Productivity Commission Study of the Schooling Workforce
Deakin University School of Education Submission

Introduction

The efficiency of the schools workforce depends upon the rates of return on investment in education and skills produced by that workforce. These rates of return fall generally into two categories. Firstly, economic returns depend upon the capacity of educators to develop an appropriately skilled and committed workforce capable of contributing to the productive capacity of the economy. Secondly, and equally important, social rates of return depend upon the capacity of the education system to encourage social cohesion in an increasingly diverse society. While schools cannot compensate for society they clearly make a contribution to both economic and social rates of return on investment.

They do so in a situation where the economy is undergoing continuous transformation through technological innovation as well as change resulting from the increasing pace of globalisation. They also do so in a situation of increasing social diversity and inequality. The challenge for the school workforce is to respond to these issues in ways that allow their students to develop the capabilities (Sen 1985, 2005) that will allow them to live economically, socially and culturally viable lives. Whether educators succeed in meeting these challenges depends very much upon the characteristics of the education systems within which they work.

It is clear from international comparisons of educational achievement (PISA, TIMMS, etc.) that those countries with the most integrated and professionalised systems of education (Scandinavia, Finland in particular) produce not only high levels of conventional achievement but also the lowest levels of educational inequality. Anglophone countries (especially the UK and USA but also, increasingly, Australia) have the least integrated education systems with consequent lower levels of comparative achievement and higher levels of inequality (OECD). In such systems the rates of economic and social return on investment are, therefore, likely to be diminished.

The question inevitably arises, therefore, as to what changes to system and workforce could increase both economic and social rates of return on Australia's considerable investment in education.

While these issues are addressed below in response to the Commission's specific questions a number of general issues provide an important context.

Firstly, at system level two issues are of prime importance: the need for greater system integrity coupled with adaptability in the face of increasing diversity. Secondly, the redress of inequality in infrastructure and recurrent resources that provide the immediate context for the schools workforce.

Secondly, at schools level, as stated in the *National Declaration on the Educational Goals for Young Australians* (online), schools are required to develop active citizens and productive workers. Such a charge requires schools to attend to the intellectual, social, cultural, physical and emotional needs of students within the overall processes of learning as well as the product of that learning as measured by standard achievement scores. Schools cannot meet these requirements unless they are networked with other schools, social agencies, various industries and the communities within which they are located.

Thirdly, these are new times in which information is more freely accessible than ever before. In such a context teachers' effectiveness is dependent on the degree of their pedagogic authority and the degree of judgement they exercise over the context and content of learning. Rigid standardisation of curriculum and assessment make the exercise of such authority increasingly difficult. The efficiency and effectiveness of teachers work depends upon their possession of an extensive pedagogical repertoire; generic interpersonal skills, cross cultural awareness and technological skills as well as depth of specialist content knowledge and the capacity to work across disciplines within collaborative frameworks.

Fourth, contemporary students are no longer simply receivers of information, but also creators and communicators of it through new media technologies. It is crucial that teachers and schools help students in the development of judgement on the value of such information, whether that is technical or social in nature. Such judgement relies upon both technical competence and social norms and values (such as fairness and equity) that can only be developed through the establishment of trust. Trust is also developed through a concern for the health and well-being of students. There is strong epidemiological evidence that student health and well-being, particularly in the early years, produces significant educational, social and economic returns for both individual and nation (Wilkinson & Pickett 2009).

The following arguments – which follow the structure of the Productivity Commission *Issues Paper* – take up these issues within the general context of a concern with workforce issues and their relationship to rates of economic and social return on investment.

The schools workforce

Q *What… features of the current schools workforce and its changing context are important from a policy perspective?*

The boundaries of the schools workforce are now more permeable across time and space than ever before. As far as time is concerned, the career trajectories of those with teaching qualifications are more flexible particularly in the face of increasing occupational opportunities in fields that require the skills that teachers have in abundance: knowledge management, personal relations, time management and organisation, team building, networking etc. Alternative occupations are seen as less stressful and more financially rewarding than teaching – especially to mid-career teachers. Over a lifetime therefore, teaching may now be seen as an episode in the development of a portfolio career built from several different options.

In terms of space, teaching is now an international profession with small but significant and increasing flows of teachers between systems and countries. An example of this is the rapid increase in the number of international schools – especially in developing countries, Asia and the Middle East in particular – and the consequent demand for English speaking teachers of whom there are currently some 250,000 in over 5,000 schools and an expectation that these numbers will double by the end of this decade (Brummitt 2007, 2009). Such teachers are and will be drawn as now from the USA and the UK but increasingly from countries like Australia, Canada, New Zealand, Ireland and South Africa (Hayden & Thomson 2011).

So the general context of the teaching workforce has changed considerably and teacher career options are now available on a global basis. Consequently only good working conditions and internationally competitive remuneration combined with promotional opportunities and professional development are likely to retain the best teachers.

Related features of the schools workforce which are important from a policy perspective are:

- the relative loss of parity in wages in teaching compared to other jobs (which means higher academic achievers tend to go elsewhere)
- lack of incentives for schools to accept pre-service teachers for practicum placements

The schools workforce also needs to be seen within the context of changes in the broader workforce which is:

- increasingly casualised and feminised
- increasingly insecure as career ladders disappear and educational qualifications no longer guarantee employment
- continuously re-skilled in response to technological change
- increasingly concerned about family/worklife balance

Student outcomes

Q *What does the available evidence indicate about Australia's education outcomes? How policy relevant are comparisons of literacy and numeracy over time and across countries?*

Q *Which avenues for reform are most promising for reducing educational disadvantage and improving education outcomes more generally? How important are workforce related changes relative to other initiatives directed at enhancing children's learning potential?*

Large-scale meta-analyses of the research on the influences on student outcomes indicate that these are of three types: the influence of students' *backgrounds* (accounting for 40 per cent of the influence on student outcomes); the influence of students' *peers* (which accounts for 30 per cent); and the influence of students' *teachers* (which accounts for 30 per cent) (McGaw 2008, Hattie 2003, 2009). In sum, contextual issues account for the vast majority of influence on student outcomes, including contextual influences on teachers and their teaching. Contextual variation is considerable between education systems of different nations, and suggests that *between-country* (or between education system) comparisons of individual student outcomes are almost meaningless. In fact, the Commission's claim that 'Australia's student performance is higher than the OECD average' and the ranking of nations according to reading, mathematics and science, run counter to PISA's intent, originally designed to enable *within-country* (or within education system, within context) comparisons of student outcomes over time, rather than comparisons between countries at any one point of time (Goldstein 2004). The reasons for this are complex but particularly to do with differences (which are not assessed by PISA) between education systems and their contexts, including differences in what is taught at particular age levels, differences in the ways in which these are taught and differences in the cultural knowledge and language use that accompany these (Goldstein 2004).

Between-country comparisons

Within Australia, differences in student outcomes between different states and territories are largely attributable to contextual issues, given the similarities of their education systems, including their common goals (MCEETYA), curriculum (particularly with progression towards the National Curriculum) and workforce demographics and qualifications. Similarly, the individual PISA performances of Australian students compare well to students in other nations with similar backgrounds and similar education systems; in particular, other Anglophone nations. That is, between-country comparisons of individual student outcomes are more meaningful between Australia and the UK or the USA, for example, because of the similarities between these nations and their education systems. In the same way, differences between individual student outcomes in Australia and those in 'higher scoring' nations need to be understood in relation to the contextual (including demographic, geographic and economic) differences of their particular education systems.

For instance, most of the higher scoring PISA countries are highly homogenous ethnically, subject to comparatively low rates of immigration and diversity, and have highly centralized and formalized systems of education. Finland is a case in point. It has a largely homogenous small student population with high levels of government investment in teacher professional development and high pay scales imparting high status to teachers and therefore an improved standard of selection into teaching. Australia, by comparison, is significantly less homogenous due to relatively high rates of immigration with consequent linguistic, cultural and religious diversity and an increasingly fragmented provision of education through Commonwealth support of diverse educational provision. There is also a lack of genuine and reasonably funded professional development opportunities for many teachers, who, compared with other professions, are comparatively poorly paid and of lower status. Hence, initial teacher education programs attract entrants with lower qualification levels.

Asian countries also invest considerably more of their GDP in education, whereas until recently this has been in decline in Australia. Asian education systems are also different in the comparatively high cultural standing attributed to teachers and in the practice of students attending after-school 'cram' classes narrowly directed at how to pass PISA-like tests. At the same time, this is at a cost. Japan, South Korea and Singapore are increasingly concerned about the type of student they are producing in terms of their creativity and capacity to think critically – capacities not assessed by PISA but now seen to be central to workers in twenty-first century knowledge economies – such that these countries are now looking to integrate Western approaches to pedagogy as a way of addressing these concerns. Indeed, Australia is a world leader in 'Productive Pedagogies', which have been shown by the research to make a difference to student outcomes (Hayes et al. 2006), albeit as one influence among a number. However, more recent policy emphasis on NAPLAN test results, particularly the public display of these, has shifted Australian teacher practice towards less effective teach-to-the-test approaches.

In short, while between-country comparisons of individual student outcomes are possible (albeit limited) between nations with similar contexts and education systems, they are more meaningful at the level of their contexts and education systems. The between-country lessons to be learned from higher scoring nations are that Australian student outcomes would benefit from: smaller class sizes (particularly among its low socioeconomic and linguistically and culturally diverse communities), increased government investment in teacher professional development, and higher status afforded to teachers, including increased deference to their professional judgments concerning the contextualized nature of teaching and learning.

Within-country comparisons

Using PISA results for their intended purpose of facilitating within-country comparison (Goldstein 2004), it is evident that there is now considerable disparity in Australia between high and low achieving groups. In international terms, this disparity is quite large among OECD nations (Wilkinson & Pickett 2009) and is growing. Australian education in the 1980s was characteristically 'high quality and high equity'. Now it is 'high quality and low equity'. While Australian school students still score at levels among the best in the world on OECD PISA tests, this now also comes with a long tail of under-achievement (McGaw 2008), with gaps in student performance between the 10th and 50th percentiles of 22 per cent (mathematics), 25.1 per cent (reading) and 25.6 per cent (science) (UNICEF 2010) and with students from low socioeconomic status (SES) backgrounds concentrated at the bottom end of these gaps.

In Australia, more than any other nation (McGaw 2008), SES is now highly correlated with academic achievement, particularly for students at the extremes of SES. In fact, the effect of schooling on students over time, as they progress through school, is to widen the achievement gap between students from high and low SES (Feinstein 2003) such that those from low SES backgrounds who complete their secondary schooling, are more likely to receive low university entry (ATAR) scores, and vice versa (Teese & Polesel 2003). A recent analysis of NAPLAN test results has shown some differentiation within these low results for students from low SES backgrounds. Specifically, students with these socioeconomic backgrounds located in Australia's metropolitan areas are more likely to receive lower NAPLAN test results than similar students located in Australia's regional and rural areas (Shepherd 2011).

The contextual differences in these different locations are important to note. Schools outside of metropolitan areas are more likely to have smaller class sizes, their students are more likely to be drawn from a range of SES backgrounds, and their teachers are more likely to know their students in greater depth. The comparative diffusion of SES in regional and rural schools and its possible effect on student outcomes, albeit still far from ideal, is particularly noteworthy. A similar effect has been noted among university and college students in the USA. A meta-analysis of research on these students and their academic outcomes indicates that students in institutions with more heterogeneous populations exhibit higher levels of overall academic achievement, particularly for students from privileged backgrounds (Milem 2003).

However, in metropolitan areas of Australia, students from low SES backgrounds tend to be concentrated in particular locations and particular schools. Indeed, there is a concentration of disadvantages in many of these locations and schools; not just in terms of education but also in areas of health, infrastructure (e.g. public transport) and other services (Vinson 2007, Glover et al. 2010). This concentration of disadvantage is matched by concentrations of advantage in other locations and schools. As the Australian Government's MySchool website demonstrates, there are quite extreme disparities in the recurrent resources available to schools. These disparities are echoed in the extreme differences in infrastructure, especially the physical conditions of schools.

For example, a significant number of disadvantaged schools in metropolitan Australia operate in deteriorating facilities while others have the benefit of quite lavish buildings and grounds. Because of the issues faced by disadvantaged schools, they also take longer and require more resources to respond to what for other schools are relatively simple system directives and requirements. As Thomson (2002) has shown, 'rustbelt' schools – schools located in areas characterized by the remnants of superseded manufacturing industries and hence with high levels of unemployment – spend a high proportion of their resources (including time) on 'welfare' rather than educational issues. These schools are also typically attended by successive waves of migrants and urban Indigenous populations. Workforce issues are intimately connected to this diversity and these disparities, with the complexity of teaching and learning in such schools having a significant effect on teacher burn-out.

The most promising avenue for improving learning outcomes among lower achieving groups is the redirection of resources to remedy infrastructure deficiencies, staffing ratios, support workforce (such as translators, community leaders, social workers) within the school, and to provide continuing professional support for teachers. As noted above, reducing class sizes in these schools also should be a priority, as well as increased government investment in genuine and ongoing teacher professional development, and higher status afforded to teachers, including increased deference to their professional judgments concerning the contextualized nature of teaching and learning.

Workforce issues

Q *What are the strengths and weaknesses of current workforce arrangements? What are the priority areas for policy attention?*

The great strength of current workforce arrangements is that supply and demand of teachers is roughly in balance although with some oversupply of primary teachers and some shortages of secondary teachers in particular curriculum areas and some difficulty staffing rural and remote schools.

The great weakness of current workforce arrangements is that teachers and schools are treated as individual units, without recognition that teachers and schools work cooperatively and belong to multiple professional and personal networks. While this individualisation may appear to allow schools and systems flexibility in workforce planning and allocation, it also prevents teachers fully engaging in support networks as participation is often individualised and seldom supported on a whole-school or network basis.

This applies particularly in the case of reward systems that identify individual teachers for rewards or incentives while the teacher's performance may be at least in part the result of considerable collegial and collaborative support. More appropriate support could be provided through joint professional development awards and support for group innovation as well as support for teacher networks.

Another weakness relates to the important work of supporting the development of new teachers in the context of the practicum. Teachers currently have little incentive to assume the burden of supervising pre-service teachers, leading to a situation where teacher education providers encounter difficulties placing their students in practicum. This situation deserves attention from policy makers.

Q *Are major changes required to address shortcomings, or would gains be better achieved through fine-tuning of existing policy settings?*

One major change needed to overcome shortages of teachers in rural and remote locations is significant compensation for travel to urban centres for professional development and networking. This would also involve mechanisms for teacher replacement on a more generous basis than available at present.

Other significant changes would be greater support during the induction period for newly qualified teachers; the development of more varied and rewarding career opportunities; greater staffing flexibility for schools; a reduction in externally driven accountability and its replacement with peer assessment and review.

Recent policy developments

Q *Do the reforms, in train or in prospect, address the right issues?*

With regard to schools workforce, many of the reforms are not premised on a strong, empirical research base and may have unintended effects that make them counterproductive to policy aims. Examples include the Teach for Australia, National Curriculum and Professional Standards for Teachers initiatives.

Teach for Australia

Rigorous, large-scale statistical research demonstrates that the teacher training and qualifications *do* make a difference to student outcomes. Using data from a 50-state survey of policies, state case study analyses, the 1993-94 Schools and Staffing Surveys (SASS) and the National Assessment of Educational Progress (NAEP), Darling-Hammond (2000) found that teacher certification had a stronger positive correlation with student achievement in reading and mathematics than class size, teacher salaries, or school spending even after controlling for poverty and language status. Similar, large-scale studies support the positive impact of longer teacher training on student outcomes, particularly in the early years of schools. For example, analyses of student achievement and teacher qualifications using data from the US Early Childhood Longitudinal Study (ECLS) found that first-grade students had higher levels of achievement in maths and reading when teachers had higher levels of coursework in these subject areas (Croninger et al. 2007).

‘Teach for Australia’ is an illustrative instance of policy reforms ignoring the evidence- base. It has been embraced by some universities as an income generating strategy and by departments of education as a quick-fix for the problems of recruiting, retaining teachers and placing teachers in hard-to-staff schools. These are powerful economic and human capital drivers but large-scale, comparative, outcome studies of the same program in the United States, ‘Teach for America’ (TFA), show a positive relationship between teacher training, teacher effectiveness and student achievements, and that reducing the length of teacher training has a negative effect on student outcomes and retention of teachers in the workforce.

Analyses of Year 9 SAT tests in Mathematics, English Language Arts and Reading, and students of Teach for America teachers make about 20% less academic growth a year than students of beginning teachers with full certification (Laczko-Kerr & Berliner 2002). Similarly, analyses of the records of 132,000 students and 4400 teachers across grades and over years using six different achievement tests found that students of TFA teachers performed worse on all six tests. On five of the six tests, TFA teachers depressed student achievement by between two weeks to three months annually compared with fully certified teachers with the same experience and working in similar schools (Darling-Hammond 2005).

The difference in student achievement produced by fully trained, qualified teachers compared with truncated training such as offered under ‘Teaching for Australia’ is even greater in the earlier years of schooling. Drawing on the research base generated by large scale US studies, early primary school students assigned to new TFA recruits scored significantly lower in reading and language arts and marginally lower in mathematics when compared with teachers prepared in college pre-service programs (Boyd et al. 2006)

The US evidence base tells us that TFA graduates get better as they undertake advanced training and gain more experience but teacher retention is a major problem The majority of TFA teachers leave the profession because they had always planned to do so or have failed as teachers. By the end of their second year of teaching, 69% of TFA teachers have left teaching; by the end of their fourth year of teaching, 85% of TFA teachers have left the profession. In short, the majority of TFA teachers do not stay in education long enough to make up for the negative impact on student outcomes they cause during their first few years of teaching.

In short, there is sufficient research to suggest that the ‘Teach for Australia’ program may not be a viable solution to the problem of recruiting and retaining the teaching workforce. Further, ‘Teach for Australia’ graduates are more likely to disadvantage the children they teach when they first enter classrooms compared with fully trained teachers. The US research evidence underlines the imperative for reforms to have a solid and persuasive research base. It also confirms that ‘quick-fixes’ that reduce the length of pre-service teacher training will not help meet Australia’s broader, national agenda to improve student achievement and outcomes and, in cases such as ‘Teach for Australia’ may have a detrimental impact on students because teachers are routinely allocated to schools where there students are already disadvantaged in various ways and where poor teaching will further reduce students’ chances of achievement.

National Curriculum

One of the major policy reforms of recent years has been the move to a National Curriculum. While the move to national curriculum is not necessarily detrimental, it will be at the loss of curriculum and assessment innovation which arose from synergies between the states where we have seen significant curriculum emerge in particular states which has stimulated curriculum development in other states. It will also require a large investment in Professional Development for teachers in states in which there is significant misalignment between previous State and Territory Curriculum, and a subsequent redundancy of past investments in teacher professional knowledge and networks of teacher innovation. The development of the national curriculum has been poorly planned and implemented in an ad hoc manner, starting with four disciplines without any debate over what a curriculum for the 21st Century should look like. Consequently other subjects are just being ‘added on’.

Professional Standards for Teachers

A key reform has been the focus on ‘Professional Standards’ for teachers. The nature of the Professional Standards for teachers in Australia has been internationally criticized as instrumental and reflecting an oversimplified, naïve understanding of teaching practice by policy leaders. Such criticisms have been made at the OECD level and informed by international comparison with teaching standards in other OECD countries.

The OECD *Country Background Report for Australia* on ‘Attracting, developing and retaining effective teachers’ emphasises that:

> ‘Professional standards’ typically refer to the content or subject matter knowledge of teachers, their communicative capability, their ability to organise, monitor, assess and evaluate learning and their practical competence as managers of learning in the school and the classroom. This is the thrust of much of the work now proceeding in the institutes of teaching and registration boards and in the MCEETYA Taskforce [but] more is at stake than this in the pursuit of the knowledge-based society and an innovative culture. In the course of the current moves to establish institutes of teaching and to define standards, teachers’ ethical standards and values have also been identified, not prescriptively, but as an issue requiring attention. This is a sensitive issue and there is little evidence that it has yet been examined in any depth (Skilbeck & Connell, 2003, pp. 74-75).

The *Background Report* also draws attention to the limited notions of ‘effectiveness’ in relation to teacher education:

> ‘Effectiveness’…is not disposed of solely using a means-ends analysis, with the ends treated as given or settled by some external authority. Teachers themselves have educational values, ideals and aspirations beyond, or perhaps even at odds with, the formal, systemic requirements of employment. Teacher satisfaction surveys and research on teacher expectations and expectations of teachers reveal a rich and varied array of educational beliefs and aspirations, of satisfactions and discontents. These form part of an analysis of teacher effectiveness (Skilbeck & Connell 2003, p.77).

These analyses highlight the complex nature of teaching and the flawed logic of limiting teaching to simple competency statements and standards. They also underline the weakness of the standards push and the need for infrastructure support for professional learning. Drawing on detailed empirical evidence, the OECD strengthened this argument in its recently released *Review of Evaluation and Assessment in Education: Australia* (2011) by identifying that teacher standards, registration and performance appraisal and management is necessary, although,

> Without a link to professional development opportunities, the evaluation process is not sufficient to improve teacher performance, and as a result, often becomes a meaningless exercise that encounters mistrust – or at best apathy – on the part of teachers being evaluated (Danielson 2001, Milanowski and Kimball 2003, Margo et al. 2008) (OECD 2011, p. 85).

It needs to be recognised that Professional Standards, teacher registration and performance appraisal and management are only a small part of the process of developing a the creative, innovative and skilled teaching profession needed for the changing demands of the 21st century. Other dimensions include a clear career pathway and opportunities supported by professional learning opportunities in multiple forms and formats. Without these important ingredients, performance management and appraisal mechanisms, including Professional

Standards, will provide little more than a report on teacher skills and will continue to be seen by teachers as nothing more than an administrative, managerial tool (OECD, 2011).

Q *What reform areas should be afforded the highest priorities?*

To nurture the sort of high-level teaching capacities needed for dynamic, knowledge economy of the future, Australia ought look to the management of high skill professions, such as medicine, or teacher registration and accreditation processes elsewhere in the world, including some US states. In these instances, standards, registration and accreditation processes are linked to a progression through a career structure that is publicly recognised through a variety of means (e.g. title, progression rankings, salary increments) but is always contingent on undertaking and applying on-going professional learning. It is this important interconnection between different aspects of teacher professional work that needs to be a policy priority. The OECD (2011, p.91) has made the same arguments in its policy recommendations for the Australian teaching workforce:

- The alignment of teaching standards with a competency-based career structure;
- Teacher registration conceived as career-progression evaluation;
- Developmental evaluation performed through teacher appraisal as part of performance management, internal to the school, for which the school principal would be held accountable;
- Links between developmental evaluation and career-progression evaluation.

A key reform priority needs to be the alignment of performance accountabilities with professional development and learning. In tackling this task, it is imperative that policy provides capacity for teachers and schools to decide on the sorts of professional learning that is appropriate to specific, local needs and contexts. Current practice in many states is to prescribe reform areas as ‘priorities’ and to limit the range of activities, initiative and professional learning to these areas. This ‘top down’ approach limits the capacity of teachers and schools to respond to local imperatives or excludes them from developing their skills, capacities and services to the needs of their communities because their local needs do not match state-decreed priorities. Such inconsistencies are self-evident when we scrutinise the application and effects of policy. The operationalization of funding allocated to low SES schools under the National Partnership scheme is an illustrative case. In many low SES schools in NSW, these funds are being used to buy in additional staff, particularly paraprofessionals, in order to expend the funds in the required time. Principals acknowledge that this will have little long term effect on improving the skills and capacities of teachers or producing long term improvements in the achievement outcomes of students from low SES communities, but that they have little alternative given the limited autonomy they have been given to make professional judgement about identifying *local* priority areas and deciding how funds out be expended to best meet local needs and the capacities of the established teaching workforce. Such top-down approaches to reform do little to stimulate an innovative, creative and professional teacher workforce. Rather, it works to embed organisational practices that deprofessionalise teachers and principals.

A related issue concerns the purpose of schooling and the national goals of the schooling system in Australia. Although COAG has enunciated these, the crucial factor is how these ambitions are implemented in practice. Too often there is a gap between the idealised goals articulated in policy and the practical mechanisms for enacting policies in the complex and varied contexts in which teachers work.

Thus, the key reform priority should be in ensuring that COAG's idealistic and noble visions for schooling and teaching are not reduced to instrumental means-end policies that equate teacher effectiveness with student achievement in national test, but that policy recognises the more complex facets of the work of teachers and operates as a tool for enabling these facets to be nurtured and acknowledged. The OECD *Background Report* also emphasized this point:

> Effective teaching is not just about efficient ways of achieving pre-established goals and meeting existing socio-cultural expectations, but has creative, critical purposes and values, covering a wide spectrum of human and social development. 'Successful' or 'effective' teaching is often equated with examination success by students, with the inculcation of the norms and mores of particular sub-cultures, or with employment and other economic outcomes. All of these are relevant, but none is sufficient in itself and there is a risk of distortion of wider educational purposes and values when any one, or combination of these factors becomes the dominant motif. Just as 'effectiveness' is more than a means to some pre-determined end, so also it needs to be analysed in the context of the broad, inclusive aims of education and goals of schooling (Skilbeck & Connell 2003, p.79).

Q *Are there any significant gaps in the reform agenda, or reforms that are unlikely to be particularly beneficial?*

Teachers and principals work with an assemblage of policies, which are often contradictory and competing (Harris & Ransom 2005). Strong external accountability is now driving all schools to the detriment of other aspects of learning which are perhaps even more critical as preconditions to achievement. Teachers are particularly reform-weary due to uncertainty and implementation issues. Teachers are also being encouraged to be innovative and creative in order to develop those generic capabilities required for students to be educated for the 21st Century with the emphasis on intercultural capability, critical thinking, self management and lifelong learning (MCEETYA 2008). Teacher professional autonomy and sense of efficacy or capacity to make a difference is extremely important in terms of being able to negotiate multiple policy agendas and address the needs of the particular groups of students they teach.

Currently, the introduction of Professional Standards and performance management appraisal is unlikely to have a significant impact on improving the teaching workforce unless accompanied by policies that enable, rather than disable, the professionalization of the workforce in the true sense of 'professional'. There is a long tradition of describing teaching as professional practice (e.g. Epstein & Humbert 2002, Kemmis 2005, Noddings 2003, Schatzki 1996, Schon 1983, Wenger 1998). The notion of teaching as a profession extends beyond the concept of professional practice to an identity and competence as a professional. Drawing on definitions of 'professional' in fields such as medicine (see Epstein & Humbert 2002), the 'professional' work of the teacher can be defined as,

> The habitual and judicious use and development of communication, knowledge, technical skills, reasoning, emotions, values and reflection in daily practice for the benefit of the individuals and communities being served (35).

Integral to building a professional identity and a genuinely professional teaching workforce is the expectation and requirement for ongoing professional learning, a career pathway that allows individuals to demonstrate skills and expertise and to be recognised for their achievements and professional accomplishments. Current reforms do not develop a strong sense of professional autonomy, and indeed research indicates teachers feel there is a lack of trust and a lack of incentive and recognition for their professional behaviour and achievements.

Focusing on Professional Standards is not in itself a solution whereas investment in teacher professional learning is. Professional Standards will not by themselves raise the status of teaching or attract the next generation of high quality teachers other than guaranteeing that teachers have the required basic skills. Raising the status of teaching that will attract a wider range of high quality applicants requires a significant investment in professional learning, one which recognizes and rewards innovation, and broadly a more positive discourse by government and the media about teachers and public schools in particular.

Q *Are the implementation/evaluation/review arrangements likely to be effective?*

With respect to teachers' performance, it is not clear what is to be judged, how or by whom. Integrity in these processes is essential. Relying on school principals alone leaves evaluations open to subjective judgments and power relations, and presumes that principals have a well-grounded and accurate insight of standards across the profession by which to benchmark their assessments. The use of external experts who 'inspect' teachers is inadequate: it provides a snapshot impression of what teachers actually do and treats teaching as an exclusively individual enterprise, ignoring the importance of team work and collaboration in the identity and practice of a profession. Other strategies for evaluating and reviewing teachers that include the development of portfolios and peer assessment provide a more accurate body of data and a mechanism for ensuring validate, consistent assessment across the profession. Arguably such mechanisms are more time consuming but the 'cost' is offset by greater assessment accuracy and consistency.

Q *In the context of the current reform initiatives outlined above, where can the Commission's study into the schools workforce best add value?*

Most recent policy initiatives address questions of standards and performance requirements for teachers. However, there are few recommendations regarding the kinds of support that might be provided for teachers on a continuing basis in terms of the professional learning required to achieve and maintain such standards. The imposition of performance, evaluation and review processes without such support is likely to alienate rather than encourage teachers and may well lead to increased numbers exiting the profession. The Commission's study can best add value to teacher performance by investigating and proposing strategies for substantial professional learning opportunities alongside performance demands. The Commission should ensure that teacher standards and performance requirements are linked to on-going teacher professional learning opportunities, particularly those that teachers, principals and schools identify as priorities rather than those that are centrally imposed.

Balancing supply and demand

Q *What are the key factors, whether across the board or specific to particular areas, that may contribute to current or future workforce shortages? Are all of these factors amenable to policy action?*

There has been a decline of students undertaking science in post compulsory schooling, and of girls undertaking ICT and technology, which has reduced the pool of students attracted into these areas in the professions. Imbalances of supply are difficult to remedy in general as the demography of school populations and workforce populations can vary considerably over relatively short periods of time (e.g. one decade). The general parameters of such changes can be quite accurately predicted (Preston 2000) but demand can be significantly affected by changes in government policy and supply by varying conditions in the economy, especially alternative occupational opportunities and rewards. However, shortages in particular areas are influenced by graduation rates in specific disciplines and it is notoriously the case that the numbers of university students undertaking courses in mathematics, sciences and languages other than English have been in decline for a number of years. One possible remedy would be to alter the HECS regime for students entering these courses and offer HES repayments for those wiling to teach for a minimum period. A teaching scholarship scheme providing both HECS payment and a living allowance could also be considered.

Q *Are there weaknesses in specific recruitment and/or retention strategies that could be exacerbating imbalances in supply and demand? Are there any underlying problems in workforce planning strategies?*

There is a lack of workplace flexibility – such as job-sharing arrangements – which suit many with family and caring responsibilities. This situation is exacerbated by a shortage of child care places and a new trend for mothers to stay out of workforce more when looking after young children. Males are also opting to be more involved and take parental leave, but not in the numbers originally expected. Other occupations have more flexible work arrangements and are perceived as more ‘family friendly’ (Pocock 2009).

Over the past two or three decades several highly successful school-based teacher education programs have been run by various university schools of education (previously by Deakin and currently by VUT for example). These programs have overcome many of the shortcomings of existing programs but they are notoriously resource intensive and consequently have been unable to be upscaled to engage all teacher education students. Unless the funding formula for teacher education is revised it is unlikely that the expertise gained from such limited experiments can be universally applied. Major changes are required to establish a graduate entry profession supported by HECS exemptions and salary compensation, as well as specific HECS and living allowances for undergraduate students in priority areas such as maths, science and languages and appropriate funding to facilitate university-delivered school-based teacher education.

Q *What lessons, if any, can be learned from other sectors of the economy in dealing with the staffing challenges in the schools sector?*

Professions such as medicine and nursing have a similar problem in attracting and retaining practitioners in isolated regions and rural communities e.g. doctors and nurses. They are recruiting skilled migrants who are prepared to settle under certain conditions. This approach was tried in the 1970s with US and Canadian teachers. One possible solution is to pay teachers in their final year or semester of pre-service education to undertake their practicum in more difficult-to-staff schools, perhaps as a group. This solution would also provides those schools with an opportunity to recruit and students to realize the opportunities of teaching in rural areas. This requires government investment as students cannot afford to leave jobs to go on practicum.

Job design and innovation

One of the greatest difficulties facing the schools workforce is the increasing diversity of settings for teachers' work. Preparation and performance standards are mainly written as if all teachers are or should be alike. The result is that either the standards are written so comprehensively as to include all possible eventualities (thus making it impossible for teaching institutions and graduates to meet the full range of requirements) or they are written in such general terms as to ignore the diversity of requirements of various school settings (thus leaving graduates unprepared for the various 'realities' of diverse schools). We need research into what makes a teacher effective in diverse environments in order to differentiate teacher preparation programs in ways that prepare graduates not only for different curriculum and assessment requirements but also for the pedagogical demands of diverse educational milieu. Similarly the issue of class sizes should not be considered as a general issue, but one that is specific to the demands o f particular educational situations. Clearly smaller class sizes might make a considerable difference to those working and learning in 'rust-belt' or immigrant schools, but it might have little impact in schools practicing selective entry and with a literate, high SES clientele.

Q *Are the roles of and relationships between different school workers appropriate to meet current and emerging needs? In what ways might changes in job design be useful?*

There is greater need for more specialist assistance in schools by workers who are trained in approapriate professions – e.g. social workers rather than chaplains, while career workers need to develop pedagogical approaches to promoting student engagement. Health and well-being are now critical preconditions to student learning and achievement (Blackmore & Kamp 2006, Wilkinson & Pickett 2010). In particular there is greater need for suitable support in classrooms where there are students with an array of disabilities across the spectrum. While each classroom may have multiple personnel working in them, it is critical that the teacher's professional position is recognised and rewarded.

Q *Does the current design of teaching roles give sufficient recognition to issues such as extra-curricular activities, interaction with parents and the community, or to assisting students with the transition to further education or employment?*

There is little recognition of the ways in which teachers' work has expanded in terms of accountability on the one hand – with intensification of labour due to reporting and recording – and on the other hand the move to personalise learning. All teachers now are expected to embed literacy and numeracy teaching, to develop industry and university partnerships, to promote an inquiry approach, to use evidence and read research, to develop policy, to create innovative programs, to identify individual and group student needs, to work with new learning technologies, to work in groups, to plan and implement specialist programs, to manage transitions in and out of school, to communicate with parents as well as record and report on the above. Teachers work in multiple professional networks with health and youth workers as well as with subject organisations. Networks have become a major policy approach in Victoria for example (Kirby 2000).

Q *Would further decreases in student–teacher ratios significantly improve student outcomes? How should empirical research on the cost-effectiveness of class size reductions as a means to improve student outcomes be interpreted?*

Flexibility is what is increasingly being required in new learning spaces and 21st Century pedagogies (Blackmore et al. 2011a). This means that teachers will sometimes work with larger groups as a team and at other times one-on-one. But the base student teacher-ratio should be reduced to facilitate the one-on-one personal contact that is critical to retaining student engagement and implement and monitor personalised learning plans. Most research now points to the need for teachers to work in this way which requires significant regular and programmed planning time as a team (Blackmore et al. 2011b).

Training and professional development

Q *What are the advantages and disadvantages of the traditional Diploma and Bachelor of Education entry pathways? Do postgraduate studies in education contribute significantly to teacher quality?*

Teacher qualifications matter for student achievement. Large-scale studies in North Carolina and New York City in the US found that student achievement gains were closely related to teachers':

- Strong academic background
- Quality preparation prior to entry
- Certification in the field taught
- Experience (> 3 years)
- National Board Certification (in NC)

In combination, these predict more of the difference in student learning gains than race & parent education combined (Clotfelter, Ladd, & Vigdor, 2008). Research also shows that preparation directly linked to practice benefits teachers in their first year (D. J. Boyd, Grossman, Lankford, Loeb, & Wyckoff, 2009). These two premises provide a warrant for the support for funding for quality education prior to entry to teaching in order to generate student achievement gains.

Learning to teach in preservice teacher education

The structure of teaching programs has been considered in a number of ways. Sharon Feiman-Nemser, for example, provides the following theoretical framework for learning to teach, based on a range of research findings, which contributes specific categories of preparation required of teaching programs:

- Learning to *think* like a teacher (teaching is intellectual work, requires critical examination of one's beliefs, moving beyond naïve beliefs, a transition to pedagogical thinking linking ends and means, development of meta-cognitive awareness) Lortie 1975 onwards
- Learning to *know* like a teacher (different kinds of knowledge that good teaching depends on, include the knowledge that teachers generate in practice. Knowledge of subject matter and how to teach it to diverse learners, how children growth and develop, how they learn, how culture and language influence that learning, curriculum, pedagogy, classroom organisation, assessment, understand the broad purposes of schooling and how those purposes influence their work. Difference between knowledge *for* teaching and knowledge *of* teaching which can only be gained in the context of work)

- Learning to *feel* like a teacher – teaching and learning to teach are deeply personal work, engaging teachers' emotions and identity as well as their intellect (Hammerness, Featherstone, Ladson-Billings)
- Learning to *act* like a teacher. Mary Kennedy – problem of enactment – putting one's intentions into action. Need a repertoire of skills, strategies and routines and the judgement to work out what to do when. Adaptive expertise cf routine expertise

A theory of teacher learning that also addresses adaptive expertise is necessary because tools, practices, domain content, and the characteristics of learners are no longer static over the course of a teaching professional's career. Teachers must learn continuously in order to handle this complex, rapidly changing learning environment. Teachers in the 21st century, in order to become and remain effective, need to innovate new solutions and approaches as new tools become available, and contexts and needs change. Thus, a theory of teacher learning should begin from a view of teaching as encompassing practice, learning, and innovation.

B.Ed. programs are very effective for enabling formation identity and skill development over time and also in terms of developing a base of subject knowledge

Q *How effectively do pre service training courses (and the national accreditation standards for such courses) meet the current and prospective needs of the education system and teachers? Do courses place sufficient emphasis on practicum?*

There are a number of features that can be attributed to exemplary teacher education programs: (Darling-Hammond, 2006b, 2006c; Darling-Hammond & Bransford, 2005)

- A tightly knit set of experiences based on a common, clear vision of good teaching
- Well-defined standards of practice and performance;
- A rigorous core curriculum with emphasis on student learning, assessment, and content pedagogy;
- Use of problem-based teaching methods including cases, action research, and portfolios;
- Extended clinical experience (30+ weeks) with expert veterans, linked to coursework, in partnership schools

What are high achieving nations doing in initial teacher education? Substantial investments in initial teacher education focused on

- Teaching a wide range of learners
- Learning to practice in practice
- Learning to assess learning to shape teaching
- Learning from and for practice-based research

(Darling-Hammond, 2010)

There would be considerable benefit in moving to a graduate entry two year Master of Teaching program as the predominant form of teacher preparation. HECS exemption for such programs would be necessary as an encouragement for enrolment. There would also be benefit in using the experience gained in previous school based teacher education programs to expand these models to the full cohort of students in collaboration with participating schools. Students in such programs should be employed as teacher aides during the program until they are qualified as teachers thus making up for salary loss they would otherwise experience. The in-school component of the university program should be part of a whole-school professional development program where teachers as mentors are offered professional development and credit for advanced work on issues relevant to the specific school context. As part of their professional development both teachers and school leaders should have the opportunity to experience/take part in the professional development programs offered in networks of schools associated with the university program. Leadership and professional development programs should take account of the diversity of contexts within which teaching and learning occur with particular emphasis on building cultures of commitment to learning, community and responsibility (Starratt 2003).

We also argue that as far as undergradute programs are concerned, four years minimum education and training is required for teachers, and that one year post-graduate teacher education is insufficient. Though pre-service training appears perennially hamstrung by financials, pre-service teachers need to spend more time supervised in schools. One model may include university staff as 'translators' in schools. One other measure of quality could also focus on the quality of teachers chosen as supervisors for pre-service teachers. An aspect of this lies in the seeming disconnect and lack of understanding of pre-service training by some teachers. The advantage of the four year education courses is that the 80 days of practicum allow for a greater range of experiences in the classroom. Education courses do place sufficient emphasis on practicum but the resourcing of practicum offices by university can become an issue for schools of education.

The embedded practicum has a significant place in the education of future teachers but there is a substantial amount of work to be done in changing the ways most mentor teachers view the practicum experience. This requires time and funding to allow teachers and academics to have meaningful conversations that address these changes in thinking. Practicum as a hurdle task assessed by knowledgeable mentor teachers is proving to be a great success in ensuring that there is a quality connection between theory and practice for our pre-service teachers. This is evidenced in the Masters of Teaching students who are repeating professional practice units having failed the practicum and core unit in their first year. These students are presenting with a level of maturity and deeper thinking that was not evident in their first year. However, teacher education academics need to be able to get alongside mentors in the schools to ensure that the messages and expectations are consistent and at present there is not enough funding to make this happen. We are rethinking our strategies for engagement with the schools but without the ability to get out amongst the profession this approach can be hit and miss. Again, where we are able to engage in meaningful discussions with mentors and students, we are seeing good results and a shift in thinking about how the relationship works.

Q *Is sufficient attention paid to professional development — not only for classroom teachers, but also principals and other school workers? What specific changes, beyond those already in prospect, would be appropriate?*

We acknowledge the subtle differences between professional *development* and professional *learning* as noted by Knapp (2003) and Doecke et al. (2008), particularly the changes in one’s capacity for practice as well as changes in the actual practice associated with *professional learning*, but in the end work within Day and Sachs’ (2004) encompassing definition of professional learning as the framework in this submission:

> … all natural learning experiences and those conscious and planned activities which are intended to be of direct or indirect benefit to the individual, group or school and which contribute … to the quality of education in the classroom. It is the process by which, alone and with others, teachers review, renew and extend their commitment as change agents to the moral purposes of teaching and by which they acquire and develop critically the knowledge, skills and emotional intelligence essential to good professional thinking, planning and practice with children, young people and colleagues through each phase of their teaching lives. (p. 34)

Professional development and professional learning: What works?

The convergence in the research literature on effective professional development that results in professional learning supports an emphasis on developing subject matter/content knowledge, active learning sustained over time with opportunities to put the learning into practice and with follow up and support, a focus on student learning and examination of student work and collective participation (e.g., Garet et al. 2001, Ingvarson, Meiers & Beavis 2005, Kennedy 1998, Kriewaldt 2008, Meiers & Ingvarson 2005, Supovitz 2001, Thompson 2003, Timperley, 2008, Timperley, Wilson, Barrar & Fung, 2007, Wilson & Berne 1999). These convergent findings are reflected in one of the most widely cited works in this area, namely, Hawley and Valli (1999) who, through a meta-synthesis of relevant contemporary research in the USA, propose a number of design principles for effective professional development:

1. The content of professional development focuses on what students are to learn and how to address the different problems students may have in learning the material
2. Professional development should be based on analyses of the differences between actual student performance and goals and standards for student learning
3. Professional development should involve teachers in the identification of what they need to learn and in the development of the learning experiences in which they will be involved
4. Professional development should be primarily school-based and built into the day-to-day work of teaching
5. Professional development should be organised around collaborative problem solving
6. Professional development should be continuous and ongoing, involving follow-up and support for further learning—including support from sources external to the school that can provide necessary resources and new perspectives
7. Professional development should incorporate evaluation of multiple sources of information on learning outcomes for students and the instruction and other processes that are involved in implementing the lessons learned through professional development
8. Professional development should provide opportunities to gain an understanding of the theory underlying the knowledge and skills being learned
9. Professional development should be connected to a comprehensive change process focused on improving student learning (Hawley and Valli 1999, pp.137-143)

Ingvarson, Meiers and Beavis (2005) examined the effects of features of professional development programs on teachers' knowledge, practice and efficacy by drawing on survey data of 3,250 Australian teachers who had participated in eighty professional development activities as part of the Australian Government Quality Teacher Programme (AGQTP) during 2002-2003, and reported that the most effective programs, as identified by these teachers, reflected Hawley and Valli's (1999) design principles. However, they also noted that ‘feedback’ and ‘collaborative examination of student work’ appear to have the least influence ‘despite strong evidence for their importance in other research studies’ (Ingvarson, Meiers & Beavis 2005, p.16).

In their synthesis of a large body of international and New Zealand research, Timperley et al. (2007) identified seven elements in the professional learning *context* that are important for promoting professional learning in ways that impacted positively and substantively on a range of student outcomes:

1. Providing sufficient time for extended opportunities to learn and using the time effectively;
2. Engaging external expertise;
3. Focusing on engaging teachers in the learning process rather than being concerned about whether they volunteered or not;
4. Challenging problematic discourses;
5. Providing opportunities to interact in a community of professionals;
6. Ensuring content was consistent with wider policy trends; and,
7. In school-based initiatives, having leaders actively leading the professional learning opportunities.

In their study, the *content* of effective professional learning included:

1. Discipline knowledge and the interrelationship between such fundamentals as new curricula, pedagogy, and assessment information. Theory provided the basis for making curricular and pedagogical decisions;
2. Knowledge of students, including their developmental progressions through particular curricula, and their culture;
3. Linguistic and cultural resources; and,
4. Theoretical frameworks and conceptual tools. Skills of teacher inquiry included analysis of the teacher’s own practice and new possibilities in relation to a standard of practice; the ways in which practice impacted on diverse student learners, and new possibilities for greater impact; and methods of inquiring into the adequacy and improvement of practice.

A recent large-scale project in Australia mapped teacher professional learning activities across the country (Doecke et al., 2008). Though the purpose of this project funded by DEST was not to judge the effectiveness of these activities, the authors did develop some guidelines for quality professional learning based on the survey and interview data collected:

1. Professional learning should involve strategic planning, at system-wide, school and individual levels
2. Professional learning should be explicitly embedded within teachers’ work
3. Professional learning should be diverse, and appropriate to the individuals’ and groups’ needs
4. Teacher registration bodies, systems and schools should work together to share their historical and contemporary knowledge about inducting early career teachers into the profession
5. Governments, teacher registration bodies and schools themselves should investigate and value a variety of evidence in accounting for teachers’ professional learning

6. Schools and teachers should be encouraged to form and develop a range of professional learning partnerships
7. Teachers should be encouraged to develop and/or extend professional learning networks with colleagues
8. Sectors should be encouraged to work collaboratively in cross-sectoral partnerships
9. Teaching should be recognised as engaging in continuing inquiry into practice, and this inquiry should be recognised as strongly collegial and collaborative in nature

Moreover, this project reviewed various effective approaches to professional learning and posited six principles of professional learning:

1. The collaborative nature of teachers' knowledge and teacher learning is fundamental.
2. Much professional knowledge is anchored in the specific contexts in which teachers work.
3. Knowledge of teachers and teaching develops from, and usually involves, sustained inquiry into teaching and learning by teachers themselves.
4. The findings of research into the knowledge of teachers and teaching are often not simple or certain.
5. Teachers draw on a range of evidence to evaluate and review their existing practices.
6. Teachers engaged in rich professional learning tend to work together with other teachers to build more dynamic and rigorous learning communities in which everyone – teachers, students and parents – can participate. (Doecke et al. 2008, pp.26-27)

Professional development programs may take multiple forms, including formal coursework in face to face or online mode, workshops organised by professional associations, informal learning opportunities situated in practice and self-initiated action research. Knapp (2003) suggested that opportunities for professional learning can occur:

1. Within the practice itself (as professionals investigate and draw conclusions about their daily work);
2. In settings outside practice;
3. In formalised structures and activities designed for professional learning (e.g., workshops, courses, PD sessions); and,
4. In informal settings (e.g., reading journals, conversations with colleagues).

Much of the literature focuses on highlighting important aspects of the *curriculum* of professional development, rather than its *pedagogy* – the 'what' and not so much the 'how'. Teacher learning is seen as an additive process based on accumulation of new knowledge to an existing repertoire (Day 1999). However, this is not a linear, step-by-step process of successive 'in-service' opportunities but requires understanding of the complex processes by which professional learning is developed. But, much of the literature posits strategies or structural features of effective professional development programs. For example, Loucks-Horsley et al. (1998) identified a number of strategies for effective professional learning, each based on a range of research studies:

1. Immersion into inquiry and problem solving
2. Curriculum
    2.1. Curriculum implementation
    2.2. Curriculum development and adaptation
3. Examining practice

    3.1. Action research
    3.2. Case discussions
    3.3. Examining student work and thinking, and scoring assignments
4. Collaborative work
    4.1. Study groups
    4.2. Coaching and mentoring
    4.3. Partnerships with mathematicians in business, industry, and universities
    4.4. Professional networks
5. Vehicles and mechanisms
    5.1. Workshops, institutes, courses, and seminars
    5.2. Technology for professional development
    5.3. Developing professional developers

Meiers and Ingvarson (2005) mapped a classification of these strategies according to their core purposes: developing awareness; building knowledge; using new knowledge; practising new approaches; and, reflection on teaching and learning (see p. 22) and found that they somewhat paralleled what we know from the literature about stages in the change process.

While these are useful in guiding the 'delivery' of professional development and learning opportunities, increasingly we have come to understand that, like all types of learning, teacher learning is not only individual, but 'social' as well (Cochran-Smith & Lytle 2009, Lieberman & Miller 2008, Lieberman & Pointer-Mace 2010). Teachers who plan and work together over time build commitment not only to each other but also to further learning (Little 1992, 1999, 2002a, 2002b, 2003, Little & McLaughlin 1993, McLaughlin & Talbert 2001). Ingvarson, Meiers and Beavis (2005) identified 'professional community' as a mediating variable in the effectiveness of professional development programs and that 'a substantial level of professional community is vital to significant change' (p. 17). Teachers' involvement in networked learning communities seems to lead to changed practices, philosophies, instructional time and collegial interactions (Borko 2004). Moreover, there is some evidence that strong professional learning communities within schools contribute to improved student achievement (e.g., Timperley et al. 2007). However, as Little (2002a) reminds us, though 'research spanning more than two decades points to the benefits of vigorous collegial communities … relatively little research examines specifically how professional communities supply intellectual, social and material resources for teacher learning and innovations in practice' (p. 917).

In addition, the literature is increasingly supporting the notion of teachers making their practice public as a significant professional learning opportunity for both themselves and others (e.g., Hatch et al., 2005; Lieberman & Pointer-Mace, 2010). A powerful outcome of teachers making their work public is new conversations about teaching (Lieberman & Pointer-Mace, 2010). As Lieberman and Pointer-Mace (2010) remind us:

> When professional development opportunities start with other peoples' ideas *first,* they deny what teachers know. Starting with teachers' practice invites teachers into the conversation and opens them up to critique, to learning, and to expanding their repertoire (p. 86)

Evaluation of professional development and learning

Even though the desired outcome of effective professional development and its resultant professional learning is change in professional practice that lead to enhanced student learning opportunities and outcomes, it is not always easy to show this outcome in simple causal ways. Though we do know from the literature a good deal about effective professional development, we know very little about what teachers actually learn from professional development (Fishman, Marx, Best, & Tal 2003, Wilson & Berne 1999) and even less about what students learn as a result of changed practices (Supovitz, 2001). However, there is some guidance in the literature in relation to how we can go about evaluating professional development opportunities. Guskey (2000; 2002) argued for five levels of evaluation of professional development:

Level 1: Participants' Reactions
Level 2: Participants' Learning
Level 3: Organization Support and Change
Level 4: Participants' Use of New Knowledge and Skills
Level 5: Student Learning Outcomes

He stressed that, 'Level 5 addresses 'the bottom line' and should ask questions like: How did the professional development activity affect students? Did it benefit them in any way? He also stressed that, in planning professional development to improve student learning, the order of the levels must be reversed; planning must be 'backward', i.e. starting where you want to end and then working back. However, a growing body of literature supports the notion of considering a broad range of evidence of teachers' learning when evaluating the outcomes of that learning, cautioning about using a smaller range of evidence like students' test scores (e.g. Doecke et al. 2008, Elmore 2000). Likewise, the OECD's report, *Education Policy Analysis 2004* (OECD, 2005) stresses the importance of considering 'a wider range of outcomes in education, not only cognitive abilities' (p. 12). Fishman et al. (2003) argued for evaluating professional development using a combination of teacher reflection, classroom observation and ongoing assessment of student performance.

Q *At what point (or points) in time should the quality of aspiring teachers be assessed: before pre service training, before practicum, before entering the workforce as new teachers, or elsewhere in the training and development cycle? What scope is there to increase standards for entering courses, placements or the profession without exacerbating current or future shortages?*

Entry to the profession in Australia is regulated by state agencies that use input models to make decisions about teacher registration and readiness to teach. Judgments are made about the quality of a teacher education program usually by paper review involving a panel of stakeholders deciding on the likelihood that the program will prepare a competent beginning teacher. Then, employers and teacher registration authorities use proxies like completion of the accredited teacher education program, grades in university subjects or practicum evaluation forms and observations of teaching to make a judgment about a graduating teacher's level of professional knowledge and practice - about their readiness to teach. However, authentic assessments of the actual professional practice of teachers in the workplace, incorporating multiple measures, and focussing on judging the impact of teachers on student learning, are being explored. This has become more relevant with the recent introduction of the new national system of accreditation (Australian Institute of Teaching and School Leadership 2011) and the requirement that teacher education providers provide evidence that graduates can demonstrate graduate standards.

It should be noted, however, that questions of 'quality' require some exploration as its use at different levels of policy making appears at times inconsistent.

Determining teacher effectiveness

In the last decade, the US has seen steady increase in the use of various forms of teacher assessment for teacher licensing decisions. However, this has usually been in the form of written tests. In 2004, all 50 US states and the District of Columbia reported having a written test policy for teacher licensure/ registration (both initial and ongoing) (Council of Chief State School Officers 2005). However, despite at least one state in Australia planning to follow this trend (Masters 2009), research on such teacher testing has called into question their predictive validity and their capacity to actually measure a teacher's ability to teach (Wilson & Youngs 2005).

With the increasing focus on outcomes in education policy, the spotlight is turning to 'how [teacher] preparation influences teachers' effectiveness, especially their ability to increase student learning in measurable ways' (Darling-Hammond 2006a, p.120). In the literature, academic success as well as teaching aptitude, content expertise, or intelligence are often cited as markers of teacher impact on student learning (for a complete review of relevant studies, see Darling-Hammond & Youngs 2002). The research identifies several characteristics (including teaching ability, subject matter expertise, and content pedagogy) important when measuring teaching impact on student learning. From this, we know that no one single factor can be identified as the sole contributor to the impact a teacher has on student learning. Therefore, evaluation of teachers on multiple measures is important when considering teacher impact on student learning. Moreover, as Darling-Hammond and Snyder (2000) note, 'There is a growing interest among educators and evaluators in constructing other forms of assessment that better reflect the complexity of teaching and can provide valid data about competence while helping teachers improve the calibre of their work' (p.526), and that assessments such as the practicum report do 'not address important differences in context and content, and they ignore ... the influence of teaching on learning' (p. 525).

Darling-Hammond and Snyder (2000) propose five aspects of authentic assessment to judge teaching:

1. The assessments sample the actual knowledge, skills and dispositions desired of teachers as they are used in teaching and learning contexts, rather than relying on more remote proxies. E.g. videotapes of teaching, lesson plans and assessments of student learning.
2. The assessments require the integration of multiple kinds of knowledge and skill as they are used in practice. For example, making curriculum and pedagogical decisions for a child's literacy development might rely upon: study of research and theory about literacy development, learning, curriculum, and assessment; instruction in the use of literacy assessment tools and instructional strategies; practice and coaching in the collection and analysis of data about children's literacy learning; and, reflection upon the data collected, its meaning, and implications for instruction.
3. Multiple sources of evidence are collected over time and in diverse contexts. E.g. written analyses, observation data (such as from a supervisor's observation), and samples of student work from the pre-service teacher's classroom.
4. Assessment evidence is evaluated by individuals with relevant expertise against criteria that matter for performance in the field.

5. The assessment practice includes multiple opportunities for learning and practicing the desired outcomes and for feedback and reflection, ... in order to develop as well as measure teaching judgement and skill. (Darling-Hammond & Snyder 2000, p. 526-528)

Increasingly, any authentic assessment of readiness to teach, includes a focus on candidates' application of subject-specific pedagogical knowledge that research finds to be associated with successful teaching (e.g. Darling-Hammond 2006c; Darling-Hammond & Bransford 2005). Moreover, the importance of assessing the dimensions of teachers' work linked to successfully working with diverse student groups is highlighted. For example, with her colleagues at Boston College, Marilyn Cochran-Smith has challenged much of the discourse about the pervading 'cultures of evidence' talk ever present in school and teacher education, highlighting the absence of cultural understandings and nuances in many approaches to gather and use evidence. They identify four key aspects designed to capture a more nuanced approach to evidence involving: (1) development of a portfolio of studies about processes and outcomes; (2) recognition that teacher education always poses values questions as well as empirical questions; (3) an exploratory, open-ended approach to evidence construction; and, (4) multiple structures that institutionalize evidence collection and use locally and beyond (Cochran-Smith & the Boston College Evidence Team 2009).

Portfolio Assessment

The three most commonly used means of collecting evidence about the quality of teaching in pre-service teacher education programs are: i) observation protocols that include teacher educator developed evaluation scales linked to professional standards for beginning teaching, ii) portfolios documenting preservice teachers' professional knowledge and reflection on their professional practice; and iii) teacher and/or student work samples (Arends 2006a, 2006b). Often, these approaches are designed to be used in formative ways to support teacher learning, by providing information about specific strengths and weaknesses in pre-service teachers' professional practice that can be used to support their growth as well as inform program improvement.

Portfolio assessments are widely used in teacher preparation programs, most often as a form of 'capstone' or culminating assessment (St. Maurice & Shaw 2004), and can be structured and unstructured portfolios. Structured portfolios are those that require pre-service teachers to submit specific artefacts of teaching in response to standardized prompts. These artefacts and responses are then scored in a standardized way by trained scorers using a common evaluation tool, usually a rubric. With unstructured portfolios, what and how artefacts are selected varies. For example, in a 'showcase portfolio,' pre-service teachers are free to choose artefacts that represent their 'best work'. In portfolios that are meant to be used as a tool for professional learning, pre-service teachers' selection may be more scaffolded to include specific artefacts, such as a statement of teaching philosophy, a videotape of their teaching, lesson plans or units, or original curriculum materials they have developed, with accompanying analytical reflections. While a great deal of time and effort goes into the compilation and assessment of these portfolios, they serve primarily a formative purpose. However, if a portfolio is to be used to support a graduation or registration decision, then the design and the development of the assessment must be much more structured and psychometric issues need attention.

> [A teacher's portfolio] can be used as a summative evaluation tool, but to do so requires a much more structured process and a complex set of assessment strategies. The assessment component requires clear criteria, an established set of reliable and valid scoring rubrics, and extensive training for the evaluators in order to ensure fairness and reliability. These considerations can all be met, but they are often beyond the capacity or the will of a local university (Wilkerson & Lang 2003, pp.94-95).

An example of a structured portfolio that has been used for high stakes decisions is the Performance Assessment for California Teachers (PACT) – see http://www.pacttpa.org/. PACT represents a multiple measures assessment used for initial teacher registration in California and to gather evidence of content and pedagogical knowledge as well as higher-order thinking skills from pre-service teachers (Pecheone & Chung 2006).

Since 2002, the PACT has been through eight years of development and implemented in 32 teacher education programs in California, including both traditional pre-service teacher education programs and alternative certification programs offered by school districts and a charter management organization. The assessment allows for both formative and summative assessment of pre-service teacher performance. Following specific design principles, PACT was designed to ensure an assessment focus on student learning through intentional teaching practices and the systematic collection of teaching artefacts. The design principles require that a teacher performance assessment should:

- Maintain the complexity of teaching
- Focus on content/pedagogy within disciplines embedded in the teacher preparation curriculum
- Examine teaching practice in relationship to student learning
- Provide analytic feedback and support
- Be both adaptive and generalizable

Programs have used the data generated by PACT to make programmatic improvements that have resulted in enhanced preparation and pre-service teacher performance. PACT has been approved as an official performance assessment for licensing by the California Commission on Teacher Credentialing based on extensive reliability and validity studies that met rigorous standards. Extensive research continues to ensure reliability and validity measurements, including an in-progress value-added study of pre-service teaching in relation to student learning in California.' (Mayer, Pecheone, & Merino 2011, in press)

PACT assesses 'the planning, instruction, assessment, and reflection skills of student teachers against professional standards of practice' (Darling-Hammond 2006a, p.121). The tasks 'are designed to measure and promote candidates' abilities to integrate their knowledge of content, students and instructional context in making instructional decisions and to stimulate teacher reflection on practice' (Pecheone & Chung 2006, p.24).

Remuneration and performance evaluation

Q *How important are the level and structure of remuneration for recruitment and retention of teachers? What impact does the level of remuneration have on the capabilities of those entering the teaching profession? Should differentiated remuneration be used more widely to address imbalances in supply and demand?*

- Q *Are there non remuneration conditions of employment that, if changed, would enhance teacher quality and student outcomes? Is there sufficient recognition of the work associated with the delivery of extra curricular programs?*
- Q *What makes a quality teacher? How should teacher performance be measured? To what extent can computable performance metrics indicate the 'value added' by a teacher?*
- Q *If a well designed performance based pay scheme could be implemented, would it significantly enhance teacher quality and student outcomes? What risks and costs are associated with performance based pay?*
- Q *Separate from whether financial rewards should be attached, are there ways to enhance performance appraisal processes for school workers?*

Level and structure of remuneration are important issues of the schools workforce. Despite reasonable initial salaries the scale of remuneration plateaus at a relatively early stage and encourages many (particularly males) to seek alternative employment. Differentiated remuneration is only likely to have some impact on recruitment to and retention in rural, remote and difficult-to-staff schools. It is unlikely to have any impact in areas of curriculum shortage such as maths, science and languages as recruitment in these areas is severely restricted by the low number of graduates in these areas. Non-remuneration conditions of employment are important, especially conditions of work (the state of repair of the schools, facilities and equipment, other professional supports), and compensation for lack of access to life-style options in rural and remote communities. Similarly, the impact of initial employment under short-term contract conditions is very discouraging for early career teachers as it undermines commitment, imposes insecurity and prevents access to, for instance, loans and mortgages. Again the problem with the idea of a 'quality teacher' is that in some (privileged) circumstances it may be relatively easy to achieve. In other (diverse and underprivileged) circumstances it may be much more difficult to achieve. Quality is inevitably attached to context and needs to be assessed with that in mind. Standardised criteria of assessment may, therefore, be of little use. Perhaps the most reliable form of assessment is peer assessment rather than 'computable performance metrics'. Performance based schemes are problematic in that they individualise rewards for what is a collaborative activity. The result may well be to reduce collaboration in order to maximise individual advantage thus leading to a decline in overall performance and achievement. Rather than a system of individualised rewards it might be more effective to offer awards for team/school performance or for peer nominated leadership performance.

As an overall statement, remuneration is a very important consideration for the recruitment and retention of teachers. For example, differentiated remuneration may boost supply to regional, rural and hard to place schools. In terms of the attractiveness of the profession for high achievers, the comparison to alternative career options has become an increasingly difficult argument to make to prospective teachers. If a student has the marks, what incentives are there for teaching? However, in order to ensure that teachers are provided with incentives to meet market failures, alternative models could be considered, such as offering attractive remuneration packages based on the SES of the school so that teachers got paid more for teaching in the schools that were less affluent and further from the centre. The work is more difficult. Given the complexity of the power-relations and pedagogic authority on which the teacher-student relationship is based, evaluation of student results should not directly be used for teacher salary bonuses, as this undermines the professionalism and autonomy of teachers.

In contrast, the proposal for a performance based payment for teachers could adversely affect our ability to place pre-service teachers. If teachers are trying to extract the best results from their class, they will not be willing to hand over their class to a pre-service teacher. This has the potential to be quite dangerous from the placement point of view. Performance pay will more than likely have a detrimental effect on the profession. We are shifting the profession more and more towards community-based team approaches that rely on a spirit of collegiality. The introduction of competition for pay will not foster this approach and is likely to harm it. It is not in the best interests of our most disadvantaged students for teachers to be in competition with each other. However, funding that releases teachers to plan and implement new approaches through consistent engagement with theory and professional development should be offered. Where possible this should be offered to entire teams so that critical mass for pedagogical change and improvement is possible and probable.

9. School Leadership

Q *Has sufficient policy attention been paid to school leadership and its contribution to education outcomes?*

There has been often an undue focus on school leadership narrowly understood as the principalship since the move to self management in 1990s. Research on leadership and in the school effectiveness and improvement paradigms has after 20 years determined that school leaders are important *indirectly* in that they provide a sense of direction, have the capacity to harness and distribute resources, can encourage the development of a culture of inquiry and professional learning, create structures and processes of collaborative decision-making, work with community, organize school structures and time so it is conducive to productive pedagogical approaches, as well as reward and recognize student and staff achievement. But there is no *direct* link between school leadership (principals) and student learning outcomes (achievement scores) (Hallinger & Heck 1996, Barker 2007, De Maeyera et al. 2007). Numerous studies now indicate teacher –student interaction, engagement and satisfaction as well as sense of efficacy on part of both teachers and students has a far greater effect, and therefore principals can enhance this by creating the most conducive conditions for that work (Hattie 2003, 2009, Lingard et al. 2001, 2006, Hayes et al. 2006).

What is evident in all the research is that too much effort time and energy has been spent on management work rather than pedagogical work in schools as the job of the principal in self-managing schools has expanded (e.g. Robinson 2007). Principals require greater administrative support to manage the everyday routine work of schools so that they can pay greater attention to community capacity building, leading learning and also strategic development. Pedagogical leadership has been linked indirectly to improved teacher and student learning (Mulford 2003, Mulford & Silins 2003).

Q *What motivates teachers to become school leaders? Is enough being done to identify current and future leaders?*

Australian studies indicate that in recent years there has been disengagement with school leadership (Gronn et al. 2003, Barty et al. 2005, Brooking et al. 2003,). While it is important in any career to have a capacity to gain promotion and be suitably rewarded, the reward systems in schools for undertaking leadership at anything below the principalship are not significant. Many teachers feel they have to leave the classroom to gain promotion, although there has been greater recognition of leading teachers in recent years. But most teachers who seek to be in the principal class or leadership role (e.g. level coordinator) do so for career but also to make a difference to their students and communities and to have some impact on their life chances (Johnson & Birkeland 2002, Lacey 2002, 2003). Many principals and teachers who are in schools in disadvantaged communities have familial backgrounds in those communities as students and have a strong commitment to improvement (Harris & Chapman 2006, Blackmore 2010). This goes back to why people become teachers and leaders (Olsen 2008). It is often to make a difference to students. But such commitment cannot be exploited as teachers and principals need to feel valued and have a sense of efficacy as part of a profession which is suitably remunerated.

Q *What skills do school leaders require beyond those acquired as teachers? Is enough being doing to facilitate leaders' acquisition and development of ancillary skills? Do principals necessarily require a teaching background?*

Schools are now working differently in terms of new learning spaces and technologies, use of time, community capacity building and personalized learning (Shields 2002, Pounder et al. 2002). There is now significant need for principals in culturally diverse communities to develop intercultural understandings and sensitivities, professional networks with community and government organisations to garner support, to model professional learning, to create cultures of ongoing and systematic inquiry in schools, to recognise and value difference and diversity, to have strong pedagogical knowledge across the curriculum as well as capacity to mobilise resources appropriately in terms of use of people, but also built and virtual environments to focus on student learning (Murphy & Vriesenga 2006, Robinson 2006). This means they need to have opportunities to travel, visit, research and work with and in universities. Critical to all this is to create participatory redesign which includes all stakeholders to plan and organize in ways that lead to ongoing refection on action for action (Lumby 2006). Distributed leadership has been a major focus of school reform and leadership capacity building (Leithwood & Jantzi 2006, Spillane & Louis 2002).

Q *In an environment of greater autonomy for schools, how is the role of the principal likely to change? To what extent do changes in job design for school leaders have feed-through effects to other members of the schools workforce?*

Since the move to self-management in government systems, school principals have been caught up in a cycle of performance in which policies linked to strong external accountabilities and financial rewards provide limited autonomy (Whitty et al. 2006). Principals have the power to make decisions with significant constraints of resources and intensified accountability and transparency. That is, they assume both the risk and responsibility for outcomes, Principals can be blamed for being a 'failing school' which is often the result of a range of factors outside their control e.g. policies of choice, location, local school competition, poor school buildings, lack of funds for extracurricular activities, community with high levels of intergenerational poverty, changing demographics, many of which are systemic issues. This is more about failing systems not failing schools (Myers & Goldstein 1997, Wong 2000)

Principals jobs have radically expanded in the last twenty years through accretion: personnel management and appraisal, financial management, risk management, re-designing the built environment, teaching and learning outcomes, professional networks, renewal programmes, developing student pathways, industry partnerships, university–school partnerships, rather than focusing on leading teaching and learning (Barty et al. 2005). Government schools in many states have become larger and assumed a range of organisational forms:- P-12, 7-13, P-

4,5-9, 10-12, across multi-campuses and often integrated into precincts with a range of community services (Kirby 2000, Gilchrist 2004, Tett 2005). Nongovernment schools have expanded into areas traditionally occupied by state schools. Research on principal recruitment has indicated that potential applicants are put off for numerous reasons due to the

- job being stressful because of pressure of parents, students, staff and systems.
- job being seen to be too demanding and nearly impossible to have family(most principals do not)
- value systems required e.g. promotion in the market.
- lack of diversity in principalship e,g, non- Anglo
- distraction of too much administrative work

There is therefore a need for future applicants to see the principal's position as rewarding and indeed able to produce the types of educational changes that make a difference (Blackmore & Thomson 2004).

10. School autonomy

Q *What are the advantages and disadvantages of increasing school autonomy? To what extent can currently centralised responsibilities be sensibly devolved to the school level? What lessons can be learned from approaches in Victoria and other countries, as well as from experiences in independent schools?*

There is a need for significant clarification a to the nature and form of autonomy.
Gronn's (2007) Australia wide study indicated that there are differing levels of autonomy, with Victoria having the greatest.

- There is general acceptance of the view that a degree of autonomy is necessary if schools are to respond to the expectations of their communities and the mix of student needs in the local setting.
- Principals accept the need for accountability and seek to exercise a higher level of educational leadership.
- There is a wide range of interest and capacity within each jurisdiction in taking up the amount of autonomy that is currently available.
- Administrative support for government schools is inadequate given expectations for schools and in comparison to the support for principals in most independent schools.
- There are less innovative approaches to autonomy of a kind gaining momentum in other places, especially academies in England and charter schools in Canada and the United States. These are still a small minority and the evidence coming in indicates that they are not addressing the issues.

Currently government principals find that external accountabilities (government, parents, rankings etc.) are the drivers that can be counterproductive to local needs. Ie standardized approach to localized problems (MacBeath 2008). They have to grapple with limited resources to try and address competing discourse of personalization, equity, creative and innovative pedagogies. (Harris & Ransom 2005). Principals feel they have been given more autonomy with respect to internal issues e.g. with global budgets in Victoria, and with some staffing, but with limited resources and within policy constraints. Many consider that they still lack the capacity to address local needs in the ways that could lead to better student outcomes. Gronn (2007) concluded:

- Principals acknowledge a relatively centralized leadership approach may be most appropriate for schools in regional and remote areas, but emphasized that a 'one-size-fits-all' approach is not supported.
- Principals generally sought greater involvement in the selection and performance management of staff as well as greater flexibility in the management of school budgets, where this could be managed without substantial additional workloads.
- The workload associated with regulatory compliance was a concern for many government school principals, who called for additional support with this (in line with that available to principals in independent schools).
- Surveys of principals conducted by professional associations reveal a high level of commitment to their work but also high levels of stress, often accompanied by diagnosed medical conditions. In this study, however, there was no clear causal link between principal autonomy and dysfunctional stress.

International research on autonomy and effectiveness

- Early research on the impact of principal autonomy on school effectiveness was generally inconclusive, possibly due to unreliable data and lack of explicit linkages between autonomy, teaching and learning.
- More recent research at both macro- and micro-levels confirms the links between autonomy and student outcomes where the focus is on learning, capacity building and the effective use of data. The importance of the role of the principal is also confirmed in this research.
- A broad resource base including intellectual, financial, social and spiritual capital supports strong performance in schools, with intellectual capital (the knowledge and skills of teachers and those who support them) being most important.
- Factors that appear to affect the influence of autonomy on school outcomes include principal professionalism, flexibility in governance, a systemic understanding of leadership, levels of choice and competition, funding arrangements, and accountability practices.
- Comprehensive and continuous professional development of principals is critical for establishing and maintaining the link between autonomy and effectiveness.

Victorian studies indicate that what has made a difference is where there are

i. bottom up reforms restructuring local provision in ways that focus on learning (Blackmore et al. 2011 b)
ii. develop strong internal strong peer review and weaker external accountability systems produce better student learning across all outcomes (Elmore 2007)
iii. systemic support and specific interventions from regions and centre. Critical to maintain a strong sense of a strong public education system as this is critical to producing greater equity (Connors 2000).
iv. Coherent policy. For example, the Blueprint for Government Schools (2004) policy in Victoria provided a overarching framework signifying as to what was valued in reform: focusing on student learning, professional development, encourage teacher practitioner inquiry, leadership capacity building and provision based on how to improve student learning through innovative curriculum and pedagogy. Retention

rates have improved in Victoria due to significant interschool and interagency collaboration, as well as networks and partnerships with industry and universities. At the same time, such reforms take long times up to ten years (Wong 2000).

v. Investment in teacher and leadership professional learning (Blackmore et al. 2011b)

Q *What specific governance and regulatory arrangements are needed to support greater school autonomy?*

The balance between regulation and autonomy is important. On the one hand regulation is important with regard to equity, as if schools are left to their own devices in a market oriented sector, equity loses out as indicated in research on the move to self management in UK, NZ and Australia during the 1990s. Already there is 'autonomy' within the private sector where schools have light touch regulation and accountabilities for government funds. But this allows for exclusionary practices. Non-Government schools can reject students as well as select students through a range of overt and subtle mechanisms- curriculum, fees, faith, recruitment practices, disciplinary regimes, uniform requirements. Currently, teachers are to be allowed to be selected on basis of personal beliefs, making faith based schools outside antidiscrimination laws. The question is whether government funding should go to those schools that do not recruit from and teach about a range of religious and other belief systems in terms of meeting the National Declaration's (2008) expectations of a global citizen.

On the other hand, schools are being expected to adhere to the new national imperatives of the National Curriculum; teacher and leader professional standards; greater transparency of outcomes with MySchool; and NAPLAN testing as well as intensified market competition between schools as parents (and students) raising expectations. There has been a tightening up of the regulation of teachers' core work of curriculum, pedagogy and assessment. The question is whether this leads to counterproductive tendencies in schools (e.g. teach to test, narrow curriculum provision, fear to innovate etc) (MacBeath 2008, McNeil 2009).

New modes of governance are required, ones that recognize the move towards networks as a mode of policy delivery and governance. The case of the Local Learning and Employment Networks in Victoria are indicative of how schools are now part of a wider set of relationship that facilitate pathways into further education and training as well as employment. The focus in the school sectors in now on transitions: from early years in to primary, from primary to secondary, compulsory to post compulsory. To do so effectively requires a systemic and systematic approach and cannot be addressed if schools are working in competition (Wong 2007).

So the question becomes that of relative autonomy. Principals will always want more autonomy, but there is also a need to exercise and spread responsibility beyond the individual school if students are not to fall through the cracks (Thomson 2009). As Gronn (2007) argues,

> the problematic aspects of the principal's role are directly related to the higher expectations for what should be accomplished by schools, and inadequate support. It is apparent that leaders in government and to some extent systemic Catholic schools lack the internal support that is evident in large independent schools (p. 7).

Schools in more isolated and rural regions also need more support. So there is a fine balance between centralization and decentralization that is required. A state system may be relatively decentralised but federal policies will be centralizing often over different elements of school provision that impact on workforce decisions. All principals seek to have greater flexibility in workforce because of this but flexibility often means insecurity for teachers which means they will not be attracted to the profession.

Q *What other checks and balances are required to ensure individual schools do not advance their interests at the expense of outcomes across the whole system? Specifically, could schools serving disadvantaged communities be left worse off by the competition for resources that might result from decentralisation? To what extent could such outcomes be ameliorated by concomitant increases in the flexibility of remuneration arrangements?*

There is now significant evidence cited earlier that increased autonomy in which schools do not feel a sense of responsibility for all students or to a system that students get lost (Connors 2002, Kirby 2002). Competition as the primary organized of schooling leads to bad practices e.g. focusing on those students you can make the most difference to fastest. Putting resources into activities which look good but which do not address the real issues. (Gillborn & Youdell 2000, Campbell et al. 2000). For every successful school there is usually a failing school as in a market system there are always winners and losers. Schools in disadvantaged communities are obviously worse off as they do not have the capacity to raise the additional industry, philanthropic, and alumni's social and economic capital that many government and non-government schools can in particular areas. Success breeds success. In disadvantaged communities, neither parents nor local industries and communities have the resources to invest in schools and thus provide the additional flexibility that is required to provide a comprehensive well-rounded educational program e.g. extra-curricular activities. Students feel not valued when they know they are not getting the same activities as their counterparts (Muschaump et al. 2007). Despite this, schools in disadvantaged regions tend to have to offer a greater breadth of curriculum (VET, VCAL and VCE) as well as additional resources for students with non-English speaking backgrounds, disabilities, and a range of learning needs. A market driven system means that those schools who need the most support can often get the least.

Q *Is a 'one size fits all' approach to school autonomy appropriate, or should the degree of autonomy enjoyed by schools vary according to their performance?*

Often those schools with the greatest needs require greater autonomy and more support from range of agencies in ways that suits their local needs as these schools have to be more innovative to engage with the full range of student needs. It is better to reward such schools for successes and realize that reform and improvement take time, rather than punitive measures often delivered by greater accountability or strict often impossible time limits and short term targets. The Accelerated Schools program at Stanford University shows how encouraging schools and teachers to be innovative with significant research and administrative support provides greater intellectual challenges to students that have positive long term effects rather than short term target driven approaches in the UK (e.g. Thomson 2009).

Meeting the needs of particular student populations

Q *How effective is the current suite of workforce related initiatives to address educational disadvantage? Should the goal of such policies be greater equality in education outcomes or greater equality of opportunity for all students to realise their educational potential?*

Does the choice between these two alternatives have implications for the nature of the schools workforce policies that should be employed to address educational disadvantage?

- Q *Are all student groups that are experiencing significant educational disadvantage being given suitable recognition in the current workforce policy framework? Are current measures of socioeconomic status adequate?*
- Q *Are school workers sufficiently trained to deal with special needs students, students from cultural and language backgrounds other than English, and students with any other specific educational requirements?*
- Q *Are there particular qualities that are especially important in teaching Indigenous students? Do existing teaching courses place sufficient emphasis on the development of these qualities? How might the number of Indigenous Australians training to enter the schools workforce be increased?*
- Q *Are there workforce changes that would assist disadvantaged students make a successful transition from school to work or further education?*
- Q *What are the main factors that influence the choice of teachers and other professionals to work in areas of educational disadvantage or with students with specific educational needs?(Issues Paper, p. 18)*

Gross disparities in Australian student outcomes demonstrate that the nation's education systems do not work equally well for everyone. In democratic societies in which social inclusion is a priority, there are largely two ways in which their education systems seek to broaden their appeal and effect. One involves '*affirmative* remedies for injustice … aimed at correcting inequitable outcomes … [but] without disturbing the underlying framework that generates them' (Fraser 1997, p.23). The other involves '*transformative* remedies … aimed at correcting inequitable outcomes precisely by restructuring the underlying generative framework. The crux of the contrast is end-state outcomes versus the processes that produce them' (Fraser 1997, p.23).

Affirmative approaches regard the education system as a given and focus on equalising opportunities and/or outcomes for students who are different from the norm and for whom the education system does not work well (e.g. students characterised by disability, rural and remote, Indigenous, low socioeconomic status, English as a second language, homelessness, refugees, etc.). Transformative approaches regard students' differences as a given, as the norm, and focus on equalising education systems, building within them a broader set and conception of equal opportunities and outcomes. The demise of sociology of education courses in initial teacher education programs and of teacher professional development in which these distinctions in approach and understandings of education systems and student populations are canvassed, undermines the capacity of the school workforce to adequately address educational disadvantage.

Affirmative approaches

The focus of affirmative approaches is on students who are different, rather than on transforming education systems at their core, and leads to two kinds of affirmative activities: (i) individualised accounts of difference and (ii) the development of student support structures and alternative and complementary approaches for different students, either as a temporary or a long term / permanent solution, which set different students apart and hence accentuate their differences.

Defining and measuring the socioeconomic status (SES) of students is a good example of the first. The most valid and reliable indicators or dimensions of socioeconomic status are relative levels of education, occupation and income (Duncan et al. 1972, Mueller and Parcel 1981, Gottfried 1985, Hauser 1994). The research shows that occupation levels are the best single indicator of socioeconomic status (Powers 1981, Ganzeboom & Treiman 1996). For this reason it forms the basis of the OECD's International Socio-Economic Index (ISEI), designed for application in education contexts (e.g. in analysing PISA results) and derived from students' responses about parental occupation. While never entirely indicative, occupation's value as a stand-alone measure of SES resides in its tendency to reflect the outcome of educational attainment and also influence patterns of remuneration. More generally, occupation is both *expressive* and *generative* of the social, cultural and economic resources – including education and income/wealth – that broadly define SES (Ganzeboom & Treiman 1996).

In Australia, measures of students' SES tend to be informed by one or a number of education, occupation and income levels. In fact, different education sectors in Australia adopt different measures of SES so that meaningful cross-sector comparisons are difficult. For example, the COAG Reform Council uses parental education attainment (PEA) as a proxy for SES. The higher education sector now collects information on students' PEA, but it still uses a SEIFA Index of Occupation and Income (applied to collection districts rather than postcodes) to determine their SES, in combination with Centrelink recipient data. And, for the first time, the VET sector is in the process of introducing a measure of student SES, which uses a SEIFA Index that combines levels of parental education and occupation.

Apart from their disparities, at least two problems arise from these SES measures: (i) the circular nature of defining SES in terms of educational attainment, which in turn is correlated with educational advantage and disadvantage; and (ii) in moving away from areas measures, attributing SES to individuals rather than to groups, which discounts the social and cultural aspects of socioeconomic status.

This individualised approach to defining difference is common in affirmative remedies to educational disadvantage. Being individualised, they are also partial. They also require teachers to be specialised in the differences of particular students, compartmentalising knowledge and limiting their ability to recognise the social and cultural aspects that inform difference. Hence there is little appreciation of difference as an asset (e.g. Indigenous knowledges).

Transformative approaches

The focus of transformative approaches is on education systems. In particular, they emphasise how education systems can be differently conceived and configured so that students' differences are not represented as barriers to their participation and success in education. Instead, transformed education systems provide opportunities for all students to develop 'capabilities' to lead productive lives in society (Sen 1979), which could result in a range of positive outcomes, not simply those narrowly defined by literacy and numeracy tests and to the exclusion of all other knowledges and ways of knowing.

The surrounding institutional framework

Q *How responsive is the overall institutional regime to changing circumstances? Is the established culture and practice within education departments and related regulatory agencies, as well as in government and non government schools, an impediment to workforce reform?*

While schools need to be able to address localized problems and still remain accountable to systems and governments, education departments need to provide consistent policies and supports at regional and central levels, as well as funding opportunities to support new initiatives and for professional learning of teachers and leaders.

The increased requirements and external pressure for teachers, schools and departments of education to be publicly accountable is necessary but the form of these accountabilities, with the emphasis on uniform, standardized assessment and outcomes for students and teachers, has embedded a culture of one-size-fits-all within the administrative hierarchies of departments of education. This culture has been reinforced by public display of performance data (e.g. MySchool) which has diminished the capacity to be innovative and responsive to changing circumstances at the local level. There needs to be better balance between external and internal accountabilities as drivers of school improvement. Research indicates that strong internal accountability (e.g. culture of systematic inquiry and peer review) is more likely to improve student learning and encourage teacher professional learning (Elmore 1997).

Q *Are industrial relations arrangements in the schools sector sufficiently flexible? Are there particular regulatory or institutional factors that may impede the recruitment and retention of high quality school workers? How can these be addressed?*

Teachers are confronted with increased insecurity. The research evidence demonstrates that young teachers are leaving because permanent jobs are not available and reliance on contract work does not facilitate economic security or make a meaningful career path possible. For teachers in establishment positions, there are insufficient opportunities to move to different work challenges or to achieve promotion and recognition, as well as increased remuneration. This is particularly the case for teachers who wish to remain in the classroom.

Q *Does the policy interface between the Australian Government and State and Territory Governments pose challenges for effective schools workforce reform? What effect will initiatives such as national accreditation and registration requirements, and the introduction of a national curriculum, have on the schools workforce and its capacity to meet the needs of students, parents and the community?*

Any positive equity advantages of the National Curriculum are deeply compromised by its alignment with public measures of performance that corrupt the integrity of the curriculum and student learning (e.g. MySchool). Analysis of the margin of error in NAPLAN performance by academics at Melbourne University demonstrate that there is no reason to assume that the NAPLAN tests score reported through MySchool accurately reflect the quality of teachers and schools. However, the public nature and publicity of MySchool has made NAPLAN a key driver of workplace practice, despite the fact that these undermine COAG's broader goals for schools, the potential for ACARA to fulfill its brief to ensure the implementation of more socially oriented general capabilities in the Australian Curriculum, and the preparedness of teachers and schools to respond to the specific needs of students, parents and the community. In the end, MySchool has created a culture of 'teaching to the test' rather than 'teaching for the student' and this has longer-term negative effects of deprofessionalising the teaching workforce and discouraging the ‘best and brightest’ from pursuing teaching as a career because teachers are reduced to managerial functionaries rather than professionals.

Q *Is there sufficient engagement between the government and non-government school sectors on workforce-related issues?*

Government schools bear the greatest share of responsibility of practicum for teacher education while non-government schools tend to recruit earlier in the year, often getting some of the best students. In some rural communities there is a sharing of the workforce (e.g. specialist teachers) allowing students to attend classes which cannot be offered in other schools. In general, competition for students works against such practices, with little to no cooperative arrangements in place between government and non-government schools in urban regions.

Q *How effective is the interaction with parents and the community on matters relating to student progress and school policy? How engaged are parents in school governance processes, in classroom support, and in other aspects of school activity?*

This varies considerably depending on school and location, as well as parental background and the skills and knowledge they bring. In general, principals and teachers work extremely hard to get parents involved, and some states have set up communication systems (e.g. the Ultranet) to facilitate parental involvement. Victoria has a strong focus on school councils, but some schools cannot garner the same social, economic and cultural benefits from parental involvement as others because of location and diversity within populations. Many cultural groups see the role of education as exclusively that of the school, while many parents have had poor experiences with schools and others do not have the time to work with schools (Blackmore & Hutchison 2008).

In addition, public schools vary significantly in level of discretionary expenditure due to varying levels of parental involvement and consequently the capacity to raise capital and labour. In many low SES regions in NSW for example, non-participation of parents has led to schools disbanding their P&C. Such schools cannot benefit from the significant economic contribution derived from parental involvement in more affluent schools.

Q *Is there sufficient interaction and coordination between the schools, ECD and VET sectors?*

Schools now work closely with TAFE and private RTOs to deliver programs such as VET in Schools (VETiS) and in Victoria, the Certificate of Applied Learning (VCAL). But these programs are relatively expensive to run, creating an extra financial burden for the very schools whose students stand to gain the most from comprehensive programs – schools which tend to have the least funds. For example, in Victoria VCAL and VETiS programs are taken up strongly across regional areas and Melbourne’s low SES western suburbs, but not in Melbourne’s more affluent eastern suburbs (VCAA 2010). The way such situations as these detract from the promise of interaction and coordination between schools and the VET sector should be a matter of concern for the Commission.

Q *Is there an adequate focus on the evaluation of programs (including the dissemination of evaluation results), and a readiness to adjust programs if evidence indicates that improvements can be achieved?*

Rigorous, careful evaluations that examine the long term impact of initiatives – for example with respect to impact on social indicators, transition to further education and employment – are costly and time-consuming and tend to be neglected in favour of faster, more inexpensive approaches. Such 'feel good' evaluations often focus on whether or not participants and other stakeholders 'liked' the program or 'felt' they benefited.

In addition, new programs in a given area (e.g. literacy and numeracy) are often introduced to replace 'old' programs before the latter have been thoroughly evaluated. This is frequently a consequence of policy changes at the department or government level which emphasise 'new' agendas and therefore encourage the introduction of 'new' programs. This is a managerial matter. The more complex question is that funders, including government agencies such as DEEWR and Departments of Education, are disinclined to subject educational initiatives to scrupulous, independent evaluation studies or to hear the 'bad news' that a policy initiative that has involved a considerable financial investment has limited or no efficacy. One way of addressing this is to establish an independent agency for the evaluation of educational programs – in contrast to the current arrangement whereby the same body that has supported the program by funding it also funds the evaluation. Another way is to allow rigorous program evaluation to receive funding under the National Competitive Grants Scheme. Currently, evaluations are effectively excluded from this funding scheme, yet work in the USA and the UK has shown that funding rigorous, independent evaluation of programs is the most efficient ways of establishing 'what works' and 'why'.

Q *Are there particular information and data gaps, either in collection or dissemination, that impede good decision making in education policy? Are the current institutional arrangements for undertaking research on schools workforce policy, and on education policy more generally, adequate? If not, how might they be improved*

There are no forums in which researchers can meet with policy makers on a regular basis at local, regional, state or federal level. Prior evaluation of successful models of the research-policy nexus shows that there needs to be regular ongoing dialogue between researchers, policymakers and practitioners to inform policy and practice (DETYA 2000). For researchers, policy often seems to emerge out of a vacuum suggesting that there is currently scope for a stronger link between policy formation and education research.

The weak design of evaluations that are commissioned as part of the program funding arrangement testifies to the problems inherent in the commissioning of evaluation research. As detailed above, two strategies would help address this issue: i) separating program funding from program evaluation and establishing an independent evaluation agency; ii) allowing program evaluation to be recognised as a legitimate form knowledge generation under the National Competitive Grants Scheme. These arrangements would provide a rationale and structure for enabling and encouraging rigorous, systematic and longer term evaluation of programs to replace the current proclivity of funding agencies for superficial evaluations that serve to confirm that the funder's decision to fund a program.

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