because trust has been shown to be an essential feature of all successful performance management and reward schemes;
- 4. The proposals failed to take sufficient notice of the current culture of teaching, which, in many ways was the opposite of the kind of entrepreneurial, risk taking cultures in which most performance pay schemes had been introduced. Changing the culture, if the Archive responses were to be taken as a guide, was likely to be an 'uphill struggle';
- 5. Schools, unlike some organisations, depend more on an even distribution of effort across the staff than on the performance of a few people. In the organisational structure of a school, the channelling of rewards towards a few individuals could be seen as 'misdirected';
- 6. The performance literature (e.g. Armstrong 1993, pp. 79–80) lists key criteria for performance pay schemes to have a positive effect. The proposals in this scheme, so far, were lacking in 'practically all' of these elements for successful implementation.

Farrell's and Morris's conclusions (2004) about stakeholder attitudes to the Teacher Incentive Pay proposals were similar to Storey's. In a paper entitled 'Resigned Compliance', they discussed the findings of an empirical study on the Teacher Incentive Pay project in Wales. The study was carried out in 2001, one year after the project's implementation in England, and concurrently with its implementation in Wales. It reported on the findings of a survey of 1125 teachers in 49 schools (33 junior, 16 senior) about teachers' attitudes towards the new pay for performance scheme.

The results of the survey showed that 79 per cent of respondents agreed or agreed strongly that pay structures should take more account of the different duties performed by teachers, but that 65 per cent disagreed or disagreed strongly that 'the principle of relating pay to performance' was a good one. Seventy-two per cent disagreed that teachers should be paid solely on the basis of their individual performance, and 7 per cent agreed or agreed strongly that teachers should continue to be paid according to nationally determined scales.

Given that the scheme was introduced to boost teacher motivation recruitment and retention, the researchers placed high significance on the survey results that showed teachers' views on the likely impact of the scheme in these areas. They found that 80 per cent of respondents disagreed or disagreed strongly that it would increase motivation, 83 per cent felt it would have little or no effect on recruitment, 83 per cent felt it would have little impact on teacher retention, 77 per cent felt that it would not lead to better and more effective teaching, and 73 per cent felt it would have little impact on pupil learning. Sixty-four per cent believed that pupil progress should not be the central factor for judging eligibility for performance-related pay.

Teachers agreed most strongly with the propositions that:

- the scheme would be divisive (82 per cent);
- the scheme would increase bureaucratic control (80 per cent); and
- the scheme would lead to discontent and demotivate those ineligible to apply (76 per cent).

One of the highest percentages of agreement or strong agreement was the 91 per cent of respondents who believed that the introduction of Performance-Related Pay (PRP) would cause resentment among teaching staff.

In an open-ended section of the survey, most teachers reported concerns about the perceived fairness and validity of the processes that would decide which teachers should be rewarded under PRP. Like the respondents quoted in Storey's study, these teachers made many comments about the unsuitability of applying performance processes designed for industry to teachers. Such comments were summed up in the words of one respondent:

...if we could make sure the new material coming into the education factory was quality controlled then we could start with a level playing field and be able to assess PRP fairly, The form is an insult, as is the subjective nature of its implementation. (Farrell & Morris, 2004, p.93)

Other comments related to the difficulties of making judgements about different kinds of teachers in the same school:

it is very difficult to compare the teaching performance of special needs to top level GCSE of A level. Some groups are shared, how is this evaluated? Many teachers take on extra responsibility for no reward – should they give this up? Why not just concentrate on your PRP targets? (p.94)

And in different types of school:

PRP is unfair because teacher in high performing middle class schools will find it easer to cross the threshold than teacher in socially deprived areas where pupils fail to achieve for reasons completely out of the teacher's control. (p.94)

Farrell and Morris concluded that teachers viewed the scheme as 'undermining the principles of team work in schools and a broader public service and educational ethos' (p.101). They found little to indicate that the scheme would achieve its own stated aims of increasing teachers' motivation, recruitment and retention.

The reservations about the likely success of the Teacher Incentive Pay Project were echoed in a study led by Burgess (Burgess et al., 2001), that also drew on experiences of pay for performance schemes in the USA. However, Burgess and his co-researchers did

find some small cause for optimism as teachers did not see the concept of performancebased rewards for teachers as inappropriate.

Like Storey, and Farrell and Morris, Burgess and his team also expressed serious doubts about the Teacher Incentive Pay scheme. These were largely based on perceptions that the initiative was operating more as a mechanism to give more-or-less automatic pay rises than a genuine pay for performance scheme:

If the scheme continues to operate to give almost all eligible staff a pay rise, then we would not expect much impact on effort as teachers will expect to get the bonus irrespective of whether they increase their effort ... (Burgess et al., 2001)

Recent research on the Teacher Incentive Pay Project

The studies discussed above were carried out in the early stages of the Teacher Incentive Pay project and were consequently concerned more with attitudes towards what *might* happen when performance-related pay was introduced. More recent research, such as that carried out by a team of researchers from Exeter University (Wragg et al., 2004), seems to suggest that the gloomy expectations were, in many respects, predictive of subsequent attitudes on the part of stakeholders. However, this may have more to do with the rather amateurish methods used to assess teacher performance than with the idea of performance-related pay itself (Ingvarson, 2002).

Phase 1: The Performance Threshold

Wragg's research, carried out over the first three years of implementation of the Teacher Incentive Pay Project established that 97 per cent of teachers who applied in the first round of the Threshold were successful. Heads, surveyed in 2001, said they had had experienced no difficulty assessing the applicants, but felt they had been given insufficient training. They also commented that the exercise, given the overall high success rate, was hardly worth all the time and energy they expended. They were also critical of the £300 per day that was paid to the reviewers who verified their assessments, especially in view of the fact that disagreement between head teacher and reviewer occurred in only 0.4 per cent of cases. (In later rounds, verification was provided only for a sample of teachers. The verification procedures have now been discontinued). Some head teachers said they had felt intimidated by the angry responses of the few unsuccessful applicants.

Of all the teacher unions in the UK, the National Union of Teachers (NUT) (the largest) was the most implacably opposed to the Threshold processes. Their position, which they took to the High Court (with initial success), was that all teachers were entitled to the pay rise, given current salary levels. They used commissioned research (Richardson, 1999) to argue against the concept of performance-related pay, but were not successful in preventing the processes from going ahead, albeit with modifications such as an appeal mechanism for unsuccessful applicants.

Other teacher unions and associations were more moderate in their opposition to aspects of the new measures. The Association of Teachers and Lecturers (ATL) gave qualified support, and the National Association of Schoolmasters and Union of Women Teachers (NASUWT) accepted the idea of a career 'gateway' for competent teachers, and were prepared to negotiate with the government, although they remained dissatisfied with some of the threshold processes and principles, especially that of linking teachers' pay to 'crude exam league tables' (Wragg et al., 2004 p.93).

About 60 per cent of head teachers surveyed in 2001 were opposed to performance pay 'in principle', but 39 per cent were in favour. Heads' concerns about implementing the threshold included: lack of training for them; the inroads made on their time and that of teachers; and perceived lack of clarity and guidance about how the procedures should be carried out. After the first round, in which 97 per cent of applicants were successful, many head teachers, experienced a sense of 'futility':

Since 97 per cent of eligible teachers who applied in the first round of threshold assessment were successful, the exercise seemed more of a general pay rise than a sieving of the most competent, barely worth the time and effort involved, especially as most heads had to deal with the applications entirely on their own. This sense of futility was compounded by the usually negative reaction of the unsuccessful, some threatening action against the decision, a prospect of which heads were fearful. (Wragg et al., 2004, p.63)

Phase 2: Performance management

The second phase of the performance pay strategy in England was *performance* management.

As in most performance management schemes, schools were given a set of procedures to follow. Teachers' performance was to be monitored and reviewed annually against a set of performance standards developed by the DfES. Teachers were to provide evidence of meeting the appropriate standards in school-based evaluation process directed by the principal and involving other school managers, such as Heads of Department. However, Wragg's research discovered that the scheme was implemented very differently in different schools.

In three years (2001–2003) Wragg and his co-researchers surveyed over 1000 head teachers and undertook intensive case studies of 32 teachers involved in performance management systems in their schools. Most teachers and heads believed that, if implemented as designed, the system would have the capacity to bring about improvements in practice. They saw the advantages of the scheme as:

- providing a clear structure for improvement;
- providing opportunities for reflection recognition of teachers' strengths and achievements;
- allowing teachers to discuss their career aspirations with managers;
- sharing good practice;
- helping to identify appropriate professional development; and
- higher salary.

The main disadvantages perceived by the teachers and head teachers were:

- additional stress and pressure;
- 'bureaucracy';
- time consuming nature of the processes;
- potential to be divisive; and
- problems with measuring pupil progress.

Wragg concluded that 'few teachers made significant changes to well-established classroom routines as a result of performance management' (p.147). Despite 'significant' variation in implementation between schools they found that most teachers appeared to be quite relaxed about the processes. Team leaders and heads were seen as unthreatening, and early anxieties about missing out on salary increases proved unfounded when it became apparent that, similarly to the Threshold, almost all teachers

would progress smoothly up the pay spine, as in the days before performance review. Not a great deal appeared to have changed.

By 2003, 56 per cent of heads surveyed (four percentage points fewer that the 60 per cent of 2001) were saying that they were not in favour of performance-related pay. The researchers did not see this difference as significant:

What was especially notable...was that the figure of about 60 per cent being in favour, albeit sometimes with reservations, had remained remarkable and robustly consistent over the whole of the two-year period that separated out two national surveys. (Wragg et al., 2004)

Performance Management schemes in Australia

As noted in Section B of this Report, schools in most Australian state education systems now carry out processes of Annual Performance Review (APR) for teachers. In some systems, these processes are linked to teachers' pay, in that increments can be withheld for unsatisfactory performance. Criticism of these schemes largely reflects that of the English Teacher Incentive pay project. A recent report commissioned by the Victorian Department of Education (Boston Consulting Group 2003) states:

In practice ... the performance management system does not work in most schools. Objective, independently collected data on teacher effectiveness are not used in the vast majority of schools. Often, teachers themselves provide the only evidence to support their assessments. . Schools see the process as cumbersome and low value, and many teachers do not see it as constructive. Very strong teachers tend to characterise the process as a waste of time, while less strong teachers may question the school leader's ability to provide them with objective feedback. (Victorian Department of Education and Training, 2003, pp. 24-25)

These reviewers found that while 99.85 per cent of Victorian teachers received a 'successful' performance review outcome, principals' perceptions of teachers' performance told a different story: 10–20 per cent of teachers were seen by their principals as 'outstanding'; 40–60 per cent were seen as 'good teachers'; 10–30 per cent as 'below average performers'; and 0–20 per cent as 'significant under performers. On this basis, the researchers concluded:

The net result is that the outcomes of the performance management process bear no relationship to teacher performance as perceived by most principals. (Victorian Department of Education and Training, 2003, p.25)

A study of teacher evaluation in Australia by Kleinhenz and Ingvarson (2002), which included a case study of one large secondary school's implementation of Annual Performance Review, found that the attitudes of the Principal, senior managers and teachers in this school towards APR were, on the whole, positive, but that its purposes were unclear to them:

There seemed to be tacit understanding among all participants that the processes should be as understanding as the meeting of basic accountability requirements would allow. The processes were simple and time spent on them was minimal. 'Comfortable' was the adjective most commonly applied to the relationship between reviewers and teachers. (Kleinhenz & Ingvarson, 2002, p.24)

Standards developed by the employer, the Victorian government education department, were used to guide the review processes, but teachers and administrators did not appear to fully appreciate how the standards could be used to assess or improve teacher quality:

The generally limited amounts of time they (the principal and managers who conducted the reviews) were able to give to the processes meant that their suggestions for improvement did not go far beyond helping teachers to identify strengths and weaknesses and directing them to appropriate (out of school) professional development. They had used the standards as *categories* in which to make comments but they had not even started to think that the standards might be used to indicate *levels* of performance. (Kleinhenz & Ingvarson, 2002, p.23)

Recent developments in performance pay in the USA

Knowledge and Skills-Based Pay Schemes

The main characteristics of knowledge and skills-based pay schemes were described in Section A of this report. These schemes aim to replace the traditional incremental salary scales with a few major salary stages based on more direct measures of teacher

knowledge and skill. Unlike merit pay schemes, teaching standards provide the criteria for assessing performance. Several types of professional knowledge and skill might be rewarded in this type of pay scheme, such as:

- 1. Increasing depth of expertise in a teacher's field of content, curriculum and teaching (as might be assessed through National Board Certification processes)
- 2. Widening areas of expertise as in gaining registration in new fields of teaching
- 3. Development of skills in providing teacher leadership and team management.

The introduction of knowledge and skills-based pay schemes to teaching has occurred in parallel with more sophisticated methods for developing standards for good teaching. These new forms of teaching standards aim to be research based and to represent what accomplished teachers should know and be able to do. The evidence is that when teachers develop standards in their specialist fields, in collaboration with researchers, they are much more demanding than standards developed by employing authorities for performance management purposes³. Many studies indicate that teachers view these "profession-defined" standards as valid and useful as a guide to long term professional development planning.

The development of professional teaching standards has enabled the development of methods for assessing teacher performance that better reflect the complex nature of teachers' work. The purpose of standards is to define the domain of accomplished teaching – what accomplished teachers know and do. Standards-based assessments of teacher performance have to gather data relevant to all the elements in this complex domain. This calls for multiple forms of evidence - from samples of student work over time, videotapes or direct observations of classrooms, tests of content and pedagogical content knowledge, student feedback, to documented contributions to improving the professional and wider school community.

Some examples of KSBP schemes in the USA, and research that investigated stakeholders' attitudes towards them, are described below.

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³ Ingvarson, L. & Kleinhenz. E. (2006). Ibid.

The Cincinnati scheme

In the 1999–2000 school year the Cincinnati Ohio school district field tested a pay for performance scheme designed to overcome some of the by now well known problems in attitudes towards performance pay.

The scheme involved major changes to the pay structure, chief of which was building links between teachers' pay and a standards-based teacher evaluation score. The standards used were based on Charlotte Danielson's *Framework for Teaching* (Danielson, 1996). Teachers' performance on each standard was to be rated at one of four levels. Evidence included six classroom observations and a portfolio prepared by the teacher. The results of the evaluation were intended to be reflected in a new pay scheme, to take effect in the 2002–2003 year.

To move to a higher category on the new five point salary scale, Cincinnati teachers had to demonstrate a higher level of professional practice. If a teacher failed to improve enough to move to a higher point, his or her salary would be capped. Teachers were to have a fixed number of years to move beyond the first two categories. If they failed to improve to this extent non-tenured teachers risked losing their jobs. The consequences of a poor evaluation for tenured teachers included negative effects on their eligibility for lead teacher status or placement in a peer assistance program and possible loss of salary (Heneman & Milanowski 2003, p.175).

As Milanowski and Heneman (2001) and Heneman and Milanowski (2003) discovered, teachers', principals' and administrators' perceptions of the scheme reflected some 'successes' and some 'problems'. The main success was that teachers accepted and welcomed the standards as an accurate representation of good teaching. Many teachers could see the potential of the standards for helping them to improve their performance.

On the deficit side, principals and administrators found that the system was seriously increasing their workload. This was exacerbated by some technical design problems, such as insufficient guidance from the scheme's developers about the amount and kind of evidence to be assessed.

Teachers were concerned about:

• extra workload on top of already crowded work schedules;

- uncertainty on evidence requirements, and about length and timelines;
- the knowledge and suitability of the evaluators to conduct the evaluations, especially in terms of subject content knowledge;
- the novelty of the system and implementation difficulties;
- interpretations of the rubrics across schools, with resulting inconsistencies;
- administrators' management of the processes;
- lack of feedback from evaluators;
- perceptions that the implementation of the scheme was disorganised and confusing;
- the fairness of the processes;
- the evaluators not understanding the classroom context;
- it being impossible to perform at the highest levels due to characteristics of students;
- classroom observations occurring at unrepresentative times;
- misinformation, e.g. allegations (false) that a quota would be placed on the number of high ratings available;
- the processes being too time consuming, stressful and burdensome; and
- the new system putting teachers' salaries at risk (even on the part of teachers who obtained high ratings).

On the positive side, teachers reported that they accepted the standards and assessment rubrics as an accurate representation of teachers' work. They also said the scheme had caused them to:

- reflect more on the quality of their work;
- better align their teaching to student standards;
- become better organised; and
- improve lesson planning and classroom management skills.

Despite further modifications, which included an extensive training program for assessors and administrators, painstaking attempts to ensure that the evaluations were fair and reliable, and support for teachers who were not able to demonstrate performance at the required levels, the Cincinnati pay for performance scheme was ultimately unsuccessful. The new pay schedule, due to be implemented in 2002–2003 did not eventuate because a large majority of teachers (96 per cent in a teacher association ballot) formally rejected the link between the evaluation system and the proposed pay system.

After three years, the teachers voted out the leaders who had helped design the system, and then voted down the pay system itself. The implementation glitches and potential salary loss led to ongoing teacher perceptions that the evaluation system was not good enough to use for consequential decisions, even though considerable research has shown high levels of reliability across both principal and teacher assessors, and significant linkages between teacher evaluation scores and value-added student learning (Milanowski, Kimball & Odden, 2005; Odden & Wallace, 2006).

The Vaughn Charter School scheme

Much more successful than the Cincinnati attempt to introduce a pay for performance scheme was a program, now in its seventh year, which began in 1998 at the Vaughn Next Century Learning Centre, a charter school of 1200 students in Los Angeles. (Charter schools in the USA are publicly funded elementary or secondary schools that have been freed from some of the rules and regulations that apply to other public schools in exchange for accountability for results. These results are negotiated with the school and set out in each school's Charter).

At Vaughn, the new teacher evaluation system was implemented concurrently with the new salary structure. Initially, the scheme was only available for new and early career teachers. Like the Cincinnati scheme, the evaluation system was based on an adaptation of the performance standards developed by Danielson (1996). The evaluators include a peer and school administrator trained to use an adaptation of the Danielson *Framework of Teaching*. The main forms of evidence are classroom observation, teacher artefacts, student work samples and interviews. Ratings on each of the 30 odd standards in the adapted Framework range from 1-4.

For beginning teachers with a full teaching license, the initial salary increases by about 3-4 per cent for five years, subject to achieving satisfactory ratings (2) on the Danielson standards each year. Beyond this point, teachers can move through three salary "tiers". Progression through the tiers depends on achieving higher ratings on the performance standards (2.5 average for Tier 1, 3 for Tier 2 and 3.5 for Tier 3. Additional salary increases can be gained for:

- Acquisition of specific skills and knowledge needed for the school's teaching program (e.g. Literacy expertise; ESL; subject matter knowledge, technology, etc.)
- Contingency pay (e.g. improved student attendance, discipline, parent partnerships
- Management and leadership skills
- School-based awards based on increased performance on statewide student achievement tests (\$1500)
- Further credentials (Masters Degree \$2000; National Board Certification \$4000).

The salary of a licensed first year teacher in 2000, USD32,500 could rise to about USD 55,000 under this scheme. The overall salary package provided more money potentially than teachers would have been able to receive in the Los Angeles Unified School District. In the first year of the scheme, Vaughn met its student performance targets, so all teachers received the performance bonus, offered under California's Academic Performance Index (API) to schools in which student achievement improved to a specified level.

Kellor (2005) suggested that part of Vaughn's success in gaining stakeholder support for its innovative teacher compensation scheme linked to a standards-based teacher evaluation system was its status as a large urban Charter school. The original plan was to extend the program over several years to include more senior teachers. Some veteran teachers, however, who saw the amount teachers in the program received, and who believed that their teaching was of a sufficiently high standard to earn the performance reward demanded to be allowed to participate. Largely because of these demands the date for full implementation was put forward, and the program was offered, on a voluntary participation basis, to all teachers at Vaughn in the 1999-2000 school year. An independent survey of Vaughan staff showed that 75 per cent of teachers felt motivated by the knowledge and skills elements in the standards and wanted the program to continue.

The Denver Pay for Performance Scheme

In 1999 the state of Colorado initiated the *Pay for Performance Pilot* in the Denver Public Schools system. This pilot was initially planned to last two years before full implementation of a pay for performance scheme that would link teacher compensation directly to student achievement. It is significant because the lessons learned in the course

of the pilot resulted in a system, finally implemented in 2005, that was very different from original highly simplistic attempts to link teachers' pay to improved student achievement.

The core idea of the pilot was for teachers to set one or two learning objectives for their students. For each objective achieved, the teacher received USD750.

Although the pilot, from the outset, had the support of the teachers' union, most teachers' reactions were lukewarm. Surveys carried out by the Design Team (Gratz, 2005) showed that teachers believed that, since they were doing the work anyway, they might as well be paid extra for it:

'As far as PFP (Pay for Performance) goes, it's easy money. I was doing it and I'm still doing it.'

'We were setting goals even before PFP, so why not get the 1500.'

There was also a feeling that, since Pay for Performance was inevitable, teachers and schools should take the opportunity to be involved in shaping it:

"... We want to be a part of reform instead of just being the object of it."

'Oregon has imposed PFP through legislation. If the Colorado legislature imposes it, we'll be glad that we tried it out on our own and that we have data'

After two years the pilot seemed to be having little impact. Principals reported that parents seemed unaware of it, and they themselves only gradually became aware of its possibilities as a management tool. Most teachers (89 per cent) met the objectives and received the bonuses.

Donald Gratz, who led the research team for the first half of the pilot, believed that the notion of rewarding teachers on the basis of self-set objectives for students' performance was flawed:

The easier the objective, the more likely the pay-increase. How is it possible to manage such an undertaking without having teachers rush to the bottom

with easy to achieve objectives? The lesson, I submit, is that teacher-set learning objectives, with support, are beneficial to student learning. By contrast, providing a bonus encourages teachers to keep these objectives low, and is a disincentive to higher standards. (Gratz, 2005, p.577)

Gratz also pointed out that simply offering more pay for increased effort assumed not only that teachers were not trying their best already, but also that the necessary skills and knowledge and resources were not at issue. Surveys conducted throughout the pilot showed that not even its strongest supporters among the teachers believed the pay incentive was causing them to work any harder – mainly because they thought they were already working as hard as they could. Many difficulties were experienced with regard to measuring students' learning and attributing improvement to the work of individual teachers.

However, the scheme did have some (mostly unintended) positive consequences. These included an increased focus on student learning, improvements in teachers' collaborative assessment skills, and improvement in the district's curriculum alignment. None of these improvements, Gratz pointed out, could be directly linked to teacher motivation.

The Denver pilot did not result in the abandonment of pay for performance for teachers in that state. On the contrary, it paved the way for the much more thoughtful and comprehensive Professional Compensation System for Teachers ('Pro Comp'), in which student achievement is just one component of a system that includes a standards-based teacher professional learning and evaluation process that aims to improve their skills and knowledge. Designed in a partnership between the Denver Classroom Teachers' Association and Denver Public Schools, 59 per cent of teachers voted in favour of this scheme in March 2004 (Press Release Denver Public Schools, March 19, 2004). The scheme gained teacher and union support because it acknowledged the professional concerns raised in the pilot:

Denver's pilot has shown once again – and confirmed through a more complex experiment and a more comprehensive study than has ever before been conducted – that a system that attempts to closely measure and regulate instruction provides negative rather than positive incentives. The final Denver product addresses these concerns. It breaks new ground in its scope and in showing teacher willingness to move beyond the seniority-based system currently in use across the country (Gratz, 2005, p.581).

Pay for performance schemes in Iowa, Philadelphia, Steamboat Springs

Recent attempts to introduce pay for performance schemes in Iowa and Philadelphia have met stakeholder opposition similar to that experienced in the Cincinnati example, as did a scheme in Steamboat Springs that failed to reach the implementation phase (Odden & Wallace, 2006). Part of the reason for this failure to win the hearts and minds of participants seems to have been that they attempted to introduce ambitiously large scale changes without giving sufficient care and attention to aligning the schemes with the districts' missions and objectives, and with other elements of human resources management. They also appear to have underestimated the challenges of implementation.

More successful was a scheme introduced in the 1990s in Douglas County. In this scheme, which made minimal changes to existing structures, 'knowledge and skill bonuses' were added on to a traditional salary schedule. Teachers were required to demonstrate continuing competence in order to access pay increases based on experience (Hall & Caffarella, 1996, 1998).

Research by the Consortium for Policy Research in Education (CPRE)

For nearly a decade, the Teacher Compensation Group of the Consortium for Policy Research in Education (CPRE), based at the University of Wisconsin-Madison, has been studying the design and effectiveness of pay for performance schemes in the USA. The CPRE research, which aims to help schools and districts to 'fend off another round of failed merit pay programs', has comprehensively investigated the attitudes of stakeholders, especially teachers and administrators towards various examples of performance pay schemes (http://www.wcer.wisc.edu/cpre/tcomp).

Initially the CPRE research focused on school-based merit-pay type performance programs in which each teacher in a school received a bonus for their part in meeting or exceeding student achievement goals (Heneman, 1998; Kelley, Odden, Milanowski & Heneman, 2000; Heneman & Milanowski, 2002). They then shifted their research focus to knowledge and skills-based schemes that paid teachers extra for acquiring and demonstrating specific knowledge and skills that were seen to benefit student achievement.

In 2006, researchers Heneman, Milanowski, Kimball and Odden (2006) reported on findings from four 'sites' that used Charlotte Danielson's *Framework for Teaching* (Danielson 1996) or an adapted version as the basis of KSBP evaluation schemes that were trialled and implemented between 1998 and 2001. The sites were the Coventry (9 schools), Washoe County (88 schools) and Cincinnati (81 schools) districts, and the Vaughn Charter School in Los Angeles described earlier. A key aim of the researchers was to uncover administrator and teacher attitudes towards the schemes:

...administrator and teacher reactions are a major determinant of the willingness of administrators to use the system as designed, and of teachers to agree to link pay with assessments of performance. The initial acceptance and long term survival of the evaluation and KSPB system will be jeopardized if administrators and teachers believe the evaluation system is unfair, overly burdensome, and not useful in guiding teacher efforts to improve performance. (Heneman et al, 2006)

At all sites the researchers found that:

The most positive and least varied reactions were to the performance competency model embedded within the evaluation system. Teachers generally understood the standards and rubrics comprising the evaluation systems, and agreed that the performance described at higher levels described good teaching (Heneman et al., 2006, p.6).

Many teachers interviewed said that this was the first time they had a clear understanding of the districts' expectations of their performance. Many also said that the standards helped them to have useful conversations about practice with their principals.

Most teachers believed the evaluations were fair, although some raised concerns about the procedures used. The main issues related to perceptions of trust, subject matter expertise, familiarity with the context and preparation. They were also concerned that school administrators were not always able to conduct sufficiently thorough evaluations and provide useful feedback because of competing demands in their own workloads. Some evaluators were perceived as too strict, some as too lenient (Henemen et al., p.6).

Henemen found that Principals and other school administrators generally agreed with the teachers on most aspects, especially on the point that explicit standards describing

performance helped them to have more productive professional conversations with their teachers. They also felt that the amount of evidence collected, in combination with the rubrics describing the four levels of performance, helped them to be more effective as evaluators. However, they were less happy with the amount of work placed upon them by the new evaluation procedures. Some said that it had meant extending their work day, or causing them to work longer on weekends.

An important feature of the CPRE research was that positive correlations were found across the four sites between the teacher evaluation scores and (value added) estimates of student achievement in Reading and Mathematics. The correlations were highest in Vaughn and Cincinnati, where teachers were aware of possible future links between pay and performance. The researchers 'speculated' that the higher correlations in Cincinnati and Vaughn may have been due to the use of multiple evaluators, better training of evaluators, and, especially at Vaughn, a longer history and stronger culture of agreement about what constituted good teaching. Given the size of recent estimates of likely effects of teacher input on student learning (Nye, Konstanopolis & Hedges, 2004; Rowan, Correnti & Miller, 2002), they remarked, however, that these results in Vaughn and Cincinnati were 'about what one might expect' (Henemen et al., p.5).

The most central issue for KSBP schemes is, of course, how to identify teachers who 'deserve' to be paid more on the grounds of superior knowledge and skill. Who will decide, and on what basis? In most of the schemes discussed in this section so far, the decision was made 'in-house' under the authority of the school principal, with various kinds of involvement on the part of peer teachers and school administrators. In its most sophisticated form, the decision to award higher pay involved the collection and evaluation of various kinds of evidence, including classroom observations, based on a set of teaching standards, such as those of Charlotte Danielson's *Framework for Teaching*. Research on attitudes towards schemes of this nature, showed, among other things, that teachers and administrators respected fair and valid evaluation systems based on acceptable standards, and that they accepted the notion of rewarding superior teaching performance as demonstrated in such evaluations.

If 'the devil is in the detail', a considerable amount of devil would appear to lie in the fidelity and quality of implementation as the central determinant of the outcomes of performance pay schemes. Large school systems need to ensure that methods for collecting evidence and judging teacher performance for financial reward decisions will be fair and valid, that principals and administrators can continue to work with

disappointed teachers, and that the workload and stress levels will be manageable. For many, these challenges are so great that they believe they can only be overcome through performance pay schemes that place responsibility for the evaluation of performance in the hands of external agencies, such as professional certification bodies.

Certification-based performance pay systems

The viability of a performance pay scheme depends more than anything else on the validity and fairness of the procedures for assessing performance. Developing and operating a rigorous system for assessing teacher performance is a complex business. It requires resources well beyond those of most schools to develop valid teaching standards, methods for gathering multiple forms of evidence and procedures for training assessors and minimising bias.

The history of merit pay schemes indicates that it is a mistake to leave the operation of a high stakes assessment system to individual schools and the micro-politics of school life (Johnson, 1986; Murnane & Cohen, 1986; Blase, 1991). This practice also undermined the credibility of the English Threshold reform and the Advanced Skills Teacher reforms in Australia and we have seen in the previous section that it can be a problem for knowledge and skills-based pay schemes if implementation is left to individual schools.

The measure of "performance" in a performance-based pay scheme may be based instead on an assessment system operated by an agency external to the school. This is increasingly the pattern. In some cases, this agency is established within a particular school system, such as examples below from Scotland and Australia. In other cases, this agency may be a national professional body providing a certification service to all school systems such as the Dutch Principals Academy and the National Board for Professional Teaching Standards in the USA.

As explained in Section A, professional certification is an endorsement by a professional body that a member of that profession has attained a specified standard of knowledge and skill. In this sense, professional certification is a special case of knowledge and skills-based pay, except that the process of developing standards and methods for assessing performance is conducted by a national professional body rather than a single employing authority. The standards are profession-wide and the certification is portable – not tied to a particular job or position in a school. While professional certification is usually voluntary, when it is recognised by employing authorities as a credible measure of a

certain level of professional accomplishment it provides a powerful incentive for standard-based professional learning (Ingvarson & Kleinhenz, 2006b).

Three examples of certification-based pay schemes are discussed here. The first two are the Scottish *Chartered Teacher* scheme and the Australian '*Advanced Skills Teacher*' classification. The 'portability' of the certification in each these schemes is limited to the particular education systems in which it was developed. However, as this certification gains credibility, teachers may find that it has currency beyond its system of origin.

The third example, the NBPTS certification system, is one of the most well known and widely used of its type. Most states in the USA now offer salary increases or bonuses to teachers who gain National Board Certification. California has been offering an additional USD20, 000 bonus to National Board Certified teachers who move to disadvantaged schools. The bonus is spread over four years.

The Standard for Chartered Teacher Award in Scotland

The Chartered Teacher reform aims to provide incentives for professional development and a career path for expert teachers beyond the top of the Scottish incremental. To gain the Chartered Teacher Award a teacher needs to provide evidence that they have attained the Scottish *Standard for Chartered Teacher. The Chartered Teacher Award* is a 'portable' qualification that attaches to the teachers who hold it, and allows those teachers to command a higher salary, whatever positions they hold in any government school. All teachers who teach in the government school system in Scotland and who hold the Chartered Teacher Award, or have made progress towards it, are entitled to substantial extra pay (about 20 per cent).

The Chartered Teacher concept emerged from a major industrial settlement in 1998 that led to a significant improvement in teachers' pay and conditions. The Chartered Teacher reform makes an interesting contrast with the English Performance Threshold Assessment reforms described earlier. Menter et al., (2004) compare the two approaches and argue that "the Scottish example is strongly oriented towards professional development, while the English example is oriented towards performativity and teacher assessment".

The Standard for Chartered Teacher Award 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.

There are now two 'routes' for achieving the Standard for Chartered Teacher status: the 'Program' Route; and the 'Accreditation' Route. Teachers who choose the program route complete a serious of modules or courses with their chosen Providers. 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. All assessments are carried out by the candidates' chosen "Providers", such as a university.

Chartered teachers receive a salary increase of up to £7,000 per annum (approximately AUD17,000). Applicants are expected to cover most of the costs of undertaking the modules. This can range from £6,000 (accreditation route) to £12,000 (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.

The Chartered Teacher initiative is still in the early days of implementation. At this stage it is hard to gauge teachers' attitudes and the impact it may be having on their work and students' achievements in Scottish schools. An article by Hugh Reilly in The Scotsman raised doubts about the program's likely effectiveness:

Objective evidence clearly shows the CT program is dead in the water. Of 20,000 or so teacher who meet the criteria (by reaching the top of the unpromoted pay scale), only 6,000 expressed initial interest. To date only 2,500 have embarked on the CT program. (Reilly, 2005)

This article elicited quite a strong , mostly negative, response from teachers, who criticised the cost of the program, its 'academic' focus, and the large amount of extra work it placed on teachers ('There's no way I'm giving up my weekends to be lectured at', said 'Freddie' in *The Scotsman* on May 6th 2005). Anecdotal evidence suggests that teachers resent the large investment of time and money needed to access the Award, and that many believe the reward is not worth the effort.

The GTCS itself, however, believes that there is sufficient anecdotal evidence to show that the teachers who are undertaking the program find it a powerful means of improving their practice (Conversation with GTCS representative, 2005). The Education Minister, Hugh Henry, announced a review of the Chartered Teacher program on 1 December 2006.

'Advanced skills' positions in Australian education systems

As indicated in Section B, three Australian states and Territories provide pay beyond the top of the incremental scale for accomplished teaching performance, based on a standards-based assessment process. These schemes include the Level 3 Classroom Teacher classification in WA, the Teacher of Exemplary Practice position in the NT and the Advanced Skills Teacher classification in SA. The origins of these classifications go back to the Advanced Skills Teacher Reforms of the early 1990. Salaries for these positions are roughly 10 per cent above the top of the incremental scale, however, teachers who are not at the top of the incremental scale can apply for these positions, in which case the increase in salary they receive can be considerably higher.

Each of these school systems has established central guidelines for assessing applications for these positions. In the WA example, the task of developing and operating the standards and the assessment process was initially contracted out to a university (Jasman & Barrera, 1998). An association of Level 3 Classroom Teachers now manages the process.

Apart from an evaluation of the Level 3 Classroom Teacher position which was carried out in 2001 (Ewing, 2001) most evidence of teachers' attitudes towards these schemes is still anecdotal. It suggests that teachers are not opposed to the notion of financial reward for demonstrated superior teaching skills. In each case, they seem to regard the various assessment processes as fair and valid, and believe that preparation for the assessment makes a valuable contribution to their own professional learning.

The Level 3 Classroom Teacher classification is of particular interest because the evaluation is standards-based and carried out by peer teachers in processes that are external to schools. In these respects it bears some similarity to the NBPTS evaluation procedures. Insofar as it is a system-wide initiative that provides a substantial reward for

teachers who teach within that system, it is similar to the Scottish Award for Chartered Teachers.

Ewing's research, which was commissioned by the Department of Education in WA, found that the majority of Level 3 teacher candidates (successful and unsuccessful) who responded to surveys and participated in interviews believed that the assessment processes were 'valid', but that more than half of respondents had doubts about the 'fairness' of the evaluations. This was thought to be due in part to the fact that assessors often taught in different fields and at different levels from the teachers being assessed (p.33). Respondents were very positive about the benefits of going through the application process on their professional development. Anecdotal evidence indicates that the Level 3 process and position have not had negative effects on staff working relationships.

Seventy-two per cent of respondents in Ewing's study believed that the portfolio assessment process was rigorous. Eighty-three per cent of survey respondents felt that, in terms of rigour the assessment process 'far outweighed the application requirements of other promotional positions (Ewing, 2001, p.31). This raised questions about the relative rewards offered by the two types of position. It is common to hear WA teachers say that it easier to gain promotion and salary increase by applying for a deputy-head position than by applying for the Level 3 classification.

The low 'pass rate' (333 successful applicants of a total 1095 in the two Level 3 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 Level 3.

The National Board for Professional Teaching Standards (NBPTS)

The NBPTS was formed in 1987 to advance the quality of teaching and learning in the USA by developing professional standards for accomplished teaching, creating a voluntary system to certify teachers who meet those standards and integrating certified teachers into educational reform efforts. It is an independent, non-profit, non-partisan and non-governmental national organization with 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.

Most states and a growing number of districts in the USA now offer extra rewards, including annual bonuses and higher salaries to encourage teachers to apply for National Board Certification. States and districts increasingly reallocate their professional development budget to cover the application costs, as evidence mounts about the validity of the assessment and improvement effects of the process. They are also offering salary incentives to attract and retain teachers who have NBPTS certification (Odden & Kelley, 2002).

There are several very significant differences between National Board Certification and the kinds of evaluation used to determine teachers' eligibility to receive higher pay in other systems. First, the standards on which the evaluations are carried out are 'profession-wide' in that they are written not by employers in particular systems or jurisdictions, but by teachers who have been nationally selected as experts in their fields. (However, the Board has members from employing authorities, and consults widely with all stakeholders to ensure the acceptability of standards.) Teachers feel they have 'ownership' of the standards, which have now been developed in about 30 subject and/or levels of schooling fields, and believe that they provide in-depth representations of their skills and knowledge. These standards are typically regarded as much more demanding than those developed for teacher performance management in schools.

The second difference is that carefully trained peer teachers, who have already demonstrated accomplishment in their field of teaching, carry out the assessment of teachers performance under NBPTS supervision. History teachers evaluate history teachers, early childhood teachers evaluate other early childhood teachers, and so on. Unlike some systems, especially performance management systems, in which teachers are evaluated by principals or other school administrators whose teaching expertise may lie in other fields, NBPTS certification processes ensure that teachers are evaluated by those with an in-depth knowledge of what is being evaluated. This encourages teachers' confidence in the validity and fairness of the processes.

The third difference is that the evaluations are conducted on the basis of multiple pieces of evidence which teachers are required to submit as responses to certain tasks. Teachers' knowledge of content and pedagogical content knowledge is assessed as well as practice. Each of these forms of evidence focuses on students' work, and on what students are learning as a result of the teacher's work. The NBPTS takes care to ensure the validity of its assessment tasks and scoring rubrics, especially the congruence

between the assessments tasks and the standards that are being assessed. A recent report by Ingvarson and Kleinhenz (2006a) describes in more detail the methods developed by the NBPTS for assessing teacher performance.

There is a large body of research on the National Board's standards and methods for assessing performance. The Board also commissions evaluations and studies of the validity of its certification system regularly. Several independent research studies have shown on balance that teachers who gain National Board certification have better student outcomes than those who do not (Vandevoort et al., 2004; Goldhaber & Anthony, 2004).

In a major study using longitudinal data covering all the North Carolina students in grades 3, 4 and 5 for the years 1995 to 2004, Clotfelter, Ladd and Vigdor found that licensing (registration), experience as a teacher and National Board Certification each had significant effects on mathematics achievement. However, further qualifications such as master's degrees obtained after five years of teaching were associated with negative effects on student achievement. This research, among other validity studies, indicates that National Board Certification would be a more direct way of rewarding performance than typical pay schedules in the USA.

Teachers who have been through the process of assembling evidence about their teaching and applying for Board certification routinely rate the process as the most beneficial form of professional development they have ever had (Tracz, 1995). Perhaps most important, the research suggests that standards-based schemes for assessing teacher performance and providing certification that leads to increased pay do not have the negative and divisive effects that so many earlier performance pay schemes had on staff relationships (Anagnostopoulos & Sykes, 2006).

Board certified 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 credible guarantees of teacher quality. Board certified teachers are thus rewarded in terms of enhanced status and expanded employment opportunities as well as financial remuneration. Many districts now integrate Board Certification into collective bargaining and their salary frameworks (http://cpre.wceruw.org/tcomp/research/ksbp/certification.php).

A study commissioned by the Board in 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 per cent);
- was an effective professional development experience (96 per cent);
- enabled them to create better curricula (89 per cent);
- improved their ability to evaluate student learning (89 per cent);
- enhanced their interaction with students (82 per cent), parents (82 per cent) and colleagues (80 per cent).

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."

By 2006 nearly 120,000 teachers had applied for National Board Certification and around 45 per cent had been successful. Many who miss out the first time apply again. The application fee for National Board Certification is about USD2,500. This may seem expensive, but it is much less than the costs of a Masters degree. Many states and school districts pay the fee because they see as a better way of spending their professional development budget. An independent study by Cohen and Rice (2005) recently found that

the candidacy process and candidate support programs . . . incorporate elements of high-quality professional development identified in the research literature and are no more costly than other forms of professional development. . . Our findings on design and cost suggest policy makers should consider the NBC model as an alternative way to target professional development and salary rewards.

Other developments in performance pay

Individualised Pay in Sweden

One of the most radical reforms to teachers' pay arrangements has taken place in Sweden. With the cooperation of the teachers union, Sweden has effectively deregulated teachers' pay since 2000. The reform was consistent with public policy direction in Sweden in general and the decentralisation of the education system in the 1990s. With decentralisation, local municipalities demanded control of teacher salaries. The goals of the policy change were to:

- improve the efficiency, productivity and quality of the education system by providing local mangers the responsibility for setting pay in alignment with local needs;
- link teacher performance with pay; and
- improve teacher retention and recruitment.

Fixed pay scales have been replaced by market-based individual contracts that are negotiated between individual teachers and local employers. National pay agreements guarantee a minimum salary after one year of employment and individuals negotiate pay levels beyond that. The first national agreement stipulated an increase in national expenditure on teacher salaries of 20 per cent during the first five years of the agreement. Beyond these guidelines, the local municipality (the employer) has the flexibility to determine an individual teacher's pay. Subsequent salaries are determined once a year in local negotiations (Johnson, 2006). Strath (2004) states that, "the ultimate goal of all parties is to grant more autonomy on setting pay levels to the school managers and the expectation is that the use of the dialogue method will ultimately replace traditional negotiations" (p.9). Strath reports that a recent study by the largest teacher union found that 60 per cent of teachers are now in favour of individualised pay compared to less than

one third in a 1999 study. Newer and younger teachers viewed the new scheme more favourably than more experienced teachers.

Strath lists some implementation challenges that are already becoming clear:

- Individualised pay requires thorough training of all local managers in the procedure; this has been a challenge to many municipalities and a reason unions have used traditional negotiations.
- The devolution of authority with regard to pay has caused power struggles among local stakeholders.
- Successful implementation of the performance-based part of the system requires clear incentives for those involved in the process. Therefore, holding principals accountable for school results is crucial.
- It is critical to have clearly defined criteria on how to evaluated teacher performance and clear objectives for schools.
- Schools and municipality need to have adequate and equitable financial resources
 or the individualised pay system will lose credibility and potentially create
 inequitable conditions for hiring and retaining teachers.

One of the authors visited several schools in Sweden recently and interviewed teachers and principals about this reform. It was clear that the new arrangements were being used by principals primarily to attract teachers in shortage areas rather than performance pay. One of the effects of this was that experienced teachers found it harder to negotiate salary increases than younger teachers.

One young male teacher in a middle school was clearly benefiting from the new system. He had been teaching four years and was highly regarded by the principal. Through negotiations with the principal, his salary had been raised by about 30 per cent since he started.

The following comments were made in a group of high school teachers who were talking about the new performance-related pay system:

We call it the "rumour-based" salary. The principal never sees what we do, though the new salary is supposed to be based on the quality of your teaching. Principals just don't have the time – to see what you do. Younger teachers are getting bigger raises than older teachers.

There is no way to have a career - as a teacher. Performance- related pay? That's a principal decision. It produces envy.

Young teacher: "You need a higher salary to attract us."

Older teacher: "But, you need a higher salary to keep us!"

When asked later how he decides who to award pay increases to, the Principal of this school wet his index finger and pointed it to the sky, as if testing the wind. Teachers also talked about the pay system in another high school:

Pay is now related to how much extra work you take on, above the basic job – helping the team. Teachers make up the criteria for extra pay themselves. It's based on how active you are in developing the school – not for being a better teacher.

Teachers who have come to the school recently can negotiate a higher salary than teachers who have been here a long time.

Young teachers have more negotiating power – Sometimes I feel a bit stupid for staying on.

Principal's comment: The new teachers ask for more money than the experienced teachers.

A young female teacher in a primary school pointed out that she is now paid more than her mother, who is also a teacher. On the new pay system, she comments:

The idea is good – though you have to sell yourself. You have to wonder whether the principal really know how good you are.

The real problem is how to get the good teachers to stay!

This Swedish experiment will be interesting to watch.

Career Tracks in Singapore

The following summary is based on a report by Lynn Olson (2007) of a seminar convened by the Aspen Institute in 2006.

Singapore has a well developed career system to recognize and reward outstanding classroom teachers. Its education system is highly centralized and schools follow a national curriculum, with national tests for students at key intervals. Teachers are

employed centrally by the national Ministry of Education; becoming a teacher is a highly competitive process and applicants are drawn from the top one-third of their college classes. They are paid a full monthly stipend while they complete one to three years of teacher study at the National Institute of Education, after which they are obligated to remain in teaching for three years. Teachers with an honours degree earn higher beginning salaries than other teachers.

Since 2002, Singapore's Ministry of Education has started a new incentive payment scheme to encourage teachers to make teaching their long-term career. Teachers receive a retention bonus for every three to five years they stay in the service. This has helped keep the resignation rate for teachers at less than 3 percent, despite the good performance of the Singapore economy over the last few years and increased job options in the private sector. To encourage a culture of learning in schools, the government pays for 100 hours per year of professional development for all teachers. Even so, said Wong Siew Hoong, the Director of Schools for the Ministry of Education, the challenge is to continue to motivate teachers to remain committed to the profession. "For teachers to do the best job," he said, "they must feel comfortable in school. They must feel ownership of the school community. And they must feel they want to do something for their students."

Partly for that reason, Singapore has developed a performance-based pay plan for teachers, which has been in place for about a decade, and more recently three career tracks for teachers to aspire to. "One of our governing principles is the concept of 'work for reward and reward for work'," explained Siew Hoong. "That assumes that people are incentivized by rewards and, therefore, as employers, we must reward people for their work." The performance-based bonus system provides rewards for both outstanding individual and team contributions in every school. In addition, on top of their base pay, individual teachers are eligible for annual bonuses, ranging from half a month's to three months' salary, based on the judgment of panels composed of people from within the school who have day-to-day knowledge of the teacher's work.

After their first three years in the classroom, teachers now can choose to pursue one of three career tracks: a leadership track; a specialist track, for those interested in curriculum and instructional design, educational psychology and guidance, educational testing and measurement, or educational research and statistics; and a teaching track. The "teaching track" caters to the majority of educators, who want to make excellence in classroom teaching the primary focus of their careers. Within that track, teachers can move up from a "senior teacher" to a "master teacher" to a "master teacher, level 2," with their pay

rising to reflect both their demonstrated expertise and the assumption of additional responsibilities.

Senior teachers serve as a mentor and role model for teachers in their schools. Schools also have been given the flexibility to arrange their workload so that senior teachers can spend more time mentoring younger teachers. Master teachers spend their time working on initiatives at the national level or assisting groups or clusters of schools. The master teacher's main role is to provide advice and guidance to teachers and to help introduce new teaching methods and pedagogy within subject areas. Master teachers are appointed on a fixed, three-year term, which can be renewed, with the cluster superintendent deciding on the deployment of individual master teachers in consultation with local principals. A master teacher might teach in a particular school for a semester or a year, for example, to provide model lessons for other teachers in the school to observe and learn from.

To move up the career track, teachers must satisfy various criteria to show they have the skills, knowledge, and competencies for the job, by submitting a professional portfolio of their work to a selection panel at their school. Among other things, applicants must demonstrate the contributions they have made to their school organization as a whole, their ability to collaborate with parents and community groups, to contribute to the character development and well-being of their pupils, and to advance student learning.

Under the career-track system, a master teacher can earn a salary equivalent to a career "specialist" level 1 or 2, while a master teacher level 2 can earn a salary equivalent to a school vice-principal. Individuals can also choose to move laterally across career tracks if they satisfy the criteria for the job or career track they want to enter. "Now we're saying that those people who are really, really good in the classroom, if we want to keep some of them in the classroom, we will move them into the teaching track," says Siew Hoong, "whereas in the past we would have moved them up and out of the classroom."

Singapore's Ministry of Education takes a very active role in managing the development of its educational workforce. It identifies potential leaders early, uses data to track their performance, and makes sure they get a range of experience to groom them for future roles. A competency-based performance management system evaluates teachers annually both for how well they meet current work targets and for their estimated career potential. The latter is used to identify training possibilities and to plan for future job postings and assignments. Singapore and Japan also share a commitment to keeping teachers'

mindsets open in a rapidly changing environment. Japanese teachers with 10 years' experience can spend several weeks in businesses, social welfare institutions, and other settings to improve their understanding of the broader society. In Singapore, teachers may spend two to three weeks working in private industry to gain a better understanding of real-world contexts. A "Teach Less, Learn More" initiative, launched in 2005, also encourages Singapore teachers to provide students with opportunities to speak up and engage in creative work in the classroom. "Our preoccupation now is really about the future," said Siew Hoong. "Our students are going into a future that is so unpredictable, where change is the norm, where they are expected to be learning and relearning. How do we get our students ready for that? How can we get our teachers to be role models?"

USA: The Teacher Incentive Fund

In 2004, President Bush introduced a \$500m "Teacher Incentive Fund" in the USA. The purpose of the Fund is to support programs that develop and implement performance-based teacher and principal compensation systems, based primarily on increases in student achievement, in high-need schools. The Fund aimed to provide a \$5,000 bonus to approximately 100,000 teachers across the country. However, the program provides no guidelines as to how states and school districts might use student performance to evaluate individual teacher performance in ways that are reliable and valid⁴, a problem that leading researchers in the field agree no one has solved as yet (Millman, 1997, Raudenbush, 2004). The Program also forces teachers to compete for a limited quota of one-off bonus payments, thereby ignoring previous research indicating the importance of pay schemes that foster, rather than undermine, stronger cooperation and joint effort within schools (Smylie & Smart, 1990).

(There were echoes of the Teacher Incentive Fund in the Victorian Liberal Party's policy announcement prior to the recent Victorian state election. The Liberal Party announced that they would introduce performance pay for teachers if elected. They proposed to award up to a 5 per cent bonus on their salary to 2000 Victorian teachers each year, with the criteria for awarding performance pay increases to be negotiated with teachers' representatives, school councils and the Minister for Education, and to be firmly focused on those teachers who add the most to their students' education and the school community as a whole.)

Whether a categorical grant program of this nature would produce commitment rather than opportunistic compliance, as many grant programs do, remains to be seen. It is

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⁴ http://www.ed.gov/programs/teacherincentive/faq.html

already clear that States and school districts are experiencing difficulties in preparing applications that meet the requirements of the U.S. Department of Education. The Department will appropriate less than half the money set aside for 2006 and provide more technical assistance to future applicants (Honawar, 2006).

In a recent article, Jim Guthrie (Guthrie & Springer, 2006), the highly regarded, former Dean of Education at Berkeley University called for more pilot studies and experimentation before rushing into policy implementation. What we know about pay for performance in schools, he argues, is far from conclusive, but what we do know is that:

- Measures of performance must be aligned with what a teacher can reasonably be expected to accomplish, and student-performance targets triggering teacher bonuses must be realistically achievable and announced in advance.
- Award-calculation procedures must be replicable and transparent, and of a financial magnitude perceived by teacher as significant.
- Construction of pay-for-performance arrangements should not discourage teamwork among teacher and others in a school, but must discourage free-riding.

It is around these principles that carefully designed experiments and pilot projects should take place and be subjected to careful scrutiny.

In the absence of experimentation and independent appraisal, the idea of paying teacher for performance will remain a reform dominated by hyperbole and assertion.

President Bush's Teacher Incentive Fund has also attracted considerable criticism from teacher unions. For example, Reg Weaver, president of the National Education Association has stated:

England tried it. Canada tried it. Several U.S. school districts have tried it. It has never worked. Paying teachers based on the test results of their students has failed for many reasons. But mainly it has failed because it hurts those that it purports to help: children.

Students learn best when teachers work as a team, not as free agents competing for a financial reward. These grants will promote unhealthy competition in a profession that thrives on teamwork and collaboration. Real learning is the casualty when teachers shift their focus from quality instruction to boosting test scores.

The Teacher Incentive Fund seems likely to follow the pattern of many merit pay schemes in the past⁵.

Summary and discussion

This section of the paper has presented an overview of pay for performance schemes and their impact. Three approaches to linking pay to performance were reviewed:

- 1. Merit pay,
- 2. Knowledge and skills-based pay, and
- 3 Professional certification

The evidence indicates that teachers' attitudes to performance pay depend very much on how "performance" is defined and the validity and reliability of the measures used to assess it. The level of scepticism among teachers appears to decline the more that teachers play a part in developing the standards and performance measures. The evidence is in that the most valid and challenging teaching standards extant have been those developed by teachers' professional associations, beginning with those developed by the National Council for the Teaching of Mathematics in 1989 and more recently, those developed by several Australian teacher associations (Ingvarson & Kleinhenz, 2006a).

So far as earlier merit pay schemes are concerned, their limitations are well documented (Johnson, 1986; Murnane & Cohen, 1986; Odden & Conley, 2002). These schemes were often introduced with insufficient understanding of what was involved in developing fair and valid methods for teacher evaluation. However, proposals for simplistic merit pay schemes continue to emerge.

Morrow (1992) studied merit pay plans in several states and districts and found that "there was no evidence in this study to support the position that it was pay-for-

⁵ http://www.whitehouse.gov/news/releases/2004/09/20040922-1.html

performance which improved student achievement" (p.285-286)⁶. Incentives in themselves did not necessarily improve what teachers knew and could do, or lead them to teach more effectively. More effective teaching was more likely to result from long-term, high quality professional learning promoted by knowledge- and skills-based approaches to performance-based pay.

More recently, there is evidence that some performance pay schemes are associated with improvements in student achievement. The Teacher Advancement Program is one example (Solmon et al., 2007), but it needs to be remembered that in this program performance pay is only one component of a set of support strategies designed to improve student performance.

Teachers are less sceptical about the possibility of fair, valid and useful performance assessments in knowledge and skills-based pay schemes. They are most positive about the methods for assessing performance used in external certification processes such as those for the WA Level 3 classification and National Board Certification.

The English *Teachers Pay Incentive Project* was shown to be similar, in some ways, to performance management and appraisal systems in Australian state education systems. The main similarity was that teachers' progress along negotiated pay scales or 'spines' in both the English and (most) Australian systems is subject to performance as judged in review and evaluation processes conducted at schools. In both cases, standards developed by the employer are used to assess teachers, and all processes are conducted by or under the authority of the principal.

Evidence suggests that stakeholder attitudes towards the English Teachers' Pay Incentive Project were initially negative, if not hostile. These attitudes appear to have shifted slightly, as teachers and principals perceive advantages, such as the sharing of good practice, identification of professional development needs and opportunity to access a higher salary (Marsden & Belfield, 2006). The chief problem seems to be that the system has 'settled down' and become 'domesticated' without producing significant change, as most teachers continue to move comfortably along the pay spine, much as before. Negative attitudes now appear to be mainly directed towards the time consuming, 'bureaucratic' nature of the assessment processes. Accessing the higher salary levels is seen as a burdensome hoop to be jumped through rather than as a rigorous means of

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⁶ Morrow, S.Y. (1992). A Study of Student Achievement Results Using Selective Teacher Payfor-Performance Models (Teacher Performance). Dissertation, Baylor University.

identifying and rewarding quality teaching. The little evidence available on performance management systems in Australian schools suggests similar attitudes among Australian teachers and school principals towards the various antipodean versions of performance review processes in schools.

The highly localised nature of American education is reflected in the many merit pay for performance schemes that have been attempted in various states and districts over more than 150 years. Stakeholder attitudes, especially those of teachers and school principals, expressed strong resentment that many 'merit pay' schemes seemed to rest on an assumption that teachers were not working hard enough, and that promises of money would exhort them to greater effort. Importantly, teachers often believed that the judgements of competence on which extra pay was awarded, were unfair. These negative attitudes 'brought down' many a scheme, causing commentators to question whether pay for performance was appropriate to education as an enterprise (e.g. Johnson, 1986).

In the latter part of the twentieth century and the first decade of the 21st, however, payfor- performance schemes that attracted stakeholder (especially teacher, principal and employer), support were designed and implemented in the USA and also in Australia. Some of the more successful programs in the USA were those that rewarded group (rather than individual) teacher performance. Most promising so far seem to be examples of knowledge and skills-based pay systems that reward teachers who have satisfied the requirements of an evaluation perceived to be fair, valid, rigorous and consistent.

Over 20 years ago the noted researcher Dan Lortie observed in response to a question about merit pay, 'The heart of the problem is that there is little agreement over what the art of teaching is' (Johnson, 1984, p.182). Since that time, much progress has been made in the development of professional teaching standards that set out to answer this problem. The first feature that is common to all recent successful KSBP pay for performance schemes is the development and application of standards that teachers recognise as providing accurate representations of their work. Older schemes that assessed teacher competence, based on behavioural checklists, tended to engendered attitudes of, at best, compliance, at worst, revolt.

Teachers readily understand and recognise that 'modern' standards, such as those of Charlotte Danielson's *Framework for Teaching*, the field specific standards of the National Board for Professional Teaching Standards, and sets of standards developed by Australian teachers' subject associations, accurately describe their professional

knowledge and skills. Teachers welcome such standards as a vehicle for improving their professional knowledge and skill, and appreciate that any assessment of their teaching that is made on the basis of such standards is much more likely to be valid than assessment based on a bureaucratic list of superficial 'competencies'.

In summary, many pay for performance schemes have been tried over at least 150 years, and most have failed because they have not gained the support of the stakeholders who are most closely involved in the processes, most notably teachers and school administrators.

This review indicates, however, that it is now possible to establish performance pay schemes that overcome many of the deficiencies of previous merit-pay schemes. These standards-based schemes need to be distinguished from "performance management" schemes, which are the right and proper responsibility of school managers. The focus of the latter is on whether teachers are fulfilling their contractual duties. The focus of the former is on providing incentives and recognition to teachers to move to high standards of professional performance that improve student outcomes.

Teachers view these emerging performance-based pay schemes more favourably; they have significant effects on teachers' professional learning, and they create a cadre of teachers who are credible and welcome mentors and leaders in schools. Employing authorities increasingly value the assessment services that a rigorous professional certification body can provide. They can recommend to their teachers that they apply for certification from an external, independent agency, taking away the difficult and onerous task of attempting to set up their own local performance assessment schemes that rarely gain respect. A rigorous professional certification system can give them a sound basis on which to offer incentives and recognition to retain valuable teachers who reach high standards of knowledge and skill. One key element in gaining stakeholder support for such systems is the development of fair, valid and rigorous systems for evaluating teacher performance. Another is that certification is an achievable goal for all teachers, not a special few, given adequate opportunities for professional development. A third is that the salary benefits must be substantial, reflecting a genuine commitment to value high quality teaching.

Paradoxically, standards-based performance assessment schemes developed by teachers' professional associations such as the mathematics and science teachers in Australia and the NBPTS in the USA are often much more searching and rigorous than those developed

by employing authorities (such as the English Threshold). NBPTS certification has gained a high level of credibility, with all stakeholders. As a result, states and school districts are increasingly giving some tangible form of recognition to teachers who gain NB certification in salary arrangements.

These new schemes might be called "evidence of professional development"-based pay schemes; evidence, that is, in terms of practices that are consistent with standards for accomplished teaching, and evidence of what students are doing and learning as a direct result of a teacher's teaching. Consequently, these new approaches to performance pay are regarded more favourably by teachers than the older schemes. They also have a much greater impact on encouraging teachers to engage in effective modes of professional learning - modes that help teachers develop toward higher standards. They also promote, rather than undermine, the development of accountable professional culture in schools.

Under what circumstances do performance-based pay systems gain professional commitment and improve student learning outcomes?

If a performance pay scheme is to achieve its chief aim of improving student achievement, it needs to identify the teaching practices (i.e. standards) that lead to improved student achievement and reward teachers who learn how to meet those standards. This review indicates that performance-based pay systems are more likely to have a positive impact when their development and operation is seen as a mutual responsibility between employing authorities and professional associations. There are complementary roles to be played here in the development of standards, assessments, professional development, certification and employer recognition. In other words, performance-based pay schemes for teachers are more likely to be successful when:

- a) their guiding purpose is to give substantial and valued recognition to teachers who provide evidence of professional development to high teaching standards;
- valid (research-based) standards have been developed by expert teachers in their specialist field of teaching to provide long-term goals for professional development;
- appropriate research has been completed to develop reliable and valid procedures for gathering evidence to indicate whether teachers have met those standards;
- d) the assessment of performance procedures are conducted by an agency external to the school to ensure reliability, comparability and fairness;

- e) teachers have adequate opportunities to learn the knowledge and skills required to put the standards into practice;
- f) a teacher's ability to demonstrate that they have met the relevant standards leads to valued professional recognition, enhanced career opportunities and significant salary increases;
- g) teachers who reach high standards of performance gain access to interesting, challenging and well-supported positions in schools where they can make provide leadership to improve teaching and learning; and
- h) Governments and other employing authorities become convinced that the assessment system is valid and reliable and make long-term commitments to support the system.

SECTION E: SUGGESTIONS FOR FURTHER RESEARCH ON PERFORMANCE PAY

In preparing this report, ACER was asked to identify:

- a) the gaps in the Australian and international evidence base related to performance pay, and
- b) what other data/research would have been valuable in assessing the value and/or acceptance of performance-based pay for teachers in an Australian context?

It is noteworthy that most of the research drawn upon for this report has come from the USA or England. The Teacher Incentive Project in England was part of a major national initiative to "modernise" the teaching profession that affected over half a million teachers. Several major research programs, such as those led by Wragg (2004), have been able to follow these reforms closely and add to our understanding of issues involved in implementing performance-based pay and factors affecting its effectiveness.

In a survey of teachers in England, Marsden and Belfield (2006) found that most teachers (63 per cent) remained sceptical about whether the principle of relating teachers' pay to performance was a good one after five years of the Teacher Incentive Project reforms there. As we have indicated, however, the rigour of the methods for identifying effective teachers in that scheme remain doubtful. Over 90 per cent also said the process had little effect on their professional development. In contrast, over 90 per cent of teachers who have been through the National Board certification system said the assessment process was both valid and beneficial.

Similarly, there have been many major performance-based pay reforms in the USA, of many different types, providing a basis for many research programs such as that run by Allan Odden, Carolyn Kelley and the CPRE team. Several states like Connecticut have had comprehensive approaches to lift teacher quality for over 20 years. These major reform programs also provided fertile ground for researchers to add to our understanding about how to provide incentives with positive effects on student outcomes.

Equivalent reform programs are relatively rare in Australia, apart from the Advanced Skills Teacher reforms of the early 1990s. Consequently, there is little Australian research to draw upon about performance pay. Research on stakeholder attitudes to the idea of performance-based pay in the abstract can be useful, but research that is based on

experience with well thought through performance pay programs is much more likely to add to our understanding.

It is doubtful that there would be value in conducting more surveys of teachers' attitudes in general to performance based pay. The usual answer to these surveys is, "it depends on how it is done." Stakeholder attitudes to performance pay depend mainly on what they have had the opportunity to experience. We can run national consultation processes about standards, performance assessment and certification until the cows come home. Only hands-on experience with new approaches to developing standards and assessing performance will lead to changed attitudes and better informed decisions about how to make the pay system a more effective instrument for improving the quality of teaching.

When Australian teachers have been part of well-conceived schemes to develop standards and assessments of teachers' knowledge and skills, their attitudes are much more positive. For example, the Australian teachers who were part of the development of standards for highly accomplished English, mathematics and science teachers became very committed to those standards. They found that it was possible to write standards for what teachers should know and be able to do that they had pride in. They also found that it was possible to create valid methods to assess teacher performance against the standards. As a result, attitudes changed with experience.

The most rigorous system for identifying accomplished teachers in our review, the NBPTS, is the one that most involved teachers and their professional associations and organisations in all phases of developing the performance assessment system. It is also the system most respected by all major stakeholders (all 50 states recognise National Board Certification).

It is likely that the attitudes of most Australian teachers to the concept of performance-based pay are likely to remain sceptical without similar participation in the processes of developing and trialling methods of gathering evidence and assessing performance. While there is little doubt that, on rational grounds, most stakeholders recognise that pay systems and career paths need reform, a cultural change in attitudes needs to happen in parallel with any reform initiative.

Such reforms would need to be seen as a shared responsibility between teachers, governments and employing authorities. Teachers will need to accept responsibility for developing rigorous profession-wide systems for defining, evaluating and certifying

accomplished practice if they expect the public to place greater material value on their work. Teachers and the teaching profession will need to be the agents rather than the targets of this reform.

This review of performance pay schemes indicates the need to move gradually, in a developmental way, toward building capacity. Based on the assessment of the available evidence, it would seem unlikely that there is any one model that could be readily adopted for application in Australia at this time. Hands on experience with well researched and carefully developed assessment processes will lead to better informed decisions about how to make the pay system a more effective instrument for improving the quality of teaching and improving student learning outcomes.

Therefore, it is suggested that two research and development programs on performance pay be initiated; one focused on developing valid and reliable systems and measures for gathering evidence for individual performance pay decision, the other focused on learning how to operate team or school- based performance award programs.

Individual approaches to performance-based pay

Successful implementation of performance-based pay schemes for individual teachers is unlikely to become a reality without a major research program to develop our capacity for measuring teacher knowledge and skill. (By "successful implementation" we refer not only to schemes that are psychometrically rigorous, but also to schemes that have the power to give all teacher the incentives to engage in effective forms of standards-based professional learning, not just the few who may compete for bonuses. In other words, successful schemes have the capacity, in Elmore's terms (1996) to enable effective teaching practices to "go to scale".)

There is much to learn about reliable methods for assessing teacher performance from research and development work conducted overseas, but local capacity is definitely growing to conduct this kind of work. The heart of any performance-based pay scheme is the system for assessing teachers' knowledge and skill. That system must be sound. It must focus primarily on direct (rather than statistical) evidence about what students are learning, doing and experiencing as a result of the conditions for learning established by the teacher. Our current capacity to create systems for assessing teacher performance that are valid, reliable and fair is limited. It is doubtful whether there is a performance-based pay scheme in Australia that would meet these criteria, if subjected to rigorous research.

While teachers' attitudes to merit pay schemes are well known, we only have limited knowledge about their attitudes to the concepts of knowledge and skills-based pay and professional certification. Pilot programs in a few jurisdictions, with accompanying research projects would test the acceptability and feasibility of these approaches in the Australian context.

Stakeholder attitudes to performance pay depend mainly on what they have had the opportunity to experience. As mentioned earlier, the legacy of payment by results and inspection is deep in the collective consciousness of the teaching profession. Even the word "performance" can lead many teachrs to lower the shutters. Few teachers in Australia have experienced a knowledge and skills-based scheme in the way, for example, that teachers have who have been applicants for National Board Certification, or those who have been trained to assess those applications.

As far as performance-based pay is concerned, we probably know more about what teachers do not want, than about what they would come up with if they had the responsibility for building a professionally credible performance-based pay system.

Consideration might be given to research projects that would aim to greatly increase the numbers of teachers and other stakeholders who have direct experience with recent developments with standards-based methods for assessing teacher performance. We suggest that a national pilot project on standards, performance assessment and certification in one or two well-defined teaching fields, such as primary teaching or secondary mathematics and science teaching, might be initiated with the following purposes:

- To conduct research and development work on standards-based methods for assessing teacher performance.
- To trial these assessment methods with teacher volunteers to test their feasibility and reliability.
- To evaluate the acceptability and credibility of these methods with stakeholders.
- To examine the effects of the assessment process on teachers' professional learning.

At later stages, if such a project moved from a pilot stage to wider implementation, there would be a need for further research on the consequences of awarding recognition in salary terms to teachers who met designated standards or levels of performance. Interest might focus, for example, on the level of teacher engagement in more effective modes of professional development, on the staff relationships in schools and on effective ways of organising schools to capitalise on the leadership that such teachers might provide.

It would be advisable to select a small number of specific teaching fields in which to begin this work rather than trying to cope with all the specialist fields at the same time. Primary teaching, or early childhood are examples of specialist fields where this work could start. Alternatively, secondary mathematics and science teaching would also be suitable, as the respective subject associations have already done a great deal of groundwork in developing standards and trialling assessment methods. These are also fields where teachers are in short supply and career paths are needed with a greater capacity to attract and retain good teachers.

Projects such as these might be carried out under the umbrella of agencies such as Teaching Australia or state and territory professional standards bodies or some form of collaboration between the two. This is an area where the adage 'start small, but think big' applies.

Jurisdictions and teacher associations might be invited to submit proposals to be part of these pilot projects. The pilot certification projects might be trialled in collaboration with one or two school systems. It would be unwieldy to work with all jurisdictions on board from the start. States and territories such as WA, SA and the NT might provide fertile ground for the experiment as they already have versions of performance-based pay schemes for accomplished teachers at the top of the salary scale and they may be interested in refining their schemes to increase comparability and mutual recognition. Project reference groups should have a broad membership of employing authorities, unions, parent organizations, principals and teachers.

Projects such as these will need sufficient consideration before it will be possible to go to scale. It is vital to avoid the mistakes made by so many performance pay schemes in the past where there was little understanding about the importance on getting the performance assessment system to acceptable levels of reliability.

Members of project teams, including practicing teachers, could develop or refine existing standards and assessment task guidelines. Teachers could be invited to field test assessment methods, such as portfolio tasks and other methods for providing evidence of how their knowledge and practice meets the standards. Members of teacher associations in the pilot states might develop local support groups for teachers as they prepared evidence of their performance. The final step could be to train a group of experienced teachers, in the designated specialist teaching fields, to assess reliably the evidence provided by teachers against the standards.

A central purpose of this study would be to monitor the attitudes of all stakeholders as the project progressed. It would be important to build in processes for researching the reliability and validity of the new approaches to assessing performance. The first stage of the pilot project might be trialled with a small group of teachers and it would be desirable if the cooperating school systems could guarantee suitable recognition for teachers who complete the process. A project such as this would provide a firmer foundation on which to gauge the attitudes of stakeholders to the possibility of building pay systems that gave more incentives and recognition for evidence of attaining high standards of performance.

It is important to continue to collect robust, defensible information on the effectiveness or otherwise of different models of performance pay for teachers. This can inform future policy directions in this important area.

School or team-based performance awards

There are few gaps in the research on individual merit pay schemes. Many studies identify potential weaknesses of these schemes: lack of fair performance evaluation, creation of competitive work environments, distrust between teachers and administrators and unstable funding (Odden & Kelley, 2002).

However, the prospects for performance-based awards for teams of teachers look more promising, although the research so far is limited. There is evidence that teachers who work in cooperative teams felt more motivated at work and were more successful in achieving higher student achievement (Shedd & Bacharach, 1991). Timperley and Wiseman's (2003) research in New Zealand shows a positive relationship between schools with strong professional communities and student achievement. There is probably greater justification for using student outcomes, as measured on statewide standardised tests of student achievement, for team-based than individual performance

bonuses. Other measures of performance related to student welfare, engagement and satisfaction are also more appropriate to team-based awards.

After reviewing several examples, Odden and Kelley (2002) claim that the evidence indicates that school-based performance award programs do improve student performance. However, there are cautions. Improvement is greatest in areas of the curriculum measured by the assessment instruments, so measures need to be monitored to ensure they are valid representations of what is valued in the curriculum. In addition, teachers need to believe the goals are achievable with given resources and that system will be administered fairly.

Several jurisdictions in Australia have programs designed to strengthen professional community, such as Victoria's *Performance and Development Culture* program, but to our knowledge no team-based or school-based performance pay schemes have been developed as yet. Developing and implementing such a scheme would be a major enterprise. This is possibly an area where a collaborative pilot scheme might be initiated so that research could be conducted on the feasibility and viability of such schemes.

While team-based approaches to providing incentives to improve student achievement may prove to have some merit, they do not replace the need for pay systems and career paths that provide incentives to individual teachers to deepen and broaden their professional knowledge and skills. Salary levels do affect the academic quality of people attracted to teaching. They are also one of the most important reasons why teachers leave the profession. There is general agreement among educational stakeholders that excellent teachers should be able to remain in the classroom without suffering financial loss. They should not feel compelled to move into administrative positions, or into other careers in order to gain recognition or status. The need to find better ways to recognise and reward individual teachers for meeting high performance standards will remain.

REFERENCES

- Anagnostopoulos, D. & Sykes, G. 2006). What Difference does Difference Make? The Meanings of National Board Certification and the Sentiments of Teaching. Paper presented at the Annual Meeting of the American Educational Research Association, San Francisco April 2006.
- Australian Government Department of Education, Science and Training, (2006). *Attitudes to Teaching as a Career: A Synthesis of Attitudinal Research*. Surveys and Workforce Analysis Section. Canberra: DEST
- Armstrong, M. (1993). Managing Reward Systems. UK: Open University Press.
- ACT Australian Education Union (2005). 'Accomplished Teacher Schemes' Which way forward for the ACT? *The ACT Teacher*. June 2005. www.aeuact.asn.au/LibraryRes.htm
- Austin, A.G. (1961). Australian Education 1788-1900. UK: Sir Isaac Pitman and Sons Ltd.
- Australian Education Union (2006). Press release: AEU dismisses claims for performance based pay as simplistic. 21 August 2006.
- Bacharach, S., Conley, S.C.& Shedd, J.B. (1990). Evaluating teachers for career awards and merit pay. In J. Millman & L. Darling-Hammond (Eds.), *The New Handbook of Teacher Evaluation (pp133-146)*. Beverley Hills, CA.: Sage Publications.
- Blase, J. (Ed.) (1991). *The Politics of Life in Schools: Power, Conflict and Cooperation*. Newbury Park: Sage Publications.
- Boston Consulting Group (2003). *Schools Workforce Development Strategy*. Melbourne: Department of Education and Training.
- Braun, H.I. (2005). *Using student progress to evaluate teachers: A primer on value-added models.* Policy Information Centre, Educational Testing Service. Princeton, NJ: Educational Testing Service.
- Burgess. S., Croxson, B., Gregg, P., & Propper, C. (2001). The Intricacies of the Relationship Between Pay and Performance for Teachers: Do teachers respond to performance-related pay schemes? *CMPO Working Paper Series No. 01-35*. UK: CPMO, University of Bristol.
- Chevalier, A., Dolton, P. & Mcintosh, S. (2007). Recruiting and Retaining Teachers in the UK: An Analysis of Graduate Occupation Choice from the 1960s to the 1990s. *Economica* 74 (293), 69–96.
- Clees & Nabors (1992). Teacher incentive programs do they make better teachers? *Education*, 113: 145-148.
- Clotfelter, C.T., Ladd, H.F. & Vigdor, J.L. (2007). *How and why do teacher credentials matter for student achievement?* National Bureau of Economic Research, Working Paper 2828. Cambridge, MA: National Bureau of Economic Research
- Cohen, D K and Hill H. (2000) Instructional policy and classroom performance: the mathematics reform in California, *Teachers College Record* 102, 2, February 2000.

- Cohen, C.E. & Rice, J.K. (2005). *National Board Certification as Professional Development: Design and Cost.* Washington D.C.: The Finance Project www.financeproject.org
- Connell. W.F. (1989). The Inspectorate in Australia 1960-1985. Unpublished report
- Danielson, C. (1996). *Enhancing Professional Practice: A Framework for Teaching*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Danielson, C. & McGreal, T. (2000). *Teacher Evaluation to Enhance Professional Practice*. Alexandria, VA: Association for Supervision and Curriculum Development.
- Darling-Hammond, L. (1992). Creating standards of practice and delivery for learner-centred schools. *Stanford Law and Policy Review*. 4, 37-52.
- Darling-Hammond, L. (2000). Teacher quality and student achievement: a review of state policy evidence. *Teachers College Record*.
- Delisio, E.R. (2003). School issues: pay for performance what are the issues? *Education World*. www.education-world.com/a issues/issues/374a.shtml
- Department for Education and Employment (2000). *Teachers: Meeting the challenge of change.* London: Department for Education and Employment. (www.dfee.gov.uk/teachers).
- Denver Public Schools Press Release (2004). Denver Teachers Embrace Professional Compensation System. March 19, 2004.
- Department of Education Science and Training. (2003). *Australia's teachers: Australia's future*. Canberra: Department of Education, Science and Training.
- Elmore, R. (1996). Getting to scale. In S. Fuhrman & J. O'Day (Eds.), *Incentives and systemic reform*. San Francisco: Jossey-Bass.
- Ewing, M. (2001). An evaluation of the assessment processes used to select Level 3 Classroom Teachers in Western Australian government schools. Nedlands: Department of Education of Western Australia and University of Western Australia.
- Farrell, C., & Morris, J. (2004). Resigned compliance: Teacher attitudes towards performance-related pay in schools. *Educational Management Administration and Leadership*. 32(1), 81-104. UK: Sage Publications.
- Fenstermacher, G. D., & Richardson, V. (2005). On making determinations of quality in teaching. *Teachers College Record*, 107(1), 186-213.
- Goldhaber, D., & Anthony, E. (2004). *Can teacher quality be effectively assessed?* Seattle: Centre on Reinventing Public Education, University of Washington.
- Goodrum, D., Hackling, M., & Rennie, L. (2000). *The Status and Quality of Teaching and Learning of Science in Australian Schools*: A Research Report prepared for the Department of Education, Training and Youth Affairs. Canberra: DETYA.

- Gordon, R., Kane, T.J. & Staiger, D.O. (2006). *Identifying effective teachers using performance on the job*. Washington, DC: The Brookings Institution
- Gratz, D. B (2005). Lessons from Denver: The Pay for Performance Pilot. *Phi Delta Kappan*. April 2005, 569-581.
- Guthrie, J.W., & Springer, M.G. (2006). Teacher pay for performance: Another fad or a sound and lasting policy? *Education Week*, April 5, 2006.
- Hall, G. E., & Caffarella, E.P. (1997). Third year implementation assessment of the Douglas County, Colorado school district performance pay plan for teachers.
- Hanushek, E.A. (1994). *Making schools work: Improving performance and controlling costs*. Washington, DC: Brookings Institution.
- Hattie, J. (2003). 'Teachers Make a Difference. What is the Research Evidence?' Paper presented to the Research Conference of the Australian Council for Educational Research, Melbourne, October 2003.
- Heneman, H.G., III. (1998). Assessment of the motivational reactions of teachers to a school-based performance award program. *Journal of Personnel Evaluation in Education*, 12(1), 43-59.
- Heneman, H.G., III, & Milanowski, A.T. (2002). *Evaluation of teacher's reactions to a standards-based teacher evaluation system.* Paper presented at the sixteenth annual conference of American Evaluation Association, November 8, 2002, Washington, D.C.
- Heneman, H.G., III, & Milanowski, A.T. (2003). Continuing assessment of teacher reactions to a standards-based teacher evaluation system. *Journal of Personnel Evaluation in Education*. 17(2), 173-195.
- Heneman, H.H., Milanowski, A.T., Kimball, S.M., & Odden, A.R. (2006). *Standards-Based Teacher Evaluation as a Foundation for Knowledge and Skill-based Pay*. Philadelphia, PA: University of Pennsylvania, Graduate School of Education, Consortium for Policy Research in Education.
- Holloway, D. (2000). The Inspectors: An Account of the Inspectorate of the State Schools of Victoria, 1851-1983. Institute of Senior Officers of Victorian Education Services
- Honawar, V. (2006). Many Teacher Incentive Fund Applications Rejected. *Education Week*, Nov 1 2006.
- Hood, C., Scott, C., James, O., Jones, G., & Travers, T. (1999). Regulation inside Government: Waste-Watchers, Quality Police, and Sleaze-Busters. Oxford University Press, Oxford.
- Ingvarson, L.C. & Chadbourne, R. (1994). *Valuing Teachers' Work: New Directions In Teacher Appraisal.* Melbourne, Vic.: Australian Council for Educational Research.
- Ingvarson, L.C. & Chadbourne, R. (1996). The rise and fall of the Advanced Skills Teacher. *Leading and Managing*. 2(1), 4969.

- Ingvarson, L. C., & Chadbourne, R. (1997). Reforming teachers' pay systems: the advanced skills teacher in Australia. *Journal of Personnel Evaluation in Education*, 11(1), 713.
- Ingvarson, L.C., & Chadbourne, R. (1998). Some effects of the Professional Recognition Program in Victoria's Schools of the Future. *Australian Educational Researcher*, 25(20), 61-95.
- Ingvarson, L. (2002). Strengthening the profession: a comparison of recent reforms in the USA and the UK. ACER Policy Briefs No. 2. Camberwell: ACER. http://www.acer.edu.au/publications/policybriefs.html
- Ingvarson, L.C., & Kleinhenz, E. (2006b). *A Standards-Guided Professional Learning System*. Centre for Strategic Education Seminar Series No. 153. Jolimont, Vic.: Centre for Strategic Education Studies.
- Ingvarson, L.C., & Kleinhenz, E. (2006a). Standards for Advanced Teaching: A Review of National and International Developments. Canberra: Teaching Australia
- Irving, E. (2005). The development and validation of a student evaluation instrument to identify highly accomplished mathematics teachers. Unpublished Ph.D. thesis. The University of Auckland, New Zealand.
- Jacobson, S.L. (1992). Performance-related pay for teachers, The American Experience. In Tomlinson, H. (Ed.) *Performance-related pay in Education*. London: Routledge.
- Jasman, A. & Barrera, S. (1998). Final Report: Teacher Career Structure: Level 3 Classroom Teachers: Development and Implementation. Centre for Curriculum & Professional Development, Murdoch University.
- Johnson, S.M. (1984). Merit Pay for Teachers: A Poor Prescription for Reform. *Harvard Educational Review*. 54(2), 175-185.
- Johnson, S.M. (1986). Incentives for teachers: What motivates, what matters. *Educational Administration Quarterly*, 22(3), 54-79.
- Johnson, S.M. (2006). Building a Skilled Teaching Force for Better Student Learning: An International Perspective. Paper prepared for the Aspen-OECD Bellagio Seminar, How Can Teacher Policies Improve Student Learning? Oct 17-20, 2006, Bellagio, Italy.
- Joint Committee on Standards for Educational Evaluation (Daniel L. Stufflebeam, Chair) (1988). *The Personnel Evaluation Standards: How to Assess Systems for Evaluating Educators*. Newbury Park: Sage Publications
- Kellor, E.M. (2005). Catching Up with the Vaughn Express: Six years of standards-based teacher evaluation and performance pay. *Education Policy Analysis Archives*. 13(7).
- Kelley, C., Odden, A., Milanowski, A., & Heneman, H.G., III. (2000). *The motivational effects of school-based performance awards* (CPRE Policy Brief No. RB29). Philadelphia: University of Pennsylvania, Consortium for Policy Research in Education.

- Kerchner, C.T., Koppich J.E. (1993). A Union of Professionals: Labor Relations and Educational Reform. New York: Teachers College Press.
- Kleinhenz, E., & Ingvarson, L. (2004). *Evaluation of the VIT Standards and Professional Learning project 2003*. Melbourne: Australian Council for Educational Research.
- Kupermintz, H. (2002). Teacher Effects as a Measure of Teacher Effectiveness: Construct Validity Considerations in TVAAS (Tennessee Value-Added Assessment System). *Centre of the Study of Evaluation Technical Report 563*. Los Angels, CA: National Centre for Research on Evaluation, University of California.
- Lawler, E.E. (1981). Pay and Organisation Development. Reading, MA: Addison-Wesley.
- Lawler, E.E. (1983). Merit pay An obsolete policy? In Jackman, J. R., Lawler, E. E., & Porter, L. W. (Eds), *Perspectives on Behaviour in Organisations*. New York: McGraw-Hill.
- Lawler, E.E. (1990). Strategic Pay: Aligning Organisational Strategies and Pay Systems. San Francisco: Jossey-Bass.
- Lawler, E.E. (2000). Rewarding Excellence: Pay Strategies for the New Economy. San Francisco: Jossey-Bass.
- Little, J.W., Gerritz, W.H., Stern, D.S., Kirst, M.W., & Marsh, D.D. (1987). *Staff Development in California: Public and personal investments, program patterns, and policy choices.* San Francisco: Fra West Laboratory for Educational Research and Development.
- Lortie, D. C. (1975). Schoolteacher: a Sociological Study. Chicago: Chicago University Press.
- Louis, K.S., Kruse, S. & Marks, H., (1996). Schoolwide professional community. In F. M. Newman, (ed.) *Authentic achievement: Restructuring schools for intellectual quality*. San Francisco: Jossey-Bass.
- McCaffrey, D., Lockwood, J.R., Koretz, D.M., & Hamilton, L.S. (2003). *Evaluating Value-Added Models for Teacher Accountability*. Santa Monica, CA: Rand Corporation.
- Marsden, D. & Belfield, R. (2006). Pay for performance where output is hard to measure: the case of performance pay for teachers [online]. London School of Economics Research Online. Available at http://eprints.lse.ac.uk/archive/00000850
- Medley, D.M. & Coker, H. (1987). The accuracy of principals' judgements of teacher performance. *Journal of Educational Research*, 80(4) 242-247.
- Menter, I., Mahony, 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
- Milanowski, A. (2004). The relationship between teacher performance evaluation scores and student achievement: Evidence from Cincinnati. *Peabody Journal of Education*, 79(4), 33-53.

- Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA) (2002). Demand and Supply of Primary and Secondary Teachers in Australia. Part E(i) Qualitative Research National Survey of Teachers. Melbourne: MCEETYA
- Milanowski, A.T., & Heneman, H.G., III, (2001). Assessment of Teacher Reactions to a Standards-Based Teacher Evaluation System: A Pilot Study. *Journal of Personnel Evaluation in Education*, 15(3), 193212.
- Milanowski, A.T., Kimball, S.M., & Odden, A. (2005). Teacher Accountability Measures and Links to Learning. In L. Stiefel, A.E. Schwartz, R. Rubenstein & J. Zabel (Eds.), *Measuring School Performance and Efficiency: Implications for Practice and Research* (Yearbook of the American Education Finance Association) pp.137-161.
- Millman, J. (Ed.) (1997). Grading Teachers, Grading Schools: Is Student Achievement a Valid Evaluation Measure? Thousand Oaks, CA: Corwin Press, Inc.
- Morrow, S.Y. (1992). A Study of Student Achievement Results Using Selective Teacher Pay-for-Performance Models (Teacher Performance). Dissertation, Baylor University.
- Murnane, R.J., & Cohen, D.K. (1986). Merit pay and the evaluation problem: Why most merit pay plans fail and a few survive. *Harvard Educational Review*, 56, 117.
- Murnane, R.J. (1983). Quantitative studies of effective schools; what have we learned? In Odden, A. & Webb, L. D. (Eds). School-based management: organising for high performance. San Francisco: Jossey-Bass.
- NSW Auditor-General (2003). Department of Education and Training: Managing Teacher Performance, Sydney: The Audit Office of NSW.
- Newcombe, G. (2006, November). Letter to *Teacher: The National Education Magazine*. Camberwell, VIC: Australian Council for Educational Research.
- Nye, B., Konstantopoulos, S., & Hedges, L.V. (2004). How large are teacher effects? *Educational Evaluation and Policy Analysis*, 26(4), 237-257.
- Odden, A., & Kelley, C. (1997). *Paying teachers for what they know and do.* Thousand Oaks: CA: Corwin Press.
- Odden, A., & Kelley, C. (2002). Paying Teachers for What They Know and Do: New and smarter compensation strategies to improve schools. Second Edition. Thousand Oaks, CA: Corwin Press.
- Odden, A., & Wallace, M. (2006). *New directions in teacher pay*. Consortium for Policy Research in Education, University of Wisconsin-Madison, USA.
- Olson, L. (Feb. 14, 2007). Reflections. *Education Week*. www.aspeninstitute.org/education/
- Organisation for Economic Cooperation and Development. (2005). *Performance-related Pay Policies for Government Employees*. Paris: Organisation for Economic Cooperation and Development.

- Organisation for Economic Cooperation and Development. (2005). *Teachers Matter: Attracting, Developing and Retaining Effective Teachers*. Paris: OECD.
- Organisation for Economic Cooperation and Development. (2006). *Education at a Glance*. Paris: OECD.
- Pawsey, M. M. (1994). 'The introduction of payment by results into Victoria's schools.' *History of Education Review*, 23(2), 1-17.
- Pearlman, M. (2000). Linking teacher performance to teacher compensation: Issues in implementing standards-based appraisal systems for teachers. Internal ETS White Paper. Princeton, NJ: Educational Testing Service.
- Popham, W.J. (1997). The moth and the flame: Student learning as a criterion of instructional competence. In Millman, J. (Ed.), *Grading Teachers, Grading Schools: Is Student Achievement a Valid Evaluation Measure? (pp 264-274)*, Thousand Oaks, CA: Corwin Press, Inc.
- Protsik, J. (May, 1996). History of teacher pay and incentive reforms. *Journal of School Leadership*, 6(2), 265-289.
- Ramsey, G. (2000). *Quality matters revitalising teaching: Critical times, critical choices*. Report of the Review of Teacher Education. Sydney, NSW: NSW Department of Education and Training.
- Raudenbush, S.W. (2004). What are value-added models estimating and what does this imply for statistical practice? *Journal of Educational and Behavioural Statistics*, 29(1), 121-129.
- Reilly, H. (2005). New scheme with that sinking feeling. *The Scotsman*, 20 April 2005.
- Richardson, R. (1999). Performance-related pay in schools: an evaluation of the Government's evidence to the School Teachers' Review Body. London: National Union of Teachers.
- Rockoff, J.E. (May, 2004). The impact of individual teachers on student achievement: Evidence from panel data. *American Economic Review Papers and Proceedings*, 247-252.
- Rowan, B. R., Correnti, R., & Miller, R. J. (2002). What large-scale survey research tells us about teacher effects on student achievement: Insights from the Prospects Study of elementary schools. *Teachers College Record*, 104(8), 1525-1567.
- Sclafani, S. & Tucker, M. (2006). *Teacher and principal compensation: An international review*. Washington, DC: Centre for American Progress
- Scriven, M. (1994). Duties of the teacher. *Journal of Personnel Evaluation in Education*, 8(2), 151-184.
- Selleck, R.J.W. (1982). Frank Tate: A Biography. Melbourne: Melbourne University Press.
- Senate Employment, Education and Training Committee (1998). *A Class Act: Inquiry into the Status of the Teaching Profession*. Canberra: Senate Employment, Education and raining Committee.

- Shedd, J.B. & Bacharach, S.B. (1991). *Tangled Hierarchies: Teachers as professionals and the management of schools.* San Francisco: Jossey-Bass.
- Shulman, L. S. (1988). A union of insufficiencies: Strategies for teacher assessment in a period of educational reform. *Educational Leadership*, November, 36-41.
- Skilbeck, M., & Connell, H. (2003). Attracting, developing and retaining effective teachers. Australian Country Background Report: Commonwealth Government Department of Education, Science and Training.
- Smylie, M.A. & Smart, J.C. (1990). Teacher support for career enhancement initiatives: Program characteristics and effects on work. *Educational Evaluation and Policy Analysis*, 12(2), 139-155.
- Solmon, L. C, White, J. T., Cohen, D. & Woo, D. (2007). The Effectiveness of the Teacher Advancement Program. Report: National Institute for Excellence in Teaching.
- Stedman, J.B. & McCallion, G. (2001). *Performance-based pay for teachers*. Washington: Congressional Research Service, The Library of Congress.
- Stodolsky, S. (1990). Classroom observation. In J. Millman & L. Darling-Hammond (Eds.), *The New Handbook of Teacher Evaluation* (pp. 175-190). Beverley Hills, Calif.: Sage Publications.
- Storey, A. (2000). A Leap of Faith? Performance Pay for Teachers. *Journal of Education Policy*, 15(5), 509-523.
- Strath, A. (2004). *Teacher policy reforms in Sweden: The case of individualised pay.* International Institute of Educational Planning, Paris.
- Stronge, J.H. (Ed.) (1997). Evaluating teaching: A guide to current thinking and best practice. Thousand Oaks, CA: Corwin Press.
- Timperley, H. & Wiseman, J. (2003). The Sustainability of Professional Development in Literacy Part Two. School-based factors Associated with High Student Achievement. Wellington, NZ: Ministry of Education.
- Tracz S. & Associates. (1995). Improvement in teaching skills: Perspective from National Board for Professional Teaching Standards field test network candidates, Paper presented at the *Annual Meeting of the American Educational Research Association*. San Francisco.
- Urbanski, A. & Erskine, R. (2000). School reform, TURN, and teacher compensation. *Phi Delta Kappan*, 81(5), 367-370.
- Vandevoort, L. G., Amerin-Beardsley, A., & Berliner, D. (2004). National Board certified teachers and their students' achievement. *Educational Policy Analysis Archives*, 12(26).
- Victorian Department of Education and Training (2003). Schools Workforce Development Strategy. Report undertaken by Boston Consulting Group.
- Weick, K. E., McDaniel, R. R. (1989). How professional organizations work: Implications for school organization and management. In Sergiovanni T. J. &

- Moore J. H. (Eds.), *Schooling for tomorrow: Directing reforms to issues that count.* Needham Heights, MA: Allyn and Bacon.
- Wilson, S. M., Darling-Hammond, L., & Berry, B. (2000). A Case of Successful Teaching Policy: Connecticut's Long-Term Efforts to Improve Teaching and Learning. A Research Report. Centre for the Study of Teaching and Policy, University of Washington, Seattle,. Web site: http://www.ctpweb.org.
- Wragg E,C., Haynes G.S,. Wragg, C.M., & Chamberlin, R.P. (2004). *Performance Pay for Teachers: The experiences of heads and teachers*. London: Routledge Falmer.

APPENDIX 1: PROJECT BRIEF

Required Outcomes:

- (a) provide an overview of current pay arrangements for teachers in Australian schools, according to jurisdiction and sector, including industrial relations frameworks who is covered by collective enterprise bargaining agreements and how; what other arrangements are there? Is there provision, within any of these arrangements for performance-based pay schemes?
- (b) identify differentiation in arrangements between jurisdictions, including policy or legislative frameworks which may impede, limit or prevent the introduction of performance-based pay arrangements for teachers;
- (c) provide an overview of recent (since 2000) Australian and international research on the attitudes of stakeholders (including teachers, school leaders, parents of school-aged children, teacher employers, etc) to performance-based pay for teachers;
- (d) provide an overview of recent international research on the impact of the introduction of performance-based pay schemes for teachers. What level of acceptance has there been for the introduction of performance-based pay? How successful has the introduction of performance-based pay been in achieving the intended goals - e.g. higher levels of teacher retention, improved teaching standards, improved student outcomes, recognition, etc.? What unintended consequences have arisen?
- (e) identify the gaps in the Australian and international evidence base on the issues above. What other data/research would have been valuable in assessing the value and/or acceptance of performance-based pay for teachers in an Australian context?

APPENDIX 2: CURRENT AWARDS AND AGREEMENTS IN STATE

AND TERRITORY GOVERNMENT SCHOOLS

The relevant sections of the eight state and territory government school Agreements are

described below. Awards cover the majority of teachers in Australia and content of the

Awards is often mirrored in the systemic Agreements. While education authorities have

many policy documents related to various items in the Agreements, there is variation in

the extent to which performance appraisal and management is outlined or described in the

Agreements themselves.

While there are variations in the different Agreements across the jurisdictions, all

Agreements cover and are binding on government school teachers in the particular state.

"Teachers" may be variously specified - as persons employed under a particular Act, or

as persons members of or eligible to be members of the AEU. The parties to the

Agreements are the state (specified in various ways) and usually the state branch of the

AEU.

Australian Capital Territory (ACT)

The ACT is currently operating under a federal award and an expired collective

agreement. Schools have central budgets and centrally appointed staff.

Parent Award: Commonwealth Teaching Service (ACT) Award 1981.

Name of Agreement: ACT Department of Education and Training

Teaching Staff Certified Agreement 2004-2006

(Certified 20 August 2004, Expired 1 March 2006)

The new ACT Agreement (as at December 2006) was still being negotiated as of 22

August 2006. Issues still under discussion are the quantum of salary increase and the

amount of face-to-face teaching. The ACT branch of the AEU had initially proposed an

Accomplished Teacher category to reward classroom excellence, worth about \$3,000 to

teachers. This has not been included in the Agreement now under negotiation but the

ACT Education Minister has not ruled it out of future negotiation: 'Key issues to be

resolved [in future negotiations] included the assessment process, the administration of

the program, the tenure within the category and the number of positions within the

category.' Australian, 21/7/06

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There is currently a nine level salary scale for Classroom Teachers, plus three School

Leader positions. School Leader C is an executive position with, usually, a large

component of classroom teaching. It does, however, remove teachers from the classroom

for at least part of the time.

Teachers who commence with or who achieve a recognised qualification beyond the

compulsory four year training can move up an extra step in the incremental scale. This

has been the practice in the ACT for some time. However, if teachers are already at the

top of the scale and gain an extra qualification, there is no provision for recognition by

way of salary increase. Within the nine levels of the incremental scale, there are three

categories for Classroom Teachers: Beginning Teacher, Accomplished Teacher and

Emerging Leader. These categories have been included 'for the purposes of identifying

professional responsibilities and targeting support effectively'. All Classroom Teachers

have an individual Professional Pathways Plan. Individual reviews are conducted twice

yearly by the principal or delegate. There is also a Pathways to Improvement Plan to

assist teachers in need of support. This contains provisions for addressing under-

performance, including reduction in an incremental level.

There is also a Leading Teacher position with a one year maximum tenure whereby

teachers are paid an allowance of \$3,500 from school funds for a particular project. There

is no quota for the number of Leading Teacher positions in a school, with schools having

some budgetary discretion in this area.

Teachers are placed in the Classroom Teacher salary incremental scale based on

qualifications and experience. Movement through the scale is 'based on performance and

is in recognition of competence, developing expertise and the assumption of broader

professional responsibilities'.

All permanent teachers have a Professional Pathways Plan as a basis for assessing and

developing professional performance and for engaging in performance feedback.

Northern Territory (NT)

The NT has a federal award and a collective agreement.

Parent Award: Northern Territory Teaching Service Award 1981.

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Name of Agreement: Northern Territory Public Sector 2005-2007 Teachers and Educators Certified Agreement.

Australian Workplace Agreements are specifically excluded in the NT Agreement. 'During the life of this Agreement, Australian Workplace Agreements will not be introduced in respect of employees covered by this Agreement.' (Clause 22.1)

Teachers progress up the incremental scale according to years of experience. The annual increment can only be withheld 'as an outcome of inability or discipline procedures undertaken in accordance with the Act'.

Under the Agreement, all parties commit to implementing the Performance Enhancement Framework. One clause covers productivity, citing 'increased skill levels arising from training and professional learning'. Increased skill levels are part of overall professional learning, and do not relate directly to annual increments.

A Rapid Incremental Progression system is included. This scheme enables beginning teachers to progress through the incremental scale at an accelerated rate.

Accessing the scheme involves gaining points for approved tertiary studies or professional development courses. Beginning teachers have the opportunity to move up an extra level on the pay scale at the commencement of their third year of teaching.

The NT has in place a Teachers of Exemplary Practice (TEP) scheme. This status is awarded for sustained exemplary teaching performance and provides increased remuneration through an alternative career path to the Executive Teacher (ET) structure. Pay rates are tied to the ET structure, with allowances being paid up to specific maximums of the ET salary. The scheme has three levels, all of which include exemplary modelling of teaching, a role in curriculum and professional development and in school and/or wider system needs. Applicants are responsible for collating evidence, assessment panels verify the evidence, and moderation committees undertake system wide moderation of all reports. Teachers generally remain on a particular level of the TEP scheme for at least two years, although this is not mandatory. Assessment panels are established by the school principal and include three teachers from the applicant's school. The Chairperson should be a TEP3 or Executive Teacher Level 4 or above. The Chair selects one of the teachers, who must be a TEP 2 or an Executive Teacher, or above. The applicant nominates the other teacher, in consultation with the Chair.

Teachers are eligible to apply for TEP positions after two years' teaching experience (from Step 6). If their application is successful, their salary increase will be given as a percentage of their salary point on the incremental scale with an upper limit related to ET levels. Thus there is provision for salary 'acceleration' in the last three levels of the incremental scale.

New South Wales (NSW)

Name of Agreement: NSW has a State Award: Crown Employees (Teachers in Schools and Related Employees) Salaries and Conditions Award 2006 Industrial Relations Commission of NSW.

Teachers in NSW move up a common incremental salary scale subject to demonstration of 'continuing efficiency in teaching practice, satisfactory performance and professional growth'. Under the *Teacher Annual Review Scheme*, teachers are appraised by a principal, supervisor, or nominee: the. The annual review entails conferences, observation of educational programs and review of documentation.

There are many policy and ancillary documents related to teacher assessment and review in addition to the Award, but no specific accountability procedures are described. Acceleration through the incremental scale can occur for people returning to or entering teaching from industry, with prior industrial experience being taken into account.

Queensland

Queensland has a State Award and a collective agreement. Schools have central budgets and centrally appointed staff.

Parent Award: Teachers' Award – State 2003 Queensland Industrial Relations Commission.

Name of Agreement: Department of Education and the Arts Teachers' Certified Agreement 2006

Salary increments for classified teachers are automatic unless the teacher is subject to "Diminished Work Performance" or similar processes. Progression after a certain point on a scale is only by way of promotion, or by accessing senior teacher salary.

Progression is by annual increment within a range of bands, with provisions for three year trained teachers to accelerate. These provisions include accredited professional development and a standard form acknowledging additional knowledge and skills. There is provision for a principal to withhold an increment if performance is deemed unsatisfactory. Otherwise, progression along the incremental scale is automatic subject to satisfactory professional performance. There is no specific appraisal or review process as yet. A set of aspirational, developmental professional standards for teachers is currently being developed and negotiated with the state union branch. Providing evidence of meeting professional standards will at this stage be voluntary. However, the Queensland College of Teachers is about to introduce a requirement for all teachers to meet conditions for renewal of their registration every five years.

A particular stipulation applies to teachers who have less than four years training. The Queensland agreement specifically excludes compulsory classroom observation as a method of establishing completion of qualifications to attain 4 year trained status. 'No teacher will be required to undergo classroom or other inspection for the purposes of certification.'

Queensland also has a senior teacher position following the top of the incremental scale. To become a senior teacher, a teacher signs an undertaking regarding factors such as curriculum implementation and positive relationships. The teacher's primary role is as a classroom teacher. The parties have agreed to a three-level classification structure from 2009. This structure will differentiate between teaching and leadership positions.

South Australia

South Australia has a State Award and a collective agreement. Schools have central budgets and local selection of Classroom Teachers.

Parent Award: Teachers (Department of Education and Children's Services (DECS)) Award.

Name of Agreement: South Australian Education Staff (government pre-school, schools and TAFE) Enterprise Agreement 2006

Teachers are paid on an eight-point incremental salary scale (excluding Special Authority teachers). Movement up the incremental scale is based on length of experience, not performance appraisals or reviews. There are procedures in place to address a situation

where a principal believes underperformance is a problem. Teachers progress through the incremental salary scale unless the Chief Executive certifies unsatisfactory 'conduct, diligence and general efficiency'. A teacher can not be accelerated up the incremental scale. There are general systems of ongoing performance management in schools throughout the year.

There is a separate two point scale for ASTs. A new AST 2 assessment process, based on agreed criteria, is being trialled and implemented this year, and higher salary levels for Key teacher and Co-ordinator positions. AST positions are directly linked to classroom teaching performance. There was previously a requirement that teachers be at top levels of the incremental scale before applying to become an AST. The 'step barrier' has recently been removed, and teachers at any level of the scale may apply. Teachers are also able to apply for AST 1 and AST 2 concurrently. ASTs are re-assessed after a number of years to ensure continuing high performance.

Successful application for AST status is directly related to classroom teaching performance and not to any particular career path; it is directly related to teaching practice in a variety of classroom settings. ASTs are Classroom Teachers who spend the majority of their time in the classroom. An Assessment Panel of three merit trained members including the principal considers the evidence and whether the applicant meets the criteria. Evidence includes a portfolio, lesson observation, a presentation and discussion. ASTs are expected to spend the majority of their time in classroom teaching duties.

There is no quota for the number of AST positions, with teachers being able to apply at any school. A school with a large number of very experienced teachers may have a large number of ASTs. The state government funds the AST system centrally.

The SA AST scheme is a performance pay scheme directly related to the appraisal of classroom teaching performance. There is also provision for recognition of classroom teaching excellence because teachers can jump from any point of the incremental scale to AST, now that the 'step barrier' has been removed.

Tasmania

Tasmania has a State Award and a collective agreement. Schools have central budgets and centrally appointed staff.

Parent Award: Teaching Service (Tasmanian Public Sector) Award 2005.

Name of Agreement: Teaching Service (Tasmanian Public Sector) Award 2005

The Teaching Service (Tasmania Public Sector) Salaries and Conditions of

Employment Agreement 2005. Tasmanian Industrial Commission

Teachers in Tasmania move through the incremental scale subject to satisfactory

performance, 'having regard to the teacher acquiring skills and professional

knowledge...demonstrated by objective criteria.' The employer may defer or refuse the

increment if the employee does not meet the criteria.

Positions classified at Band 2 are 'instructional and classroom-based with employees

demonstrating exemplary teaching practice'. Progress to this level is through appointment

or promotion.

Under the terms of the current Agreement, a Working Party will be established to review

the current promotional structure and to 'consider the concept of an 'in classroom'

promotional teacher position'.

The union has agreed to the satisfactory performance requirement, but there is no

established process by the Department of Education (DoE) for appraisal. The former

three AST positions have been collapsed into one incremental step.

Initial acceleration on the incremental scale can be offered to certain select beginning

teachers, perhaps a couple of levels higher than otherwise.

Victoria

Victoria has a federal award and a collective agreement. Schools have global budgets and

locally selected staff, which means they have, relatively, considerable staffing flexibility.

Parent Award: Teachers' (Victorian Government Schools) Conditions of Employment

Award 2001.

Name of Agreement: Victorian Government Schools Agreement 2004.

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Progression through the salary scale is through an annual performance and development process. This process is designed to 'recognise high performance and address low performance'. There is performance appraisal and quality assurance in that there are sets of standards for each of the three levels on the incremental scale – graduate, accomplished and expert – that define what a teacher at that place on the scale should be able to do. These sets of standards change between the three levels. One level of Expert Teacher is for access by former Experienced Teachers with Responsibility (ETWR), a previously available position. An increment can be withheld if performance is deemed to be unsatisfactory.

The teacher class comprises Leading Teacher and three levels of Classroom Teacher: Expert; Accomplished; and Graduate.

Salary progression is linked to achievement against professional standards or similar criteria. Teachers may be considered for accelerated salary progression within any of the teacher class classifications within the school. Principals can accelerate teachers within the incremental scales, but this would be a budget issue. The significant acceleration would be if a teacher were to move from a low point on the incremental scale to a Leading Teacher position. This could occur if a Leading Teacher position was advertised to meet a particular school need and only a few teachers were available who met the criterion.

Western Australia

Western Australia has a State Award and a collective agreement. Schools have central budgets and a mixture of locally/centrally appointed staff.

Parent Award: Teachers (Public Sector Primary and Secondary Education) Award 1993.

Name of Agreement: The School Education Act Employees' (Teachers and Administrators) General Agreement 2006 (registered August 2006) defined in the Agreement as 'Public Education (School Education Act Staff) Agreement 2006

WA has a twelve point scale, two levels of Senior Teacher and a Level 3 Classroom Teacher level. Progression through increments is subject to satisfactory service. An increment can be withheld or a teacher reduced on the incremental scale if service is deemed unsatisfactory. There is an overall performance management process in schools

The Senior Teacher position 'acknowledges that there is a need to retain competent experienced teachers in duties directly associated with classroom teaching and learning'. To progress to Senior Teacher, teachers must have completed service at a specific level of the salary scale and completed agreed relevant professional development. Duties and breadth of tasks are negotiated at school level. There is no quota for these positions. Like other states, WA has a large number of teachers at the top of the incremental scale. However, according to the AEU, many of these teachers do not currently apply for Senior Teacher positions.

The purpose of the Level 3 Classroom Teacher is to 'support the retention of exemplary teachers in the classroom'. To progress to Level 3 Classroom Teacher, teachers undergo a two-stage competency based selection process that requires submission of a portfolio of evidence and a 'Reflective Practice' discussion with colleagues. The portfolio allows applicants to demonstrate the relationship between teaching and learning and student learning outcomes; the Reflective Practice allows applicants to demonstrate how they work with other teachers and their 'capacity for professional reflection'. Accredited Level 3 teachers negotiate a role with their principal or line manager, with the role being regularly reviewed. In the main, it is a regularly timetabled allocation, perhaps once per fortnight, or as pooled time. Examples of time usage might be enabling other teachers to participate in team teaching or taking up a mentoring role. The WA Level 3 Classroom Teacher position involves external review and assessment against standards. It is a promotion position. The Level 3 Classroom Teacher position is discussed further in Section D of this report.

APPENDIX 3: THE INCREMENTAL SCALES IN NON-GOVERNMENTAL AWARDS

SECTION B – TEACHERS' SALARY SCALE – CATHOLIC SCHOOLS – JULY 2006															
NEW SOUTH		ACT VICTORIA		QUEENSLAND		WESTERN		SOUTH		TASMANIA		NORTHERN			
	WALES		(1/07/06)	(1/10/06)		(1/5/06)		AUSTRALIA		AUSTRALIA		(1/4/06)		TERRITORY	
(3.5	(3.5 per cent from							(3.3 per cent from		2 per cent > 10/05				(4 per cent from	
1/1/06)				<u> </u>				1/2/06)				<u> </u>		01/03/06)	
1	36936	1	44365	1-1	46127	1	39943	1	40,966	1	39730	1	35925	1	37652
2	40259	2	47962	1-2	47441	2	41078	2	42,586	2	42241	2	38340	2	41647
3	42943	3	50351	1-3	48793	3	42455	3	45,575	3	45380	3	40925	3	44539
4	45167	4	52759	1-4	20184	4	43916	4	48,563	4	47654	4	42235	4	47656
5	47621	5	55158	1-5	53085	1	45145	5	51,552	5	49930	5	43543	5	50992
6	50072	6	58154	1-6	54598	2	47647	6	54,541	6	52207	6	44850	6	54561
7	52527	7	61151	1-7	56154	3	50141	7	57,529	7	54483	7	47159	7	58382
8	54983	8	64150	1-8	57755	4	52643	8	60,518	8	56758	8	49591	8	62468
9	57435	9	69007	1-9	59401	5	55153	9		9	59034	9	52143	9	66839
10	59888			1-10	61539	1	57243	10		10	61231	10	54831		
11	62341			1-11	63447	2	59345	11		AST	63272	11	57652		
12	64798			1-12	65414	3	61432	12				12	60618		
13	69334			2-1	65414	4	63645	13				13	64854		
				2-2	66467	LT/AST1	2805								
						AST2	4733								

TEACHERS SALARY SCALE – INDEPENDENT SCHOOLS – JULY 2006																
	NSW	ACT	7	VIC	TORIA	QUE	ENSLANI)		TASM	ANIA		SA	NT		
2 per cent from 1/7/06		2 per cent from 1/07/06		(Award)		ANGI	ANGLICAN		LUTHERAN		1/5/04		LUTHERAN 2 per cent 1/7/05		ESSINGTON SCHOOL (TERM 1 2005)	
1	39445	1	46883	1	35444	1	40042	1	38500	1	37086	1	40467			
2	42006	2	49923	2	36544	2	41154	2	39593	2	38258	2	42918	1	40019	
3	44801	3	52412	3	37644	3	42513	3	40918	3	39459	3	45982	2	42798	
4	47125	4	55259	4	39144	4	43958	4	42335	4	40664	4	48204	3	45794	
5	49684	5	58148	5	40644	1	45158	1	43514	5	41867	5	50428	4	49000	
6	52247	6	62656	6	42040	2	47557	2	45922	6	44017	6	52648	5	52428	
7	54804	7	65427	7	43436	3	50029	3	48325	7	46286	7	54872	6	56100	
8	57367	8	67803	8	44936	4	52526	4	50743	8	48667	8	57093	7	60026	
9	59923	9	71189	9	46436	5	55026	5	53167	9	51178	9	59316	8	64227	
10	62486			10	47936	1	57113	1	55178	10	53812	10	61461	9	67263	
11	65046			11	49436	2	59204	2	57200	11	56581	AST	63453			
12	67609		·	12	50936	3	61288	3	59214	12	59254					
13	70168					4	63374	4	61348	SCT	59276					
ST1	72386				<u> </u>	ST1	66009	LT1	2468							
								LT2	4331							

TEACHERS SALARY SCALE – INDEPENDENT SCHOOLS –JULY 2006 WESTERN AUSTRALIA							
Step	Anglican (01/02/05)	CCGS (01/01/05)					
1	33,743	36,708					
2	35,795	38,937					
3	38,395	41,166					
4	40,561	43,742					
5	42,166	46,142					
6	44,694	48,200					
7	46,426	50,260					
8	48,520	52,832					
9	51,935	55,661					
10	53,526	57,976					
11	55,741	60,036					
12	57,642	62,610					
13	59,926	65,183					

APPENDIX 4: CASE STUDIES OF PAY ARRANGEMENTS IN SIX INDEPENDENT SCHOOLS

This Appendix includes specific examples from six independent schools of pay practices and/or variants of performance pay. The independent schools included in this sample represent a range of schools in student enrolment numbers, resource base, community involvement and socio-economic and metropolitan/rural locations. Names of the schools have been changed. The school principal has approved each report.

Rewarding excellent classroom teaching was an important issue for all these principals. Most felt restricted by the funding available and would like to be able to include more performance pay in their salary schemes. Methods of selecting or identifying teachers for extra rewards or bonuses varied.

Five of the six schools are directly recognising perceived excellent classroom teaching performance in the form of differential placement on a salary scale or within a range of levels, or by paying a bonus of some kind. One school is recognising perceived excellent classroom teaching performance in the form of access to outstanding professional development opportunities rather than monetary reward. Performance pay at each of the schools was, to different extents, confidential in some respects and was ultimately at the discretion of the principal, usually acting in consultation with other key staff.

1. Davidsonian Grammar School

Davidsonian Grammar School is a primary to Year 12 school in a large regional town. The school has an enrolment of about 900 students and a teaching staff of 80. The school is in a federal electorate that has one of the lowest per capita incomes in Australia. The school opened as a new school several years ago with many staff and students from a recently closed school, but with a new leadership.

Teachers at this school sometimes receive a level of performance pay in the form of end of year bonuses for exemplary performance. These teachers are selected by a panel (panel members not eligible) that takes into account its own knowledge of the staff and nominations from other staff. The bonus is an annual 2000 award (taken as travel entitlements for personal pleasure) for two teachers at the school. While the Principal said that staff members appreciate both the recognition and reward in the bonus, he also described it as 'only sops, quite frankly', particularly in comparison to performance pay systems in other professions.

The principal of this school would like to be able to recognise and reward the school's most exemplary teachers with a structured form of performance pay. 'I would like to be able to say to my best teachers: Don't go into middle management, stay in the classroom.' He sees two major impediments to the introduction of a performance pay system: first, teachers have been 'very resistant to the idea of disparities of salary based on performance; second, budgetary considerations are a major impediment to the introduction of a meaningful system of performance pay'.

Student surveys of teacher performance are widely used at this school, and while staff were 'horrified at first', the feedback from staff in this respect is now positive, especially as most staff receive positive 'reviews'. The Principal would use both student and staff input in selecting outstanding teachers. He does not feel that 'egalitarianism' is appropriate in pay scales for the [teaching] profession.

Budgetary considerations would probably be the major impediment to introducing performance pay at this school. 'My hands are tied by salaries and awards and by the fees set by the [school] accountants.' He believes that this would be the case at most independent schools, which 'basically keep pace with government pay scales or pay a few hundred dollars above these scales'. He commented that at one stage there were two steps available above the incremental salary scale for those with extra responsibilities, but these have now been subsumed at some independent schools into the incremental scale – 'a de facto increment'. The Principal thinks that schools have basically put the issue of performance pay 'into the too hard basket...I don't know of any school that has a meaningful performance pay/bonus system'.

If this Principal were able to develop a performance pay system free of budgetary constraints, he would have different grades of rewards, with many teachers receiving an extra 2 per cent on an annual basis. There would be an extra payment (5 per cent) for competent performers in hard to staff areas simply because of scarcity, and a 10 per cent to 15 per cent extra payment for very strong performers in hard to staff [curriculum] areas. This would be an extra incentive to retain their services and reward their excellence. For very strong performers in any area there would be a 10 per cent extra payment. The Principal estimated that there would be about six to ten teachers from this staff of 80 in the last two categories.

2. Dunnellen College

Dunnellen College is a primary to Year 12 school in a 'leafy suburb' of a capital city. The school has an enrolment of about 550 students and a teaching staff of about 60.

The Principal of this school supports the concept of performance pay as recognition and reward for exemplary teachers, and says the school has been using a system of performance pay for a number of years. In order to have some flexibility in salaries, the school pays above the independent schools' Award rate. This means that a teacher's salary above the annual award scale can range between zero and 8 per cent. If there were to be no increment, a teacher's salary would still be above the independent schools' Award, but below the government Award. In practice, most teachers would be being paid between 0 per cent and 5 per cent above the government Award. It would be unusual for a teacher not to be given an increment, but the increment could be withheld if performance were not deemed adequate. A teacher at the top of the scale could earn up to 4000 or 5000 above the top of the government incremental scale in recognition of outstanding performance.

The school pays cash bonuses of between 1000 and 3000 at the end of the year to teachers who have performed 'above and beyond' normal duties by, for instance, running a particular program. Incentive awards such as 'vouchers for a weekend away' are also given.

Salary and bonus levels based on performance are confidential to each teacher. Staff receive annual letters informing them of their particular increases or bonuses. 'Otherwise you run the risk of people getting their noses out of joint.' Teachers do nevertheless discuss these matters occasionally, although in this Principal's experience, those with the more substantial increases or 'performance pay' are the most circumspect in this respect. 'The ones who tend to talk about it are the ones with the standard increase.'

The Principal would like to differentiate more between teachers and to have a wider system of performance pay if the budget were bigger. He would like to increase recognition and rewards for 'outstanding classroom practitioners' and to pay them a salary commensurate with what they would receive if they were promoted to an administrative position. He would also offer additional incentive payments to retain exemplary teachers in difficult to staff subject areas such as Maths/Science.

This Principal stated, however, that the 'best and most brilliant Classroom Teachers' are often also the most ambitious and many will eventually want to move into senior management and

leadership positions. He believes this would be the case in many instances even if higher salaries were paid for outstanding Classroom Teacher performance. He does not see this as necessarily detrimental to the profession overall. 'You need to keep the bigger picture in mind and think beyond your own school, to raise overall standards, to have your best people in leadership positions in the general system and to encourage people to take on these challenging positions.'

3. Raasay College

Raasay College is a school in an outer metropolitan area, with over 1400 students and a staff of over 120. Employment of staff is covered by the school's own Certified Agreement, which, while based very much on the State's Independent Schools' Award, is individual to this school. This system has been in place for a number of years. Before a new Agreement is finalised, the Principal consults with the state's independent schools' association to discuss likely developments over the next few years. The Principal and Board like to give improved working conditions in advance of the general Award. They try to keep the salary level up to 2000 ahead of the systemic sectoral awards. The school's Board of Directors endorses the additional 1 per cent in the salary scale because 'they are aware this premium is necessary [to attract quality staff]'. This Principal estimates that pay levels at the school would be in the middle of the independent schools' range.

Progression along the incremental scale is automatic. The question of withholding an increment has never arisen and is in any case precluded by the Agreement.

There is some performance pay at the school with regard to the salaries attached to senior positions. These salaries are set by the Principal and relate to matters such as work output. These salaries relate to about ten staff; they are not covered by the school Award, but are determined by the Principal with regard to the market. In the case, for instance, of a Deputy Principal, the salary could be up to \$30000 above the top of the scale. These positions all have some element of classroom teaching, but do not relate to classroom teaching as such.

There is a further category of Expert Teacher in this school. This category is for Classroom Teachers who have no other responsibilities. The criteria are set out clearly for these positions, which entail an extra 2000 to 4000 annually. With good performance, progression to the Expert Teacher category is 'pretty much automatic'.

Some element of performance pay is also attached to positions of responsibility, with an allowance of, on average, about \$8000 being paid. The base salary does not vary and the Principal has sole responsibility for the payment of these allowances, although others may advise. While these allowances do not generally relate directly to classroom teaching performance, there may be an occasion when an 'incentive' payment may be made in an area where it is difficult to retain quality staff. An example would be a highly competent Classroom Teacher who was offered a much more highly paid position in industry. In this case the Principal had the flexibility to develop a number of specific classroom related additional tasks related to the subject area in question, with the teacher invoicing the school on a monthly basis as these tasks were accomplished. In this case the additional monthly payment averaged at about 1000. The Principal also has the autonomy to accelerate staff on the incremental scale. 'People can jump to positions [on the incremental scale] earlier regardless of how long they have been in the service.' This happens occasionally, including at recruitment stage, when a highly competent Classroom Teacher might leave another school, or when a staff member is recruited from another profession.

While the incremental scale and Expert Teacher allowances are part of the Agreement, the individual placement of staff on these levels is confidential. Other allowances and the individuals receiving allowances are published, as is the range of the allowances. The specific position and salary amount of an individual within the range of the allowance is also confidential. I.e. a Head of House could receive an allowance of anywhere between \$7000 and 9500.

The Principal believes that the staff would generally be supportive of more extensive performance pay related to classroom teaching, but there is limited scope for the additional costs this would incur. The 'bucket of funds' is not unlimited and additional costs incurred would need to be recouped through increased fees. If logistical difficulties could be overcome, and if funding were available, the Principal would like to see classroom related performance pay system in place, with fair and transparent criteria and processes.

4. Alfred Day College

Alfred Day College is a large private school with several thousand students in a capital city. About 500 teachers are employed at the school. All staff are on Australian Workplace Agreements (AWAs). Agreed documents about practice are incorporated into the AWAs, which cover workload, salary scales and allowances. All contracts are confidential, but the range of possible, and in some cases explicit, bonuses is public. Previously, salary scales had

been based on historical practice, with a small group of similar independent schools following a separate Certified Agreement. The ability to operate as 'Award Exempt Schools 'was removed legislatively at state level several years ago, at which time the staff of this school voted to accept individual contracts.

As in the previous Certified Agreement, under the AWAs, staff members are paid on a scale of about 10 per cent to 15 per cent above government school awards, with annual increments each year. In terms of salary, teachers "stop moving" once they reached the top of the twelve point scale, with the usual entry point being at the fourth level. This is about 10,000 more than the corresponding level in Government Schools. It is possible, but would be unusual, for an increment to be withheld on the basis of unsatisfactory performance.

There is additional provision for performance pay. The Principal described performance pay at the school as 'both direct and indirect'. Teachers who perform 'at a very high level' can be accelerated up the incremental scale, 'reflecting a high level of performance'.

There are also additional roles for outstanding teachers. They can hold various positions of responsibility. These can entail a very significant amount of money – a Dean, for instance, might earn between 20,000 and 25,000 extra annually. What is of particular interest in this arrangement is that the Dean would still have a 75 per cent teaching load. This is a deliberate practice. In the words of the Principal, 'No-one escapes the classroom!' (The only exemptions to the classroom teaching role are for those whose role necessitates constant movement between classes or sites.)

The Principal also teaches a class. The continuation of all staff as Classroom Teachers 'sends a strong message to staff – we are all of one profession'. The best Classroom Teachers have a leadership role, but the aim is to keep the best practitioners in the classroom – 'to link leadership with practising teachers'. They are 'involved in significant teaching practice, but also receive significant additional salary'. This professional bonus links the leadership aspect to practice.

There is a small number of outstanding teachers who do not take a position of responsibility by choice. These teachers remain totally in the classroom. The school 'tries to reward their excellence' by paying an additional salary/bonus of between 3000 and 5000. Expert teachers are recommended by Heads of Departments on an annual basis, as a way of retaining their enthusiasm and drive. Selection is through an open process with a right of review.

In summary, between 3000 and 25000 can be paid to Classroom Teachers (those in the classroom for three quarters of their time) over and above the salary scale. About 80 people would be receiving a payment in conjunction with a position of responsibility, and about ten people would be receiving the smaller Expert Teacher payment.

The Principal describes this school's salary arrangements as 'basically a performance pay sort of system. It is an extra strong and very collegial staff, all committed to the same profession. But you can't have carte blanche [with regard to salaries and allowances]. Teamwork means you need a degree of openness and a framework for the acknowledgment of expertise and success. Most teachers are pretty generous about good teaching [and will accept a system of performance bonuses] provided they don't think there are favourites or that special deals will be made. If the [performance payment] process is open, just, fair, the profession will buy it. This is the fourth year that this school has been using its performance payment system and the Principal believes that it has a high degree of acceptance and is not causing division. Welfare and staff morale surveys are consistently very positive.

5. Ashley Cooper Grammar School

Ashley Cooper Grammar School is a primary to Year 12 school in an outer suburb of a capital city with an enrolment of over 1000 students and a teaching staff of about 100. The school has a certified agreement, but the salary scale is discussed with teaching staff on an annual basis and is not incorporated within the agreement. The school is subject to the Independent Schools Teachers' Award but the principal's view is that the salary component of the award has become largely irrelevant because it is so far behind what he regards as market salaries. As in the government schools Award in this state, there is a 12 point incremental salary scale, with new graduate teachers entering at Level Four and progressing through the scale. The beginning level of salary is about 4000 above the government beginning level. There is no provision for withholding an increment. When staff are being recruited, an offer may be made at 6000 to 7000 above the corresponding level on the government scale. The Principal believes that it is probably inevitable at some stage to offer incentive payments for difficult-to-staff areas, or to attract staff in areas where improvements in educational outcomes may be sought. While the salary scale and range of allowances are public, individual contracts within the school's Agreement are confidential.

This school differs from government and many other independent schools in that there is provision for accelerated provision through the incremental scale and that this provision is regularly applied. In the Principal's words, 'where the [government education] Department

has the next five years [after entry to the incremental scale at Level Four] in five small steps, we have two big steps, enabling teachers to progress after Level Five of the incremental scale to the level of ET (in government schools two levels above the top of the twelve point incremental scale) in two big steps'. Teachers performing at a particularly high level can advance two steps at once. There are also 9 levels of allowances available, ranging between \$1300 and 15,000.

Most of these allowances are paid to Classroom Teachers who also have a position of responsibility, but they can also be granted solely for outstanding classroom teaching performance. In this case a teacher would be recommended to the Principal by a Head of Department who had appraised the teacher's performance, and the teacher would also have been observed by three to four other members of staff. While some documental evidence would also be presented, the main criteria for judgment are 'what we're seeing and analysis of [student] results'. Analysis of results at different levels would involve full consideration of context and value added components. Seventy per cent of teachers at the school would be receiving some kind of additional allowance, with 15 per cent of teachers receiving the allowance for classroom teaching performance.

Part of the rationale for teachers being able to accelerate through the incremental scale to the top of the two post scale levels is a view that teachers may often be at their best during their fifth and ninth year of teaching. Rather than having small salary increases along an incremental scale, this arrangement 'lets them jump'.

As at other schools, performance payment is limited by available funding, with next year's emphasis being on increasing accessibility for students. An increase in any program [such as performance payments] means an increase in fees. The Principal believes it would be beneficial if targeted extra funding were available to reward staff members who are performing at a very high level.

6. Donnelly Grammar School

Donnelly Grammar School is a moderate sized school in a semi-rural area. It has about 800 students and 160 staff. The school has its own Agreement, which pays about 4 per cent above the government school salary scale. It has an incremental scale with steps and levels similar to those of government schools. 70 per cent to 80 per cent of staff would be at the top of the incremental scale. 60 per cent of staff would be receiving a special payment or allowance.

Two important funding priorities at this school are maintaining a low student/staff ratio and directing money towards the professional development of staff.

Allowances and promotion positions are generally at the discretion of the principal. The teachers' levels of experience, particular skills and the principal's own observations, including classroom teaching observations, are factors in these decisions. The allowances and positions are usually attached to certain responsibilities, such as Head of Department, or to particular ongoing projects. Allowances and positions are not awarded on an annual or cyclical basis, but are ongoing. Once teachers have a particular allowance or position, they retain it unless they wish to relinquish the position. Staff know the amounts attached to these positions and allowances. There is however, a small group of leadership positions in the school, where people receive a special allowance that raises salary levels considerably. The salary levels for these positions are confidential.

This school does not pay monetary rewards to teachers for performance by paying bonuses or by placing them at different points within a given range of salary levels. It does however recognise and reward outstanding performance in the classroom and in general by providing access to and paying for first class professional development opportunities both within Australia and overseas. Time and money are made available for selected staff each year to attend conferences and other special gatherings related to aspects of the school's curriculum or programs. The decisions about which staff will be given these opportunities are made annually by principal, based on knowledge of classroom performance and contributions to the life of the school. The principal believes that this has been a very effective way of rewarding and recognising staff: 'We are by and large very collegial, with a very supportive learning environment. People who do well are not resented, but are rather supported and encouraged by other staff. We try as much as possible not to send just one person, but more than one so the learning can be better shared...Teachers have described these trips as 'life-changing'. The exposure has shown them what's possible.'

Summary

A clear impression emerges from the case study schools that there is a strong desire to provide greater recognition to teachers who can show evidence of attaining high standards of professional performance. School principals recognise the importance of promoting quality teaching through rewarding evidence of enhanced knowledge and skill.

This desire manifests itself in a wide range of schemes that vary in quality from school to school. There is no consistent pattern to the definition of highly accomplished teaching or methods for assessing performance across schools. These schools have no recourse to a system, as there is in other professions, that provides them with a credible certification that teachers have reached high standards of professional knowledge and skill.

Each of these schools is attempting to develop career pathways for highly accomplished teachers and teacher leaders. However, they find it difficult to develop on their own credible systems for standards-based performance. The assessment methods they use do not lead to portable qualifications with profession-wide currency. The case studies indicate that there is a need for a profession-wide system for providing an independent, authoritative certification service to schools and school systems seeking to provide incentives to teachers to attain high standards of professional performance and retain those that do.