



Australian Government
Productivity Commission

Schools Workforce

Productivity Commission Draft Research Report

November 2011

This is a draft research report prepared for further public consultation and input.

The Commission will finalise its report after these processes have taken place.

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Publications Inquiries:

Media and Publications
Productivity Commission
Locked Bag 2 Collins Street East
Melbourne VIC 8003

Tel: (03) 9653 2244
Fax: (03) 9653 2303
Email: maps@pc.gov.au

General Inquiries:

Tel: (03) 9653 2100 or (02) 6240 3200

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You are invited to examine this draft report and provide written comments to the Productivity Commission by **17 February 2012**. Details on how you can make a submission are available from the webpage for this study.

While the Commission welcomes input on the full range of matters canvassed in this draft report, it is particularly interested to receive feedback on a selection of matters for which it has specifically requested further information.

The final report will be prepared after submission have been received and further discussions with interested parties have been held.

Contacts and further information

For administrative queries, please contact:

Yvette Goss Ph: (03) 9653 2253

For all other matters, please contact:

Leonora Risse Ph: (03) 9653 2198

Nick Ford Ph: (03) 9653 2285

Email schools@pc.gov.au

Fax (03) 9653 2199

Postal address Schools Workforce study
Productivity Commission
LB2 Collins Street East
Melbourne VIC 8003

Online <http://www.pc.gov.au/projects/study/education-workforce/schools>

Terms of reference

EDUCATION AND TRAINING WORKFORCE STUDY *Productivity Commission Act 1998*

I, Nick Sherry, Assistant Treasurer, pursuant to Parts 2 and 3 of the Productivity Commission Act 1998 hereby request that the Productivity Commission undertake a research study to examine issues impacting on the workforces in the early childhood development, schooling and vocational education and training sectors, including the supply of and demand for these workforces, and provide advice on workforce planning, development and structure in the short, medium and long-term.

Background

The Council of Australian Governments (COAG) has agreed on common strategic frameworks to guide government action on early childhood development, schooling and vocational education and training (VET) across Australia.

Building the capability and effectiveness of the workforces in these sectors, particularly for Indigenous people, will be critical to achieving the outcomes agreed in these frameworks. This study is to be undertaken in this context, and responds to a request from the COAG Working Group on the Productivity Agenda that the Productivity Commission undertake a research study examining workforce issues in these sectors.

Scope

The Commission is to provide advice on workforce planning, development and structure of the early childhood development, schooling and VET workforces in the short, medium and long-term.

In undertaking this study, it should consider and provide advice on:

1. The current and future demand for the workforces, and the mix of knowledge and skills required to meet service need. This will include consideration of:
 - (a) population distribution and demographic trends, jurisdictional and regional analysis;
 - (b) significant shifts in skill requirements; and
 - (c) policy and regulation given the agreed COAG outcomes (particularly the National Early Childhood Development Strategy, relevant National Partnerships, the National Education Agreement and the National Indigenous Reform Agreement).
2. The current and future supply for the workforces, including:
 - (a) demographic, socio-cultural mix and composition of the existing workforces, and jurisdictional and regional analysis;
 - (b) elements such as remuneration, pay equity/differentials, working conditions, professional status and standing, retention, roles and responsibilities, professional development, and training and support structures; and
 - (c) qualifications pathways particularly pathways that will ensure accessibility and appropriateness of training to meet the qualifications and competencies required for the various occupations in the workforces.
3. The current and future structure and mix of the workforces and their consequential efficiency and effectiveness, including:
 - (a) the composition and skills of the existing workforces;
 - (b) the productivity of the workforces and the scope for productivity improvements; and
 - (c) the most appropriate mix of skills and knowledge required to deliver on the outcomes in the COAG national framework.
4. Workforce planning, development and structure in the short, medium and long-term, including:
 - (a) policy, governance and regulatory measures to maximise the efficiency and effectiveness of the workforces in order to achieve the outcomes set out in the COAG frameworks; and
 - (b) changes to ongoing data collection to establish a robust evidence base, provide for future workforce planning and development and meet reporting requirements.

In addressing the Terms of Reference, a key consideration will be the extent to which sectoral and jurisdictional boundaries limit innovation and flexibility in workforce planning, development and practices. In addition to sector-specific issues, the Commission is therefore requested to consider whether reducing sectoral divides between workforces in these sectors could support a more learner-focused approach, achieve better individual outcomes and increase the efficiency of workforce development and planning.

Cross-sectoral and integrated service delivery

In recognition of some lowering of cross-sectoral boundaries and the growth of cross-sectoral delivery and integrated service delivery models, the Commission is asked to consider and provide advice on:

1. workforce skill and training needs;
2. the extent to which job design and employment agreements in the sectors are aligned to contemporary work practices;
3. implications for workforce planning across the sectors from integrated service delivery; and
4. the extent to which existing employer practices encourage attracting and retaining employees.

In addition, the Commission is to give consideration to factors that impact on building Indigenous workforce capability in recognition of the effect this will have on improving outcomes for, employment of and services to Indigenous Australians.

The Commission is also to give consideration to factors that have particular impact on each sector. These will include:

1. The Early Childhood Development Workforce

The Early Childhood Development (ECD) workforce can include, but not be limited to: coordinators and managers, early childhood teachers, teaching assistants and para-professionals, childcare workers for pre-primary and primary aged children, early childhood intervention professionals, administrative staff, community service workers and relevant health and social welfare professionals.

In relation to the ECD workforce the Commission is asked to specifically consider and give advice on:

1. Factors affecting the current and future demand and supply for the ECD workforce, and the required mix of skills and knowledge, including:
 - a. delivery of fully integrated ECD services including maternal and child health, childcare, preschool, family support services and services for those with additional needs;
 - b. market requirements for broader leadership, management and administrative skills in operating both mainstream universal service providers and integrated service hubs;
 - c. the availability and quality of pre-service education programs, including through undergraduate and postgraduate education and VET, and consideration of training pathways;
 - d. ECD workforce participation, including ease of access to the early childhood development workforce in different sectors and net returns to individuals and recognition of expertise; and
 - e. the quality and skills of the workforce, job design and workplace practices and arrangements and their contribution to achieving COAG outcomes and setting future direction.
2. Workforce planning, development and structure in the short, medium and long term, covering:
 - a. career pathways, the structure of existing employment arrangements and practices and the extent to which they are dis/incentives to attracting and retaining employees, including pay and conditions across settings; strategies to address possible pay equity issues as necessary; options for funding pay increases as necessary; and the implications for purchasers of ECD services and all levels of government and funding responsibilities;
 - b. potential labour market failures;
 - c. the impact of government, community and private provision; and
 - d. the concept and workforce implications of integrated service delivery.

2. The Schooling Workforce

The schooling workforce refers to teachers and those who support the practice of teaching. These can include, but are not limited to: leaders and managers; teaching assistants and para-professionals; administrative staff; and relevant health professionals.

In relation to the schooling workforce the Commission is asked to specifically consider and give advice on:

1. The current and future supply for the schooling workforce, including:
 - a. the availability and quality of pre-service education programs, including through undergraduate and postgraduate education, and VET;
 - b. government programs targeting supply pressures, including the extent to which there is national cohesion in relation to these programs;
 - c. motivation for entering, remaining in and exiting the school workforce and the attraction and retention of principals in changing contexts; and
 - d. school workforce participation, including ease of access to the teacher profession and/or schooling workforce, net returns to individuals, recognition of industry expertise, wastage rates in teacher training and underutilisation of qualified teachers (such as loss of qualified teachers to other occupations or overseas).
2. The structure and mix of the workforce and its consequent efficiency and effectiveness, including:
 - a. the composition and skills of the existing workforce;
 - b. the productivity of the workforce and the scope for productivity improvements, qualifications pathways; and
 - c. how the current delineation of duties supports or impedes the achievement of COAG outcomes.
3. Workforce planning, development and structure in the short, medium and long term:
 - a. the extent to which current sectoral boundaries promote or limit efficiency and effectiveness in schooling workforce;
 - b. interface with suppliers of pre-service training (undergraduate, post-graduate and VET) and
 - c. the quality and culture of the workforce and its employers, and their contribution to achieving COAG outcomes and setting future directions.

3. The VET Workforce

The status of VET practitioners as ‘dual professionals’, deploying both industry and education skills delivered in schools, VET only, dual sector and industry settings, is unique among education sectors, and poses both challenges and opportunities for the VET sector in attracting and retaining staff. In addition, the increasingly commercial environment in which many providers operate creates a significant role for VET professionals who are engaged in organisational leadership and management, but not directly involved in training delivery. The impact of this trend on the required capabilities of VET professionals is of policy interest.

In relation to the VET workforce, the Commission is asked to consider both the VET workforce as a whole, including trainers and assessors in enterprises, adult community education and community organisations, and the TAFE workforce as a subset, and provide advice on:

1. Factors affecting the current and future demand for the VET workforce, and the required mix of skills and knowledge:
 - a. change in participation in VET as a result of increasing labour market emphasis on formal training and lifelong learning;
 - b. change in volume and type of training delivered to each VET participant as a result of the trend towards higher level qualifications, and as a result of the impact of the Recognition of Prior Learning (RPL) and the Recognition of Current Competencies (RCC);
 - c. likely future patterns of training demand by industry and sector, including as a consequence of responses to emerging economic and environmental issues and to gap training and skills assessment;

-
- d. requirement for broader skills in VET professionals as a result of increasing system focus on client needs, including flexible delivery, greater focus on employability skills, catering for a more diverse student base, and partnering with enterprises and communities;
 - e. demand for managerial and entrepreneurial skills as a result of growing commercial dimensions of the VET sector and strategic market positioning and branding;
 - f. the impact of delivery of higher level VET qualifications (eg Associate and Bachelor Degrees); and
 - g. training pathways and the provision of 'second chance' education and training such as for migrant and Indigenous students.
2. The current and future supply of the VET workforce, including:
 - a. motivation for entering, remaining in and exiting the workforce; and
 - b. competition from other employers including industry and other education sectors.
 3. The structure of the workforce and its consequent efficiency and effectiveness, including:
 - a. the extent to which job design and employment agreements in the VET sector are aligned to contemporary work practices in a commercially competitive environment;
 - b. the adequacy of support for high-quality professional practice, including consideration of practitioner qualifications and standards for VET practitioners across sectors;
 - c. the current and potential impact of workforce development activities within the VET sector on the capability and capacity of the VET workforce, including a workforce development plan; and
 - d. the implications of emerging workplace and employment practices, including increasing casual and part-time employment, the 'core/periphery' model and blurring of teaching and non-teaching roles.

Study Process

In undertaking its study, the Commission should consult widely with relevant professionals and interested parties. It should use, but not replicate, existing work such as that underway by COAG, the relevant Ministerial Councils, Senior Officials' Working Groups and jurisdictions, including on:

- the early childhood quality reform agenda;
- teacher quality reforms;
- further reforms arising from policy directions of the National Agreement on Skills and Workforce Development;
- Indigenous reforms; and
- previous work commissioned by the Victorian DHS for the Community Services Ministers Advisory Committee.

This should include relevant recent survey work and workforce studies in each sector and research undertaken by NCVER, ACER, various university research centres, TAFEs and Industry Skills Councils, and the OECD.

The study should include a comparative element, both in terms of comparing the education and training workforce to other community/public service professions such as the health sector, and of relevant international comparisons, particularly with regard to the ECD workforce which is undergoing significant reform in Australia.

The Commission should provide a report, dealing with the VET workforce, within twelve months of receipt of this reference; and a second and third report, dealing with the early childhood development and schooling workforces, within eighteen and twenty four months respectively of receipt of this reference. The reports will be published.

Nick Sherry
Assistant Treasurer
[Received 22 April 2010]

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Acknowledgments

The Productivity Commission expresses gratitude to all those who contributed to this draft report. It looks forward to their continued involvement as this report is finalised.

This study is overseen by Deputy Chairman Mike Woods and Commissioner Alison McClelland. They are supported by a research team located in Melbourne.

Abbreviations and explanations

Abbreviations

ABS	Australian Bureau of Statistics
ACARA	Australian Curriculum, Assessment and Reporting Authority
ACER	Australian Council for Educational Research
AEU	Australian Education Union
AITSL	Australian Institute for Teaching and School Leadership
APC	Australian Parents Council
AQF	Australian Qualifications Framework
AST	advanced-skill teacher
ATPMPP	Australian Teacher Performance Management Principles and Procedures
COAG	Council of Australian Governments
CRC	COAG Reform Council
DEC	Department of Education and Communities (NSW Government)
DECS	Department of Education and Children's Services (SA Government)
DEECD	Department of Education and Early Childhood Development (Victorian Government)
DEEWR	Department of Education, Employment and Workplace Relations (Australian Government)
DET	Department of Education and Training
ECD	Early Childhood Development
ESL	English as a Second Language
Gonski Review	Review of Funding for Schooling
IEUA	Independent Education Union of Australia

MCEECDYA	Ministerial Council for Education, Early Childhood Development and Youth Affairs
Melbourne Declaration	Melbourne Declaration on Educational Goals for Young Australians
MGSE	Melbourne Graduate School of Education
MTeach	Master of Teaching
NAPLAN	National Assessment Program — Literacy and Numeracy
NARIS	National Alliance for Remote Indigenous Schools
NEA	National Education Agreement
NPA	National Partnership Agreement
NPAITQ	National Partnership Agreement on Improving Teacher Quality
OECD	Organisation for Economic Co-operation and Development
PC	Productivity Commission
PISA	Programme for International Student Assessment
PSP	Priority Schools Program
RATEP	Remote Area Teacher Education Program
SEAM	Improving School Enrolment and Attendance through Welfare Reform Measure
SES	socioeconomic status
SiAS	Staff in Australia's Schools
STR	student–teacher ratio
TALIS	Teaching and Learning International Survey
TIMSS	Trends in International Mathematics and Science Study
VAGO	Victorian Auditor General's Office
VET	Vocational Education and Training
VicSRC	Victorian Student Representative Council

OVERVIEW

Key points

- Australia's schools deliver generally good student outcomes at reasonable cost. The schools workforce plays a major role, with the contributions of teachers and principals being especially important.
 - But not all students are well served by the current arrangements — as exemplified by the large gap in the average educational achievement of Indigenous students.
- Reforms are in place or in prospect to address current weaknesses such as teacher shortages in some areas and subjects, inadequate performance management, and impediments to schools workforce flexibility and greater school autonomy. The reforms aim to improve the efficiency and effectiveness of the workforce and focus on improving teaching quality and addressing educational disadvantage.
- The reforms are extensive in scope and intensive in detail. But given their mostly recent origin, it is generally too early to come to judgement on their likely impacts.
 - Thus the Commission is proposing only a small number of further measures to build on those reforms, address some problematic initiatives or matters that have received insufficient attention, and strengthen policy governance and evaluation.
- The Commission recommends that:
 - two year graduate entry teacher training courses not be mandated
 - the Australian Government defer the full-scale introduction of its proposed national bonus scheme for teachers, and instead support more extensive trialling of performance payment arrangements and improved performance appraisal
 - the Australian Institute for Teaching and School Leadership collect and disseminate research into schools workforce composition and job design
 - future assessments of ways to improve pre-service training, induction and professional development be supported by longitudinal data collection
 - state and territory governments, where not doing so, support school autonomy initiatives with measures to help ensure that schools have the necessary leadership skills and school governance arrangements
 - the Ministerial Council initiate some specific policy evaluations, including a comprehensive assessment of measures to address educational disadvantage
 - the Council ensure that non-government schools, the non-teaching workforce and parent bodies are appropriately represented on high level schools policy forums.
- The Commission has also made a range of policy-related findings, including on:
 - the case for using explicit remuneration incentives to help address workforce shortages, including in hard-to-staff schools and in particular subject areas such as mathematics and science
 - the need to improve performance management within schools
 - the generally high priority that must be given in schools workforce policy to addressing educational disadvantage — especially for Indigenous students
 - the benefits of greater flexibility in the industrial relations regime for school workers.

Overview

A well-performing schooling system is a cornerstone of a successful society. It benefits individuals, the functioning and cohesion of society and the performance of the economy more generally.

Overall, Australia's schooling system delivers good, though not outstanding, outcomes.

- The foundation skills of the 'average' Australian student are at the upper end of international rankings, while expenditure (public and private) on schools education, as a percentage of GDP, is marginally below the OECD average.
- However, despite a steady increase in spending per student and falling class sizes, there is evidence that student literacy and numeracy has declined somewhat. And year 12 retention rates are little changed from the early 1990s.
- Also, various evidence suggests that Australia's schooling system could do more to offset educational disadvantage. Socioeconomic status (SES) explains more of the variation in student performance than in some other educationally high-performing OECD countries. Students with disabilities and those living in rural and remote areas — whatever their SES background — can face significant difficulties in accessing quality school education. For Indigenous students — who often experience multiple layers of disadvantage — these difficulties can be particularly acute.

While the achievement of better student outcomes requires policy action on several broader educational (and, indeed, societal) fronts, improved workforce effectiveness and efficiency has a key role to play. In addition to carrying the most direct responsibility for student learning outcomes, the workforce is the largest cost driver within the schooling system.

Reflecting this, Australian governments are embarking on a series of workforce and other education reforms within a wider human capital agenda. The Productivity Commission has been asked by the Australian Government, on behalf of the Council of Australian Governments (COAG), to contribute to the workforce reform agenda. Following on from the Commission's completed studies into the vocational education and training and the early childhood development workforces, this draft report sets out the initial results of the Commission's study into the schools workforce. The study will be completed in April 2012.

Specifically, the Commission has been asked to advise on:

- factors affecting the supply of, and demand for, school workers
- whether the knowledge and skills of the workforce, and its deployment within and across schools and regions, are appropriate to meet the community's needs
- whether current or proposed policy, governance and regulatory arrangements are conducive to maximising the efficiency and effectiveness of the schools workforce and, if not, what changes may be required.

Concurrent with this study, the Review of Funding for Schooling (the Gonski Review) is examining the overall resourcing of the schooling system. Clearly, the level of resourcing and the way it is spread across schools will have a critical bearing on the outcomes delivered by the workforce — including through its impacts on the number, quality and distribution of school workers and their rates of remuneration and working conditions.

The current state of play

A profile of the current schools workforce

School workers are employed by state and territory governments, Catholic education offices and independent school operators in a diversity of environments; including in primary and secondary schools, schools in urban, rural and remote areas, and schools with high proportions of Indigenous students or students with disabilities or other special needs.

On a full-time equivalent basis, the paid workforce includes more than 250 000 teaching staff, principals and other school leaders (table 1), and nearly 80 000 teacher assistants and administrative staff. There is also a sizable volunteer workforce of parents and others from local communities. In the government system, a higher proportion of teachers work in primary schools, whereas the reverse applies in Catholic and independent schools.

The structure and nature of this workforce has been changing in various ways.

- The proportion of the teaching workforce employed in non-government schools has steadily risen in line with a similarly changing pattern of student enrolments.
- The workforce is ageing, with the rate of age-related exits anticipated to rise in the coming two decades.

Table 1 Numbers of teaching staff, 2010^a

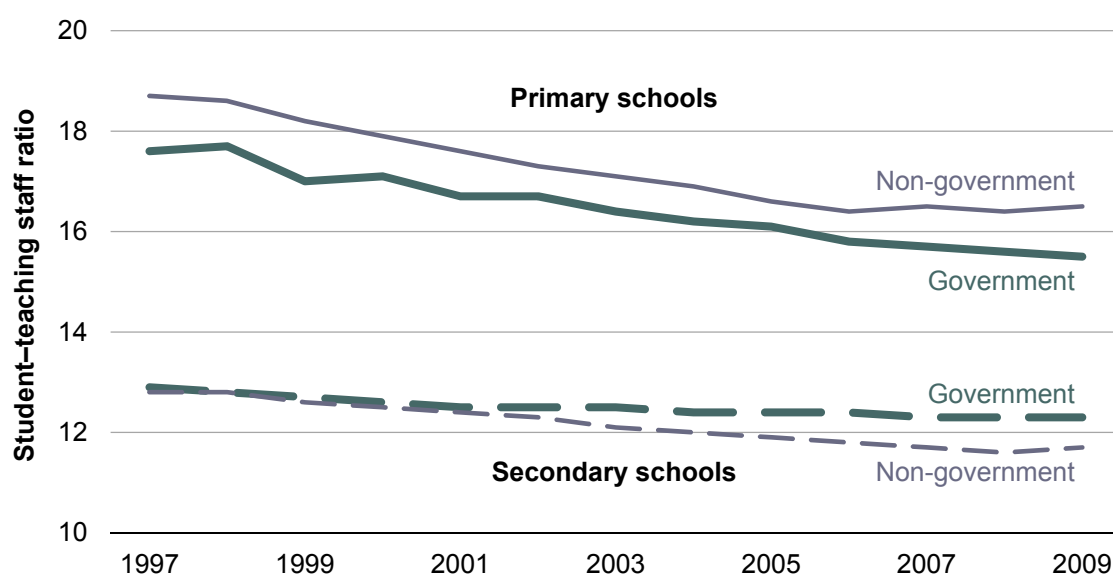
	<i>Primary</i>	<i>Secondary</i>	<i>Total</i>
Government	90 155	73 543	163 698
Non-government	37 735	49 989	87 724
<i>Catholic</i>	22 212	25 179	47 391
<i>Independent</i>	15 523	24 810	40 333
Total	127 890	123 532	251 422

^a Full-time equivalent number of teachers, principals and deputy principals.

- Contract and part time employment has been growing, with the workforce also more feminised. (The ratio of female to male teachers overall is about two to one, and at the primary level it exceeds four to one.)
- Class sizes and hence student–teacher ratios have been progressively reduced (figure 1).
- There is evidence to suggest a lowering of the average literacy and numeracy skills of females entering teacher training courses.

There have also been various, mainly recent, initiatives to foster leadership skills and to support the use of those skills by giving a growing number of government schools greater control over hiring and deploying staff and over other school

Figure 1 Student–teacher ratios^a, 1997–2009



^a Student and teacher numbers calculated on a full-time equivalent basis.

management tasks. These autonomy policies are intended to facilitate the tailoring of staffing arrangements to suit the particular circumstances of individual schools.

However, even where schools have some autonomy, custom and practice and conditions in awards and enterprise agreements can continue to constrain school-level workplace flexibility. As well, there remain considerable rigidities in remuneration arrangements. In most jurisdictions, teachers still reach the top of the pay scale in around 10 years. And there is relatively little explicit differentiation in teachers' pay on the basis of performance or of shortages in particular subject areas.

Also notable is the fact that increases in teachers' pay do not appear to have kept pace with those in many other professions. Indeed, there is evidence to suggest that, since 1995, there has been no increase in the average real salaries of Australia's more experienced teachers.

The current reform agenda

As set out in box 1, there is an extensive array of detailed schools workforce reforms in place or in prospect. Most of these are being implemented by state and territory governments and non-government school operators — reflecting their responsibility for delivering schools services.

But many have been brought under national umbrellas by COAG or the Ministerial Council for Education, Early Childhood Development and Youth Affairs. Underpinning this development has been the articulation of broad educational goals in the 2008 'Melbourne Declaration' by Australian education ministers, and in the National Education Agreement (NEA). Key objectives are to promote equality of educational opportunity and to ameliorate educational disadvantage. More specifically, the NEA explicitly targets closure of the gap in schooling outcomes between Indigenous and non-Indigenous students.

Accompanying the NEA are several education-related National Partnership Agreements (NPAs) that make additional Australian Government funding available to the states and territories to facilitate and/or reward reform initiatives agreed to be of national significance. These include the 'Smarter Schools' NPAs, which focus on improving teacher quality, raising student literacy and numeracy outcomes, and addressing educational disadvantage in low-SES communities.

Box 1 An overview of current schools workforce policies

The extent and nature of workforce-related policy initiatives varies across jurisdictions and across different components of the schooling system. Broadly however, these initiatives fall into one of three overlapping groups.

First, there are initiatives to promote an appropriate balance between the demand for, and supply of, school workers. This grouping includes policies intended to:

- boost recruitment in areas of shortage — through scholarships and employment incentives for students, by fast tracking the pedagogical component of teacher training for certain individuals (Teach for Australia and Teach Next), and by targeted initiatives to increase the number of Indigenous school workers
- increase early career retention — through more rapid salary progression, stronger classroom support and mentoring, and greater access to professional development
- encourage qualified teachers to fill hard-to-staff positions — through allowances, retraining and incentives relating to future placements.

Second, there has been a growing focus on improving the efficiency and effectiveness of the workforce, with a particular emphasis on enhancing the quality of teachers and school leaders. As well as the agreement on new national professional standards (see text), specific measures include:

- new pre-service course offerings
- minimum entry-level literacy and numeracy standards for teacher training courses
- improved performance-management systems, and increased pay dispersion to reward quality teaching
- programs to build leadership skills and, through school autonomy initiatives, the provision of greater opportunity for good leadership skills to be exercised.

Also, the just released National Disability Strategy sets out a range of broad approaches for improving the quality of education provided to students with disabilities.

Third, and in support of the other reforms, attention has been directed to strengthening policy governance. While individual jurisdictions have been pursuing improvements in these areas, the extent of national-level performance evaluation and oversight has increased considerably. For example:

- The COAG Reform Council has responsibility for assessing jurisdictional performance against the targets agreed to under the education-related NPAs.
- Beyond curriculum development, the Australian Curriculum, Assessment and Reporting Authority's functions include the facilitation of national student assessments, and compilation and publication of data on school and system performance.
- Though established in the first instance to develop national professional standards and course accreditation requirements, the Australian Institute for Teaching and School Leadership is expected to collect and disseminate information relating to the performance of the schools workforce.

To support these arrangements, steps have been taken to enhance national-level performance reporting and assessment. Provided the new performance data are soundly based and comprehensive, they will assist policymakers in measuring progress in meeting broad educational goals and help to empower parents and students — and thereby provide an additional spur for improved performance.

Governments have also endorsed a set of national professional standards for teachers and principals — developed by the recently created Australian Institute for Teaching and School Leadership (AITSL) — and have agreed to the introduction of a national curriculum, which is currently being developed by the Australian Curriculum, Assessment and Reporting Authority (ACARA). But for the most part, the new reform framework will retain scope for jurisdictional divergence and hence for experimentation with different policy approaches.

The Commission's approach to this study

In accordance with the Commission's legislation, this study is guided by the wellbeing of the community as a whole. The Commission has therefore taken into account the interests of students, the schools workforce and society more generally.

In doing so, it has been cognisant of the objectives of the Melbourne Declaration and the NEA — and, in particular, the notion that schools policies should promote equity in educational outcomes. Like both the OECD and the Gonski Review, the Commission has interpreted equity to mean that all students should have equal opportunity to realise their educational potential, irrespective of their individual, economic or social circumstances.

The Commission has also been mindful of:

- the critical role played by quality teaching (see box 2)
- the need to consider the cost-effectiveness of different approaches for achieving particular policy objectives
- the importance of predicating policy on robust evidence — or of putting in place structures that will generate that evidence
- the need to balance the benefits that can arise from national consistency in policy settings against the likely greater opportunity for policy experimentation under a jurisdictional approach.

Box 2 What makes for quality teaching?

As noted in the text, schools workforce reforms in Australia and around the world have a strong focus on improving the quality of teaching.

Fully understanding what constitutes quality teaching remains an ongoing policy challenge. In part this is due to the great diversity of ways that individual students learn. Mapping the professional dimensions (of both content and pedagogy) and personal capability dimensions of teaching is also complex. Even so, there are some recurring themes in the available evidence.

In a synthesis of the research evidence, Masters (2007) concluded that highly effective teachers are those who:

- create an environment where all students are expected to learn successfully
- have a deep understanding of the subjects they teach
- direct their teaching to student needs and readiness
- provide continuous feedback to students about their learning
- reflect on their own practice and strive for continuous improvement.

Similarly, other researchers have summed up the best teachers as those ‘who challenge, who have high expectations, who encourage the study of their subject, and who value surface and deep aspects of their subject’ (Hattie 2009).

Significantly, these sorts of skills and behaviours were also prominent in the commentary on quality teaching by the Victorian Student Representative Council (VicSRC) in its submission to this study. Specifically, the VicSRC (sub. 24) pointed to the importance of teachers being sensitive to the different learning approaches and needs of individual students, relating to students as ‘partners’ in their learning process, providing students with the freedom and responsibility to explore a range of learning options, having high expectations of both students and themselves, and hearing and responding to feedback from both students and other teachers.

The collegial dimension to teacher quality — and, in particular, the provision of leadership for less experienced or less capable colleagues — was also raised by AITSL (sub. 39).

As well, the effectiveness of particular reforms will often depend heavily on complementary initiatives. Thus, efforts to improve teaching quality will call for action on a range of fronts, including in regard to pre-service training and professional development, performance management and remuneration arrangements. Leadership and school autonomy policies are intertwined — the impacts of autonomy on student outcomes will depend to a significant extent on the quality of leadership skills, which in turn are likely to be easier to exercise and develop in an environment where schools have autonomy over hiring and deploying staff and over day to day management tasks. More broadly, as alluded to earlier, the

capacity to address workforce shortages and attract, develop and retain a high quality teaching workforce will clearly depend heavily on overall school resourcing — the subject of the concurrent Gonski Review. Broader societal policies such as health and housing also have an important role to play in delivering better and more equitable educational outcomes.

Finally, and most importantly, this study is occurring at a time when workforce policies are undergoing significant change, and when there is also considerable innovation occurring within some schools. Many of these changes are of very recent origin, thus limiting the scope to make definitive judgements on their merits. And some agreed changes have yet to be put in place. Moreover, further changes will arise from other recently completed, or soon to be finalised, reviews, including the Gonski Review.

Given this, the Commission is not proposing a plethora of new initiatives. Rather it has put forward a small number of targeted measures that:

- build on what is in train or in prospect
- address some approaches that appear problematic in light of the available evidence on what is important for delivering better schooling outcomes
- address aspects of workforce arrangements that have so far received insufficient policy attention.

In addition, the Commission has proposed some changes to strengthen policy and program governance and evaluation, and to enhance the future evidence base. Particularly important in this regard is the need to embed robust evaluation into the schools workforce policy landscape.

Addressing workforce imbalances

Projections by the Department of Employment, Education and Workplace Relations indicate that, over the period 2010 to 2022, the total number of students in Australia will increase by around 26 per cent (or about 900 000), with the forecast rates of growth highest in Queensland (45 per cent) and Western Australia (40 per cent). There will also be workforce pressures coming from competing demands from the early childhood sector, the ageing of the schools workforce and the age-induced tightening of the broader labour market.

Moreover, there are already areas of longstanding workforce undersupply — especially within teaching. In particular, there are significant shortages of teachers in secondary subjects such as mathematics and science, or who are qualified to educate students with disabilities and other special needs. And schools in rural and

remote centres and in Indigenous communities are often hard-to-staff, as can be some schools in urban areas catering mainly for low-SES students. Some jurisdictions report that high quality principals are in short supply. At the same time, there are areas of oversupply, as evidenced by the substantial number of (mainly primary) teachers who are on stand-by for positions in metropolitan areas.

Such imbalances are costly for both students and the wider community.

- Shortages are directly detrimental to the learning of the students affected and, to the extent that they often have the biggest impacts on disadvantaged students, undermine the equality of educational opportunity goal.
- Surpluses mean that schools are providing practicum training to more prospective teachers than will be required and that the community is subsidising the provision of ‘underutilised’ pre-service training.

There have been discussions between the Australian Government and universities about the current level of surpluses and the concern that the new university funding arrangements to commence in 2012 could exacerbate the situation. In light of these discussions, and the levers available to the Australian Government to more directly influence the numbers of general teaching places offered by universities, it would be premature at this juncture to consider additional measures. As well, the demand pressures referred to above may act to reduce surpluses to more reasonable levels (and in high growth jurisdictions even eliminate them).

In regard to ameliorating shortages, various measures are already in place, including scholarships and fast-tracked training arrangements (see box 1). Financial allowances are also employed — most commonly to attract teachers to (and compensate them for living in) rural and remote locations.

However, in the Commission’s view, more explicit salary differentials have a legitimate role to play, including in helping to address subject-based teacher shortages and the needs of hard-to-staff schools in urban areas. While many currently in the teaching workforce may be motivated mainly by factors other than remuneration (including the working conditions in different schools), for those engaged in or contemplating other careers, remuneration levels are likely to be a more influential consideration. Significantly, mathematics and science graduates working outside teaching, on average, earn considerably more than their teaching counterparts.

Remuneration incentives will be an aid, not a panacea, for dealing with shortages, with their effectiveness depending on the individual circumstances. Their wider use, including to help address subject-based teacher shortages, would also give rise to some practical issues on which the Commission is seeking further information.

Given Australia's competitive labour market environment and the longstanding nature of some workforce shortages, it makes sense to further explore the use of remuneration incentives. The policy environment should encourage experimentation and evaluation in situations where such incentives could potentially help to address shortages and thereby enhance student outcomes.

Improving training and professional development

School workers acquire and develop their skills and knowledge through a combination of pre-service training (instruction and practicum) and employment (professional development and practical experience, including being mentored).

Although there is a large investment in the pre-service training of future teachers, the international and local evidence on the effectiveness of different modes of training on teacher quality is equivocal. Building the evidence base in this area through the trialling and evaluation of different modes of delivery, and through better tracking of the impacts of training on the subsequent performance of teachers in the classroom (see below), is therefore a high priority.

However, there is already evidence to suggest that the practicum component of pre-service training, together with the induction received by teachers when they first enter the workforce, is important from a teaching quality perspective. There is also evidence from surveys that these aspects of the training process could be improved to enable new teachers to better manage classrooms, perform assessment and reporting tasks, and relate to parents.

A number of promising avenues for improvement have been raised by study participants — including using university–school partnerships to strengthen the links between the theoretical and practical components of pre-service training, and more heavily involving experienced teachers in both practicum and induction. But again, trialling and evaluation is the key to better understanding what forms and combination of practicum and induction, and what types of university–school relationships, are most cost-effective in improving teacher quality.

As part of the teaching quality agenda, the process for accrediting teacher training courses is also changing. The states and territories have agreed to a new national system for accrediting pre-service teacher education courses, based on standards developed by AITSL. The standards include a minimum literacy and numeracy requirement for those entering these courses.

The new accreditation system has the potential, over time, to improve pre-service training and start to improve the quality of graduate teachers. However, its actual

effects will depend critically on how well it is implemented and applied. Also, the quality impacts of the minimum literacy and numeracy standards are likely to be influenced by other factors — including whether teacher remuneration is conducive to encouraging more high quality entrants into pre-service training courses. Hence here too, it is important that there is a future evaluation of the effectiveness of the new system in helping to ensure that graduates from pre-service training courses have the requisite knowledge and skills.

Moreover, the Commission is not convinced that the benefits of one component of the new accreditation requirements — an increase in the minimum length of graduate courses from one year to two years — would justify the costs involved. As well as the direct costs, this longer training duration could potentially exacerbate some workforce shortages. Therefore it should not be mandated at this stage. Likewise, the sort of pre-registration tests for aspiring primary teachers that the Queensland Government will begin trialling in 2012 should be left as an option open to individual school operators as part of their employment selection processes, rather than be added to the national accreditation apparatus.

For those who are in the teaching workforce, professional development is an important vehicle for maintaining and building new skills and is integral to achievement of the higher level teacher classifications in the new national standards. While all jurisdictions require teachers to undertake a minimum amount of professional development to maintain their registration, there is little hard evidence on the effectiveness of these development activities. Factors that could *prima facie* enhance the contribution of professional development include improved school leadership (with a commitment to professional development), better performance management, the linkage of that management to development activities, and the reasonable prospect of remuneration or other rewards where professional development results in substantially enhanced skills and teaching quality. Nonetheless, this is yet another area where better evidence needs to be assembled on what works best and is most cost-effective.

To complement the trialling and evaluation of specific initiatives, the Commission is proposing that the Australian Government initiate a longitudinal data collection of those entering the teaching workforce that would facilitate assessments of what aspects of pre-service training, induction and professional development are most effective in improving student outcomes. This could involve either an expansion in the scope of the Longitudinal Teacher Workforce Study that has been commissioned under the National Partnership Agreement on Improving Teacher Quality (NPAITQ), or a separate data collection.

Enhancing teacher performance

The provision of regular feedback to teachers on how they are performing is important to their development. While a majority of schools can claim to have a performance-appraisal system, many teachers do not receive the regular feedback and support they need. Past reviews of teacher-appraisal systems have been critical of the lack of clear criteria, the complexity of the paperwork, and the focus on monitoring whether appraisals have been conducted rather than their effectiveness.

The NPAITQ includes financial incentives to establish or improve performance-management systems, but appears to have led to relatively minor changes to date. AITSL has observed that broad and extensive consultation and trialling and meaningful research in this area is required.

Performance appraisals are more likely to be effective if principals and teachers have a major role in determining how appraisals are undertaken in their school, and if school-based indicators and criteria are used. More than one method of gathering evidence — including an indicator of student outcomes — should be used to enable the various dimensions of performance to be captured. Central agencies can support schools by providing them with broad guidelines and templates, sufficient resources to maintain an effective appraisal system, training, and guidance on performance measures and data management.

One dimension of performance management that has arguably received insufficient policy attention is dealing with unsatisfactory teacher performance. Though there appears to have been little formal research on this issue, available data indicate that very few teachers are ever deemed to be underperforming. The Commission is seeking further input from study participants on how the management of unsatisfactory performance could be improved.

What role for performance-based remuneration?

There has been considerable interest internationally in exploring alternative remuneration systems to more closely tie teacher rewards to performance. However, there has been little use of performance-based remuneration in Australian schools.

Pay increments for teachers who have yet to reach the top of the pay scale are notionally conditional on satisfactory performance. In practice, they are almost never withheld. As a result, where teachers sit on the pay scale is largely determined by their length of service. This may be a reasonable proxy for the improvements in performance and student outcomes which, the research suggests, come with the experience gained in the first few years of teaching. However, rewarding

performance beyond that associated with the initial accumulation of experience requires mechanisms other than current increment systems.

One initiative has been the creation of advanced-skill teacher positions, which are a single higher-paid classification for more effective teachers, subject to a selection process. The resulting benefits for student outcomes appear limited to date. This seems to be due to the relatively small number of positions available, a requirement that successful candidates take on non-teaching duties, and selection processes that are not necessarily linked directly to the contribution a teacher has made to improving student performance. A performance-based career path with several classification levels could be more effective, but significant issues — such as whether it is based on national teaching standards, its cost-effectiveness, and the risk of it being subsumed into an automatic advancement process — would have to be addressed. The Commission is seeking further input on this option.

Performance bonuses are rare in Australian schools, but US schools have periodically experimented with them over many years. The results have been mixed. A current trial in a small number of Victorian government schools will provide further insights. However, it is clear that there is still much to learn about how to design an effective bonus system for teachers, particularly in an Australian context. Moreover, addressing current deficiencies in teacher appraisal and feedback would be an important prerequisite for an effective bonus system.

Given the above, full-scale implementation of the Australian Government's proposed national bonus scheme for the top 10 per cent of teachers in government and non-government schools (to initially be paid in 2014 based on teacher performance in 2013) should be deferred. In the interim, the Government should finance smaller-scale experiments with teacher performance pay, building on recent trials in Victoria and involving control groups of schools and teachers to enable robust ex post evaluation. The Australian Government could also provide further assistance to schools to address current deficiencies in teacher appraisal and feedback.

Promoting innovation in workplace arrangements

Over time, there have been changes to the roles of teachers, principals and other school workers in response to such factors as increased parental and community expectations, greater reporting and consultative demands, technological innovation and changes in pedagogical understanding.

Many of these changes have been initiated by individual schools in order to better meet the needs of the students and communities they serve. Less clear is the extent

to which workforce innovations have been purposefully driven by education authorities to achieve improved student outcomes or greater cost-effectiveness. As the Tasmanian Department of Education observed, job design is an area that has evolved over a number of years without a great deal of strategic intent.

And for one of the few instances where there has been explicit policy intent — targeted reductions in average class sizes — the evidence is generally unsupportive. Between 1964 and 2003, the average student–teacher ratio in Australian schools fell by more than 40 per cent, and has since declined further (figure 1). Such reductions have been pursued partly on the presumption that by enabling teachers to give more individual attention to each student, there will be better student outcomes. However, below a relatively high threshold level, both the Australian and international research suggests that smaller class sizes will only be of benefit to some particular student groups — such as those with learning difficulties, disabilities or other special needs. This has therefore been a costly policy approach that does not appear to have translated into a commensurate improvement in overall student outcomes, and which has tied up funding that could otherwise have been used for a range of more worthwhile purposes — including to better reward quality teaching.

Rather than focussing on further reducing average class sizes, there could be benefit in exploring whether a wider range of class sizes might facilitate greater diversification of teaching roles and methods, and be more cost-effective. The Commission was also advised of various approaches for deploying teachers and other school workers differently and more effectively — including some that would make better use of teacher assistants and aides, administrative staff, and health and student welfare specialists. Better use of the non-teaching workforce that relieved teachers of some more routine administrative tasks could, over time, also help to improve the status of teaching and thereby its attractiveness to more highly talented individuals.

But while significant improvements in this area are almost certainly possible, it would be inappropriate for the Commission to endorse particular innovations in job design and workforce structure in this study. The efficacy of many will vary across schools and jurisdictions, meaning that they will need to be subject to appropriate context-specific evaluation.

Instead, the Commission has focused on how to address institutional factors that may hinder workplace innovation. Moves towards greater school autonomy, if combined with strong leadership (see below), are likely to be helpful in overcoming the general reform inertia that can sometimes permeate large organisations and bureaucracies. More flexible and responsive industrial relations arrangements could also assist (see later).

A further impediment that needs addressing is the insufficient evaluation of many school-based innovations and the absence of mechanisms to disseminate to other stakeholders the results of those evaluations that are conducted. The Commission is proposing that AITSL's current roles in relation to teacher and school leadership quality be extended to include responsibility for promulgating ideas and research on schools workforce innovation.

Building school leadership

Principals have primary responsibility for setting their school's culture. They and their leadership team provide the local foundation on which improvements in pedagogy and educational attainment are built, and thus are integral to promoting excellence in student outcomes. As well as managing their school's resources, principals must be able to foster effective relationships with staff, students, parents, education authorities and the wider community.

Given these responsibilities, it is crucial that there are robust processes in place to identify and foster leadership ability and that school leaders are involved in continuous and relevant professional development.

It is also very important that leaders are held accountable for their schools' results as part of a rigorous performance management process. To this end, contract-based employment of principals — long a feature of the non-government sector — is now being adopted in some government school systems, allowing accountabilities to be related to the circumstances of individual schools. But contracts are not the only way to institute such transparent and tailored accountability regimes.

A further important consideration is the extent to which centralised control of decision making constrains the scope to develop and exercise leadership at the school level. The significance of this constraint varies between jurisdictions and sectors. Non-government schools, and independent schools in particular, have traditionally enjoyed greater autonomy than most government schools. However, several jurisdictions are now following in the footsteps of Victoria, which introduced an autonomous model for its government schools in the 1990s. For example:

- Western Australia is progressively implementing its Independent Public Schools program
- in New South Wales, which has one of the most centralised government-school systems, the state government is trialling autonomy in selected schools and has foreshadowed a general move to an autonomous approach.

Giving further impetus to these developments, the Australian Government has announced an Empowering Local Schools initiative that will provide financial incentives for both government and non-government schools in all jurisdictions to move further down the autonomy path. The changes will be tailored to individual school circumstances, phased in gradually, and subject to evaluation.

The Commission welcomes these developments — and, in particular, the notion of selective implementation that is central to a number of them. That is, the appropriate degree of autonomy will depend heavily on the characteristics and circumstances of individual schools, including the strength of leadership skills. There should also be robust governance arrangements at the school level, and support from central agencies on matters such as training and leadership development, teacher standards, and curriculum.

Reducing educational disadvantage

Many factors beyond a student's innate skills and attributes can impede them from realising their educational potential. A large body of Australian and international evidence shows that educational disadvantage is more likely to be experienced by students from low-SES backgrounds, those in rural and remote areas, and those with a disability or other special needs. Indigenous students, in particular, can face multiple sources of disadvantage.

Many schools with higher proportions of disadvantaged students report persistent difficulties in attracting and retaining teachers, leaders and support staff who have the skills, knowledge and capabilities to appropriately assist these students. Schools in remote localities often have a high turnover of early-career teachers and newly appointed principals, which can impede student learning. And access to professional development, and coverage of staff absences with appropriately qualified staff, pose further challenges.

Also, schools commonly report difficulty in engaging some parents and carers of disadvantaged students to support their children's education. Such involvement has been shown to be one of the most important outside-school factors affecting student outcomes. At the same time, it appears that teachers sometimes have difficulty recognising and responding to outside-school factors that are impeding student learning, and/or have low expectations of what disadvantaged students can achieve. Yet, as noted earlier, awareness of individual student needs and setting ambitious learning goals are hallmarks of quality teaching and a significant contributor to good student outcomes.

Though reducing the adverse effects of educational disadvantage will call for a range of educational and general policy responses, it must be a high priority for schools workforce reform. And while many of the general strategies to improve the efficiency and effectiveness of the schools workforce will benefit disadvantaged students, as the COAG reform agenda recognises, specific workforce initiatives will also be required.

Recent initiatives of this sort include specialised selection and training programs, improved matching of job applicants to positions, and programs to encourage more people from disadvantaged backgrounds to enter the teaching profession. In addition to the initiatives of individual education authorities and non-government schools, there are collaborative efforts such as the National Alliance for Remote Indigenous Schools, and programs such as those organised by the Smarter Stronger Institute. Some of these initiatives look promising, with the current reform agenda adding general impetus to the task of tackling educational disadvantage.

That said, there has been a long history of policy effort in this area. While some of these policies may have been helpful, the lack of evaluation makes it very difficult to determine which approaches are likely to have the most impact, and hence where the resources available to help overcome educational disadvantage should be concentrated. Accordingly, a comprehensive assessment of current and prospective programs and policies is urgently required to determine which combination of measures would be most effective in reducing disadvantage.

Strengthening the wider institutional framework

In the course of this study, it has become apparent that some deficiencies in the wider institutional framework within which schools workforce and other education policies are developed and implemented are detracting from good student outcomes.

Paramount among these is the lack of attention that has been given to program evaluation across most aspects of schools workforce policy. Robust evaluation has a generally important role to play in supporting well-informed policy making, but with the large number of reforms now underway or in prospect, it assumes even greater significance.

There have been some encouraging recent developments in this area — including as part of the new national-level reporting framework. However, to lend further impetus to those developments, the Commission has put forward several specific evaluation initiatives. In addition to the comprehensive assessment of policies to address educational disadvantage, these include: an evaluation of the effectiveness of remuneration-based incentives for addressing workforce shortages; further

trialling and evaluation of performance pay schemes; and an examination of the effectiveness of different pre-service training, induction and professional development approaches (through the proposed longitudinal data collection). It has also recommended a future review of ACARA and AITSL which would look at, among other things, the effectiveness of these entities in improving access to data and research on the schools workforce.

As well, steps should be taken to ensure that non-government schools, the non-teaching workforce and parent bodies are more appropriately involved in high level decision-making processes. Each of these groups have important perspectives and experiences to contribute. Schooling and schools workforce policies will be the poorer if those contributions are ignored or given insufficient weight.

Finally, greater flexibility in the industrial relations regime governing the employment of school workers is desirable. Indeed, there is a significant systemic tension between the current centralised regime and the underlying thrust of a number of the specific workforce policy approaches that offer the prospect of material improvements in schooling outcomes for students. The move to greater school autonomy is a case in point. Suffice to say that, in the future, awards and agreements need to be accommodative of school-level variation in workplace arrangements and supportive of governance and other changes to improve the management of poor workplace performance.

Draft recommendations, findings and information requests

DRAFT FINDING 4.1

In addition to the explicit and widely used location allowances for teachers in rural and remote areas, some school operators are increasingly using — often unpublicised — variations in pay to address teacher shortages in other hard-to-staff positions, including in particular subjects and some low socioeconomic status schools. The Commission considers that there would be benefit in exploring options for embedding such variation more explicitly into the remuneration framework.

INFORMATION REQUEST 4.1

The Commission seeks further input on the implementation issues that would arise in designing arrangements to increase the remuneration of teachers in hard-to-staff positions, and what measures should be used to address these issues.

DRAFT RECOMMENDATION 5.1

The Australian Government should commission a longitudinal data collection that:

- follows a sample of recently appointed teachers for at least five years*
- encompasses an assessment of the pre-service training, induction and professional development that each teacher receives*
- includes measures of teacher effectiveness, including an indicator of student outcomes.*

The study should follow more than one cohort of graduate teachers to analyse any future experimentation in pre-service training, induction and professional development.

This study could be implemented either by expanding the scope and duration of the Longitudinal Teacher Workforce Study that is forming part of the National Partnership Agreement on Improving Teacher Quality, or by commissioning a separate study focusing on the specific matters identified above.

DRAFT FINDING 5.1

The provision of high-quality practicum and induction experiences for pre-service and graduate teachers plays a key role in developing an effective teaching workforce. While there are a number of promising avenues for improvement, including university–school partnerships, trialling and evaluation is needed. This should focus on better understanding what forms and combinations of practicum and induction, and what types of university–school relationships, are most cost-effective in improving the quality of beginning teachers.

DRAFT RECOMMENDATION 5.2

The Ministerial Council for Education, Early Childhood Development and Youth Affairs should direct the Australian Institute for Teaching and School Leadership to modify Program Standard 1.3 of the Accreditation of Initial Teacher Education Programs in Australia; Standards and Procedures, governing the length of graduate entry teacher training courses. The revised standard should indicate that two-year courses remain an option rather than a mandatory requirement.

INFORMATION REQUEST 6.1

The Commission seeks further evidence on whether current procedures for managing unsatisfactory teacher performance are effective and, if not, how they should be improved.

DRAFT FINDING 6.1

Many teachers are not being provided with the feedback and support they need to become better teachers. Efforts to address this deficiency are more likely to be effective if:

- principals and teachers have a major role in determining how their school undertakes performance appraisals and associated support*
- appraisals are based on school-level indicators and criteria*
- more than one method is used to gather evidence on performance — including an indicator of student outcomes — so that the various dimensions of teacher performance are adequately captured.*

Central agencies can help to improve performance management arrangements by:

- providing schools with broad guidelines and templates, sufficient resources to maintain an effective appraisal system, performance management training, and guidance on performance measures and data management*
- undertaking system-wide monitoring that focuses on effectiveness rather than just on compliance with processes.*

The Commission seeks further input on what issues are likely to arise in establishing a performance-based career structure for teachers, and how those issues should be handled. This could include how to:

- align career structures with the national teaching standards
- design selection processes for promoting teachers to defined positions so that there is not an automatic progression based on accreditation or qualifications
- ensure that the career structure is cost effective
- phase in the career structure.

DRAFT RECOMMENDATION 6.1

The Australian Government should defer the full-scale introduction of its proposed national bonus scheme for teachers (Rewards for Great Teachers), given current uncertainty about how to design an effective bonus system. In the interim, the Government should finance smaller-scale experiments with teacher performance pay, building on recent trials in Victoria and involving control groups of schools and teachers to enable robust ex post evaluation. The Government could also provide further assistance to schools to address current deficiencies in teacher appraisal and feedback.

DRAFT RECOMMENDATION 7.1

The Australian Institute for Teaching and School Leadership (AITSL) should expand its online School Leadership Development Strategies Clearinghouse to promote the dissemination of research — including the outcomes of pilot studies and school-level trials — relating to schools workforce composition and job design. Such a resource should draw together experiences across all school sectors and jurisdictions, including from overseas.

In addition, AITSL should establish a mechanism for evaluating such research to assist schools and education policymakers in identifying the most promising avenues for workforce innovations.

DRAFT RECOMMENDATION 8.1

State and territory governments should complement initiatives to provide greater autonomy to individual schools with measures that give schools the necessary leadership skills, resources and school-level governance arrangements. There should also be support from central agencies on matters such as training, teacher standards and curriculum.

DRAFT FINDING 9.1

Reducing the adverse effects of individual, economic and social factors on student outcomes must be a high priority for schools workforce policy — especially for students from low socioeconomic backgrounds, students living in rural or remote areas, Indigenous students, and/or students with disabilities or other special needs. Despite a long history of policy attempts to address educational disadvantage, outcomes for disadvantaged groups — particularly Indigenous students — still fall well below the rest of the student population. While the current reform agenda has added impetus for action, and a number of initiatives look promising, a comprehensive evaluation of current and proposed initiatives is urgently required to determine the most effective combinations for future action (see draft recommendation 10.1).

DRAFT RECOMMENDATION 10.1

The Ministerial Council for Education, Early Childhood Development and Youth Affairs should initiate and oversight:

- ***a program-based evaluation of the effectiveness of remuneration-based incentives as a means of addressing shortages of school workers***
- ***a comprehensive assessment of the effectiveness of the programs and policies to help ameliorate educational disadvantage***
- ***an independent performance review, to commence in five years' time, of the Australian Curriculum, Assessment and Reporting Authority and the Australian Institute for Teaching and School Leadership. Among other things, this review should include consideration of the effectiveness of these institutions in improving access to and evaluation of: data on student outcomes and the schools workforce, and research and information relevant to workforce policy settings and to the performance of the workforce itself.***

These evaluations and assessments should complement the proposed evaluation initiatives relating to performance bonuses (see draft recommendation 6.1), pre-service training, induction and professional development (see draft recommendation 5.1) and workforce composition and job design (see draft recommendation 7.1).

The Ministerial Council for Education, Early Childhood Development and Youth Affairs should ensure that non-government schools, the non-teaching workforce and parents are appropriately represented in high level policy-making processes in the schools area. To this end, the Council should establish a working group to consult with the relevant stakeholders and advise on specific options for improving their representation on high level policy forums.

Greater flexibility in the industrial relations regime governing the employment of school workers is desirable, with a particular need to ensure that awards and enterprise agreements:

- are more accommodative of school-level variation in workplace arrangements*
- support governance and other changes to improve the management of poor workplace performance.*

1 About the study

Key points

- Overall, Australia's schools deliver good educational outcomes at a reasonable cost.
- But there is scope for improvement — with evidence of declining numeracy and literacy attainment across the student population, and of a sizeable performance gap for many students from more disadvantaged backgrounds, especially Indigenous students.
- Higher-level student outcomes can lead to significant personal, economic and social benefits. The schools workforce has an important role to play in this regard.
- The Commission has been asked to look at a range of matters bearing on the efficiency and effectiveness of the schools workforce. In doing so, it has:
 - focused mainly on those school workers most directly involved in delivering or supporting teaching services
 - sought to promote good outcomes for students and community wellbeing generally
 - left broader schools funding-related issues to the concurrent Review of Funding for Schooling
 - drawn on both quantitative and qualitative evidence
 - consulted widely with stakeholders.

1.1 Why look at schools workforce issues?

A well-performing schooling system, underpinned by an efficient and effective schools workforce, can make a major contribution to a country's economic and social wellbeing. Specifically, it can help to foster the skills, innovativeness and adaptability needed to prosper in competitive global markets, and encourage more people to enter and remain in the workforce. Just as importantly, it can promote equality of opportunity, facilitate a cohesive and inclusive society, and provide personal enrichment for individuals.

Overall, Australia's schools deliver good outcomes, due in large measure to the efforts of the schools workforce.

- Global assessments of student performance (box 1.1) consistently show that the foundation skills of the 'average' Australian student are at the upper end of the country rankings.
- Moreover, such results have been achieved within expenditure levels that are around the OECD average.

However, other high level indicators suggest there is scope for improvement. For example:

- Despite a steady increase in real spending per student, both international test results and Australian-specific work suggest that the literacy and numeracy of Australian students has declined somewhat.
- Notwithstanding the strong policy emphasis on increasing the number of students completing secondary school, the year 12 retention rate has only recently returned to the level prevailing in the wake of the 1990 recession (ABS 2011a).

Also, various evidence suggests that Australia's schooling system could do more to offset educational disadvantage. In particular, socio-economic status (SES) explains more of the variation in student performance than in some other educationally high-performing OECD countries. Students with disabilities and other special needs and/or living in rural and remote areas — whatever their SES background — can likewise face significant difficulties in accessing quality school education. For Indigenous students — who often experience multiple layers of disadvantage — these difficulties can be particularly acute. Such disadvantage and its deleterious impacts on learning outcomes in turn add to the challenges that students face in managing the transition from school to work or further study. Notably, some 15 per cent of 15 to 19 year olds in Australia are not fully engaged in education, training or employment (ABS 2011a).

And even where schools are delivering good outcomes for students, considerable performance improvement may still be possible. That is, good performance is not a justification for complacency.

Box 1.1 More on the performance of Australian students and schools

A commonly used indicator of the outcomes delivered by schools systems across the globe is the Programme for International Student Assessment (PISA), which tests various skills of 15-year-old students at three-yearly intervals. In the latest test (2009), the performance of Australian students was higher than the OECD average in reading literacy (ranked 9th), science (10th), and mathematics (15th) (OECD 2010c). Australian students were also amongst the most capable users of information technology (in a smaller group of OECD countries) — ranking equal second in digital reading performance and fourth in computer navigation skills (OECD 2011d). Moreover, in the latest iteration (2007) of a separate international test that focuses on the mathematics and science skills of year 4 and year 8 students — the Trends in International Mathematics and Science Study (TIMSS) — the overall performance of Australian students was again well above the average (Thomson et al. 2009).

However, Australian students' average PISA scores for reading literacy and mathematics declined from the previous 'in-depth' assessments in 2000 and 2003, respectively. And though a clear trend in TIMSS outcomes is harder to discern (Thomson et al 2009, p. v), using an Australian-specific dataset, Leigh and Ryan (2011) concluded that the literacy and numeracy standards of Australian students have been declining since the 1960s.

Also, the latest PISA results revealed that:

- the dispersion in the test scores of Australian students according to their SES status was considerably above the OECD average
- while the variation in the mathematics scores of high- and low-performing Australian students was similar to the OECD average, for reading and science the variation was higher than average (Santiago et al. 2011).

This suggests that Australian schools have been collectively less successful than those in some other high-performing countries in both offsetting educational disadvantage and, more generally, in taking early action to address student learning difficulties.

From a cost-effectiveness perspective, the evidence on the overall performance of Australia's schools is again mixed. In 2008 — the latest year for which comparative international data are available — Australia spent the equivalent of 3.6 per cent of GDP on school education, which was marginally lower than the OECD average of 3.8 per cent. But real expenditure per student has been rising — and in 2008 was more than 40 per cent higher than in 1995 (OECD 2011b). Though this increase was less than the OECD average, higher spending does not appear to have led to better average student outcomes in key learning areas (see above).

As participants such as Deakin University's School of Education (sub. 24, pp. 5–7) noted, these sorts of indicators must be treated with considerable caution. For example, country-specific characteristics of the student population may influence test scores. More broadly, in focusing on measurable student outcomes, PISA and similar tests encapsulate only part of the learning experience (see box 1.4).

Nonetheless, taken together with evidence on such things as trends in year 12 completion rates, the indicators detailed above help to paint a picture of a schooling system that is serving many, but not all, students well.

Various evidence suggests that higher levels of student achievement would bring sizeable economic and social benefits (see box 1.2). While realisation of such benefits is likely to require changes to a range of policy settings, improved workforce efficiency and effectiveness has a key role to play. In addition to being the largest cost driver within the schooling system, it is the workforce that carries the most direct responsibility for student learning outcomes. Reflecting this, an array of schools workforce reforms are now in train or in prospect — focusing in particular on the quality of teaching and how that might be enhanced.

Through this study the Commission has been asked to contribute to that reform process by advising on:

- factors affecting the supply of, and demand for, school workers
- whether the knowledge and skills of the workforce, and its deployment within and across schools and regions, are appropriate to meet the community's needs
- whether current or proposed policy, governance and regulatory arrangements are conducive to maximising the efficiency and effectiveness of the schools workforce and, if not, what changes may be required.

The full terms of reference for the study are reproduced at the front of the report.

1.2 How the Commission approached its task?

Workforce coverage

The schools workforce, broadly defined, encompasses principals, teachers, teaching assistants, school librarians, health and allied professionals and various administrative and other support staff. Also, a significant number of volunteers (mainly parents) assist in the running of schools and in the provision of some services.

In accordance with the terms of reference, the Commission has focused mainly on those school workers most directly involved in delivering or supporting teaching services — namely, teachers, principals and other school managers, and teaching assistants.

However, this is not to downplay the significant contribution made by parents to the education of their children, or that of the rest of the paid and volunteer workforce. Indeed, as this report makes clear, it is important that the reform process does not treat the composition of the workforce, or the existing roles of particular types of school worker, as a given. Experience in this sector and elsewhere suggests that

there will inevitably be opportunities for workplace and job redesign that delivers better outcomes for students and hence a higher return for the community from its major investment in school education.

Box 1.2 The potential dividend from better schooling outcomes

The economic benefits from higher levels of student performance have been widely investigated both in Australia and overseas. For example, studies by the Productivity Commission indicate that completion of year 12 and/or improvements in literacy and numeracy skills are strongly correlated with both the likelihood of subsequent labour market participation and the level of earnings (Forbes, Barker, Turner 2010; Laplagne, Glover, Shomos 2007; Shomos 2010).

While these studies of labour market outcomes do not take into account the costs of achieving higher student performance, equally they do not encapsulate a range of other, often difficult to measure, economic and social benefits. For instance:

- Greater educational attainment and the accompanying financial rewards can provide various non-monetised benefits to individuals, including an enhanced sense of self worth and the security that comes from financial independence.
- People with higher educational attainment also tend to have better health. As well as being a desirable outcome in its own right, improved health is likely to reinforce the direct impact of education on labour market participation.
- Greater educational attainment reduces the propensity to participate in criminal activity. (See, for example, Heckman and Masterov 2007.)
- Improved educational outcomes can confer various broader social benefits, such as greater community cohesiveness and stability, and greater equality of opportunity.

Notably, at least some of these costs and additional benefits are indirectly captured in empirical studies looking at the relationship between educational attainment and economic growth.

- Day and Dowrick (2004) estimated that projected continuing increases in the average years of education of Australia's working age population up until 2041 would conservatively raise GDP by more than 8 per cent over this period.
- Likewise, in a cross-country study, Hanushek and Woessman (2009) found that relatively modest improvements in school students 'cognitive skills' could, over the medium to longer term, significantly increase a country's rate of GDP growth.
- And in a subsequent study, Hanushek and Woessman (2010, pp. 15–6) concluded that 'cognitive skills emerge as the one strong policy factor underlying growth differences across OECD countries'.

In sum, while the magnitude of the gains suggested by individual studies must be treated with caution, viewed in its totality, the empirical work leaves little doubt that the potential dividend from improving schooling outcomes is significant.

Interface with the Commission's other education workforce studies

This study is the final of a trio of studies by the Commission on Australia's education and training workforce. It follows on from studies into the Vocational Education and Training (VET) workforce (PC 2011c) and into the Early Childhood Development (ECD) workforce (PC 2011a).

As the common terms of reference for the studies recognise, the demarcation between the three components of the (non-tertiary) education and training workforce is becoming more blurred. This raises some 'interface' issues in regard to such things as workforce planning, job design and standards, training and professional development and workforce deployment. While some individual issues of this nature were canvassed in the other two studies, in this study, the Commission has also considered whether current institutional structures are generally conducive to greater policy integration in the future.

Promoting good student outcomes and community wellbeing

The Commission's enabling legislation requires it to determine what policy settings would achieve the greatest benefit for the community as a whole.

In an inquiry into workforce arrangements, the interests of school workers are clearly very important. And often their interests and those of students and the wider community will be closely aligned. For example, if school workers are not sufficiently well remunerated or supported within the workplace, or do not enjoy appropriate working conditions, then the quality of teaching and other schooling services will inevitably suffer.

However, the services provided by school workers are nonetheless a means to an end — high quality student outcomes. It is these outcomes, and the costs of achieving them, which ultimately determine how well the community is served by its schools and school workers — and which have therefore been central to the Commission's policy assessments.

The Commission has also been mindful of the many policy changes that are underway in this area. The starting point for the assessments in this report has therefore been the 'reform inclusive' policy environment — recognising that it will be some time yet before the impacts of recent reforms, let alone those still to be implemented, can be fully assessed. The Commission's assessment framework is set out in detail in chapter 3.

Approach in regard to funding and related matters

In 2008-09, recurrent expenditure on school education in Australia amounted to around \$45 billion (see table 2.1). Nearly 90 per cent of this expenditure was funded from the public purse, with more than three-quarters of total spending accounted for by wage and salary costs (OECD 2011b).

The general adequacy of current schools funding, and the way in which it is distributed across students and schools, is currently the subject of the separate Review of Funding for Schooling, chaired by David Gonski (see box 1.3). Accordingly, in this study, the Commission has not sought to explore such broader funding questions.

That said, the Commission recognises that school funding and the resources available to different schools and communities have implications for the efficiency, effectiveness and equitable distribution of the schools workforce. For example, action to get more quality teachers into hard-to-staff schools will require attention to the broader resources available to these schools and to their physical condition. And for schools in remote areas, the availability of housing and other amenities will be a further consideration. Also, allowing schools greater autonomy has the potential to exacerbate inequalities unless all schools are adequately resourced.

This does not automatically mean that higher total funding is required. A critical consideration here is whether current funding is delivering best value — that is, whether it is being distributed across schools and students appropriately and being used in an efficient, effective and equitable way. Hence, while some meritorious workforce reforms will entail additional funding, others could involve a re-prioritisation of existing expenditure, or even offer the prospect of budgetary savings.

Analysis informed by evidence

In forming its views on the efficacy of current and foreshadowed schools workforce arrangements, the Commission has been able to draw on a large body of empirical work on the merits of different policy approaches. This empirical work provides many important insights into both approaches that could deliver better student outcomes and, just as importantly, approaches that are likely to be ineffectual or costly relative to the benefits delivered.

Box 1.3 The Review of Funding for Schooling

This review, which commenced in April 2010, is examining the funding needs of students in all schools with the aim of identifying arrangements that will achieve a funding system which is ‘transparent, fair, financially sustainable and effective in promoting excellent educational outcomes for all Australian students’.

The exercise is intended to complement an array of other educational reforms being implemented under the auspices of the Council of Australian Governments to address educational disadvantage, boost literacy and numeracy, and improve teacher quality (see chapter 3).

The review panel has consulted widely, received a large number of written submissions, released an emerging issues paper (RFS 2010), published several pieces of commissioned research (ACER 2011; Allen Consulting Group 2011; Deloitte Access Economics 2011; Nous Group 2011), and released a paper outlining questions arising from that research (RFS 2011). The review panel is due to finalise its report to the Government by the end of 2011.

However, this work is subject to a range of methodological and other caveats (see box 1.4). Accordingly, while the proposals in this report have been informed by the empirical work, the Commission has also drawn on a range of other evidence in coming to judgements on the most appropriate ways forward — including:

- input from inquiry participants
- various other reports examining schools workforce arrangements in both Australia and other educationally high-performing countries.

Notable in this latter context are the report by the Nous Group (2011) for the Gonski review and the recent report by the OECD (Santiago et al. 2011) looking at Australia’s institutional and procedural framework for reporting and assessing educational outcomes and policies. Indeed, the extensive additional reform menu put forward in the OECD report — after consultation with many of the parties that will be influential in how the Australian schools workforce policy landscape evolves — has reinforced the Commission’s concern to minimise the risk of reform overload. As discussed in chapter 3, the Commission has concluded that the best way for it to add value in what is now a very active and detailed policy environment is to indicate desirable broad reform directions and craft a relatively small and targeted set of specific proposals.

Box 1.4 Some issues in interpreting the empirical evidence

The factors influencing student outcomes, including the impacts of many of the workforce policies discussed in this report, have been subject to extensive empirical analysis. Indeed, a widely cited synthesis of this body of work (Hattie 2009) brings together more than 50 000 individual studies and provides nearly 150 000 estimates of the impacts of programs, policies or innovations on student achievement.

This large body of empirical work constitutes an important resource for policymakers. However, in drawing on it, the Commission has been cognisant of the array of accompanying methodological and other caveats, including that:

- Not all of the relevant ‘outputs’ and ‘inputs’ are measurable. There are extensive data on some indicators of student achievement — for example, literacy and numeracy performance — and also on several of the factors that may contribute to that achievement — such as class size, the qualifications of teachers and student SES. But as the Australian Education Union (sub. 28, p. 5) observed, many of the learning and other benefits imparted by school education cannot be easily measured. Nor can key influences on student performance such as the general aptitude of teachers, the strength of leadership within a school, and the learning support provided by parents to their children.
- Even for those inputs and outputs that can notionally be measured, the basis for doing so is often contested. The best way to measure teacher performance (see chapter 6) or educational disadvantage (see chapter 9) are cases in point. And some have questioned whether the commonly used measures of student numeracy and literacy pay sufficient regard to the everyday contexts in which numeracy and literacy skills are employed and how those contexts have been changing over time.
- Caution is required in translating empirical outcomes across teacher or student populations. For example, as alluded to by Hattie (2009, p. 6), successful in-school or classroom innovations are likely to come from more innovative teachers and principals. Hence, the benefits may not be as great in ‘regular’ classrooms and schools. Similarly, Lattimore (2007) cautions that the impacts of additional years in school on labour market participation are likely to be smaller for disengaged students who currently leave early than for those who already complete year 12.
- Even amongst high-performing education systems the considerable diversity in workforce arrangements reflects differences in such things as culture, custom and practice, and the nature of the broader education system and funding arrangements. Hence, while looking at overseas approaches can frequently be instructive, it cannot automatically be presumed that the findings of empirical evidence from one country (often the United States) will translate to another.
- There is typically little attention given to the costs attaching to the policy approaches concerned, and hence to relative cost-effectiveness (see chapter 3).

Accordingly, even empirical evidence that is ostensibly robust must be closely scrutinised, set against other empirical and qualitative evidence, and assessed for consistency with the outcomes suggested by a conceptual analysis of the issue at hand.

Broad ranging consultation with stakeholders

In preparing this draft report, the Commission has sought input from the full range of stakeholders in the schools workforce area. Shortly after the commencement of the study, it produced an issues paper (PC 2011b) and invited written submissions on the matters under review. To date, the Commission has received more than 40 submissions from a wide cross-section of interests, including: many (though not all of) the key government entities involved in overseeing, funding and/or regulating the delivery of schools services; various non-government school bodies; a range of professional organisations representing principals, teachers or those teaching in particular subject areas; unions; universities involved in training school workers; several academics with an interest in schools workforce policy; parent and student bodies; and groups or individuals representing students with special needs.

In addition, the Commission consulted with a similarly broad cross-section of parties on a more informal basis. As part of these consultations, the Commission visited schools in urban areas of most of the states and territories, and in several rural/remote areas of Queensland, the Northern Territory and Western Australia. (A full listing of consultations and written submissions is provided in appendix A.)

Importantly, this is only a draft report and is being made available to all interested parties, and the public generally, for their assessment and response. Drawing on the commentary in further written submissions, and at the roundtables to be held to discuss the draft report, the Commission will prepare a final report, which it will submit to the Government in April 2012.

The Commission is grateful to all those who have contributed to the study so far and looks forward to their continued participation.

1.3 Road map to the rest of the report

The remainder of this report is structured as follows:

- Chapter 2 outlines some salient features of Australian schools and the schools workforce and discusses current and emerging workforce challenges.
- Chapter 3 describes the objectives of current schools and schools workforce policies and summarises the suite of workforce reforms in place or in prospect to promote those objectives. It then details the policy assessment framework that the Commission has used in subsequent chapters to assess and build on those reforms.

-
- Chapter 4 examines the balance between the demand and supply of school workers, the remuneration and other factors that influence this balance, and some possible further means to help ameliorate longstanding workforce shortages and surpluses.
 - Chapter 5 discusses how the effectiveness of pre-service training of school workers and their subsequent participation in professional development might be enhanced.
 - Chapter 6 examines various performance assessment issues — including how the performance of teachers and other school workers might best be appraised and what relationship there should be between performance and remuneration.
 - Chapter 7 looks at workplace innovation with a particular emphasis on ensuring that such innovation is appropriately supported and encouraged, and that its outcomes are readily accessible to all of the relevant stakeholders.
 - Chapter 8 considers means to enhance school leadership and the role that greater school autonomy might play in this regard.
 - Chapter 9 sets out why enhancing outcomes for educationally disadvantaged students — and especially for Indigenous students — should be a priority. While the chapter outlines a number of policy directions that look promising, a key message is that a thorough evaluation of the relative cost-effectiveness of different approaches is required.
 - Chapter 10 builds on this evaluation theme to bring together in a single proposal several policy evaluation requirements identified earlier in the report. It also discusses the adequacy and accessibility of the supporting data and information base.
 - Chapter 11 examines some broader institutional issues relevant to the future performance of the schools workforce, including the adequacy of policy coordination and of stakeholder representation in policy development processes, and the efficacy of the industrial relations regime.

2 Profile of the schools workforce

Key points

- Australia's nearly 10 000 schools operate within distinct but overlapping systems. They may be government or non-government; primary, secondary, combined or special needs. Also, even for 'like' schools, funding, governance and operational arrangements vary across states and territories.
 - From a workforce perspective, differences in student needs and such factors as the location of schools are also significant.
- The states and territories have primary responsibility for school education within their respective jurisdictions, with jurisdiction-specific legislation outlining the regulatory arrangements applying to schools and some school workers.
 - However, a recently established national-level policy framework, predicated on a number of agreed high-level objectives, has been supported by the development of new reporting and evaluation structures and the creation of two new national entities.
- There are currently well over 300 000 full-time equivalent teachers, principals and other paid school workers, as well as a large voluntary workforce.
 - The schools workforce is ageing, becoming increasingly feminised and more likely to be employed on a part-time or contract basis.
 - Workforce composition does not vary greatly across most schools, and has changed relatively little over time, at least on a system-wide basis.
 - Pay scales for teachers are relatively flat and, compared to other professions, average real remuneration has been trending down.
- Several issues and challenges bear on the capacity of the workforce to contribute to high quality learning outcomes. These include: expected strong growth in student numbers; a more complex and demanding teaching environment; increased competition for teaching resources; an expected upsurge in age-related retirements; the lower average 'entry quality' of those seeking to become teachers; ongoing imbalances in workforce demand and supply; and often-limited workforce mobility, especially between urban and rural and remote areas.

School education is a complex and multifaceted activity, with the configuration of schooling systems in individual countries reflecting a range of country-specific factors. This means that school workforces and policies intended to improve student outcomes likewise need to be tailored to reflect country-specific circumstances.

Policy making must be responsive to future challenges as well as to current problems. And it must have regard to reforms already in place or in prospect.

To provide context for the policy discussions in subsequent parts of the report, this chapter sets out some salient features of Australia's schooling systems and schools workforce, and documents several issues and challenges that will bear upon the future efficiency and effectiveness of the workforce.

2.1 Schooling in Australia

Structure of school education

Formal schooling in Australia generally consists of six to seven years of primary school education followed by five to six years of secondary schooling (figure 2.1).

Figure 2.1 Structure of Primary and Secondary Schooling, 2011

Level	NSW, Vic, Tas ^a , ACT ^a , NT	Qld ^b , WA, SA
Pre Year 1	Kindergarten (NSW and ACT) Preparatory (Vic and Tas) Transition (NT)	Preparatory (Qld) Pre-primary (WA) Reception (SA)
Year 1	Primary	Primary
Year 2		
Year 3		
Year 4		
Year 5		
Year 6		
Year 7	Secondary	Secondary
Year 8		
Year 9		
Year 10		
Year 11		
Year 12		

^a Students transition to a senior college for years 11 and 12 in Tasmania and the ACT. ^b From 2015 Year 7 will become the first year of high school in Queensland.

Source: Adapted from ABS (*Schools Australia 2010*, Cat. no. 4221.0).

There are close to 10 000 schools in Australia. These are often referred to collectively as the schools 'system'. But in fact, there are a number of distinct, though overlapping, systems.

- About 70 per cent of schools are run by state and territory governments, with the remainder being Catholic 'systemic' schools and other non-government independent schools (box 2.1).

Box 2.1 More on schools in Australia

As indicated in the text, schools can be delineated in various ways. But in the context of funding and higher level administrative and governance arrangements, the most important distinction is between government and non-government schools.

Government schools

The 70 per cent of Australian schools that are run by state and territory governments are designed to give effect to the notion that education is a fundamental human right. Accordingly, tuition fees are low or non-existent in these schools — although parents can and do contribute to costs through both voluntary contributions and the provision of unpaid support to their school communities.

Reflecting their *raison d'être*, government schools service the greater portion of those students most likely to experience educational disadvantage as a result of socio-economic, cultural or geographic factors. For example, in 2009, some 86 per cent of Indigenous students and 80 per cent of students with disabilities attended government schools (SCRGSP 2011b). At the same time, there are also some 'selective' government high schools that cater specifically for high achieving students.

Non-government schools

Though regulated by the states and territories (see text), non-government schools are operated and governed independently, and are able to charge tuition fees. However, to receive public funding from the Australian and state and territory governments, they must be established on a not-for-profit basis.

Catholic schools

The majority of non-government schools are Catholic, most of which are 'systemic' — governed by central authorities that control the distribution of funding and set educational and operational standards in much the same way as the states and territories do for government schools. Catholic systemic schools typically charge lower fees than do independent non-government schools.

Independent schools

Independent schools serve a wide range of communities and offer educational services based on a number of different foundations — including religion, values, and educational philosophy. While most independent schools are operated and governed on an individual basis, some 17 per cent are centrally run by religion-based authorities (ISCA, sub. 18).

- Around two-thirds of schools are primary, 15 per cent secondary, 13 per cent combined and 4 per cent special needs. Within each of these school groupings, there is a mix of government and non-government schools.
- In both the government and Catholic systems, there is variation in funding, governance and operational arrangements across the states and territories.

Also relevant from a workforce perspective are differences between schools located in the major population centres and those in rural and remote areas, differences in the size of schools, and variations in the individual characteristics and needs of students in otherwise ‘like’ schools.

The institutional backdrop

In addition to directly administering government schools, each state and territory government has responsibility for overseeing school education more generally within its particular jurisdiction.

This oversight is guided by state and territory-specific legislation that outlines the regulatory framework applying to schools and some school workers.

- Legislation regulating schools generally sets out requirements on matters such as curriculum, infrastructure, governance and financial reporting. In most cases the relevant education department or its equivalent administers the regulation.¹
- Separate legislation has established ‘teacher regulatory authorities’ to register and regulate teachers and school leaders. In addition to these core functions, the authorities are typically required to maintain a database of all registered teachers, and ‘accredit’ pre-service teacher education courses.

Traditionally, there has been little formal policy co-ordination across the states and territories. Also, the role of the Australian Government has been largely limited to the provision of funding (see below).

However, following the agreement of the state and territory and Australian governments, a national-level policy framework overlaying the above arrangements has been recently implemented. This framework is predicated on a number of agreed high-level objectives, with additional Australian Government funding made available to help encourage reforms designed to promote these objectives. Also, various new reporting and evaluation structures have been developed as part of this, along with two national entities designed to contribute to particular aspects of schools policy — namely, the Australian Institute for Teaching and School Leadership and the Australian Curriculum, Assessment and Reporting Authority. (These new arrangements are considered in greater detail in chapter 3, which examines the current schools workforce reform program.)

¹ In 2007 Victoria structurally separated the provision of school education and regulation of school providers within its education department. Western Australia has separate departments for operating and regulating schools.

A range of research activity supports policy making within the above institutional structures. Historically, much of this has been generated by the state and territory education authorities and non-government school operators, with a number of researchers and independent think tanks also producing more widely applicable research. Recent additions to this have been various new data initiatives designed to support performance reporting as part of the national-level framework. (More details on the research and policy evaluation environment are provided in chapter 10.)

Funding arrangements

The state and territory governments provide the majority of public funding for Australian schools, with most of this directed to government schools. In the case of non-government schools, the Australian Government, parents and other private parties provide most of the funding (table 2.1).

Table 2.1 Recurrent expenditure on school education, 2008-09

	million	%
Government schools ^a		
Australian Government	3 441	11
State and Territory Governments	27 415	89
Total	30 856	100
Non-government schools ^b		
Australian Government	5 787	43
State and Territory Governments	2 297	17
Private ^c	5 389	40
Total	13 473	100
All schools		
Australian Government	9 227	21
State and Territory Governments	29 713	67
Private	5 389	12
Total	44 329	100

^a Excludes private funding from voluntary contributions. ^b Federal funding is broadly allocated according to the socio-economic status of these schools, with the State and Territory Government contribution based on either a jurisdiction-specific 'average government school recurrent cost' or historical precedent.

^c SCRGSP (2011b) notes that 40 per cent of non-government school funding is sourced from private fees and fundraising.

Sources: SCRGSP (2011b) and DEEWR (unpublished).

As indicated in chapter 1, the Review of Funding for Schooling is currently examining these funding responsibilities and the ways in which public funding is allocated across schools and students.

2.2 The schools workforce

The paid schools workforce totals well over 300 000 — some 250 000 full-time equivalent teaching staff, and nearly 80 000 full-time equivalent teacher assistants, administrative and clerical workers (ABS 2010b). In the government system, a higher proportion of teaching staff work in primary schools, whereas the reverse applies in Catholic and independent schools (table 2.2). As well as providing assistance to their own children's education, a large number of parents (and other volunteers) provide classroom and administrative support, and contribute to the governance of schools through participation on school boards and councils. In addition, a tutoring workforce — estimated to be about 4 000 in the 2006 ABS Census — provides teaching support to school-aged students outside of the classroom.

Table 2.2 Number of teaching staff by sector and school category, 2010^a

	<i>Primary</i>	<i>Secondary</i>	<i>Total</i>
Government	90 155	73 543	163 698
Non-government	37 735	49 989	87 724
<i>Catholic</i>	22 212	25 179	47 391
<i>Independent</i>	15 523	24 810	40 333
Total	127 890	123 532	251 422

^a Full time equivalent. The ABS defines teaching staff to include teachers, principals, deputy principals and senior teachers mainly involved in administrative duties. The number of teaching assistants is reported under a separate measure that includes administrative and clerical staff (see text).

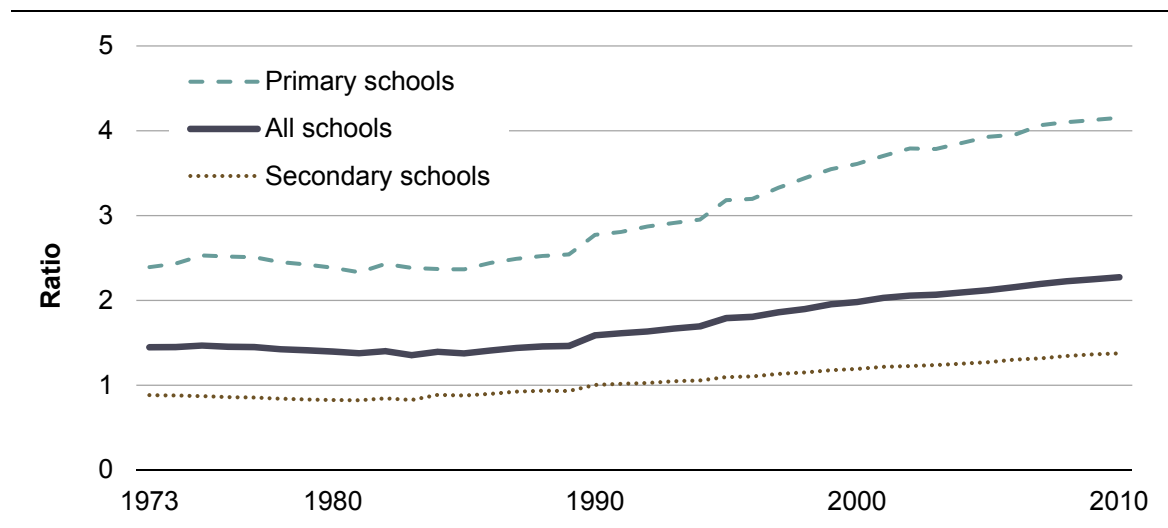
Source: ABS (*Schools, Australia*, Cat. no. 4221.0).

The structure and nature of this workforce has been changing in various ways.

- In line with the increase over time in the share of students enrolling in non-government schools, the proportion of the workforce employed in that sector has been growing.
- Like the workforce as a whole, the schools workforce is ageing. As discussed below, an expected increase in age-related exits from the workforce over the coming two decades is one of several challenges confronting policymakers.
- In keeping with trends across the wider economy, contract and part-time employment of school workers has been increasing.
- Class sizes and hence student-teacher ratios have been progressively reduced (chapter 7).

- Especially within primary schools, a growing proportion of teaching positions are being filled by women (see figure 2.2). This is despite the expansion over time in the range of economy-wide career opportunities available to women.

Figure 2.2 Female–male teaching staff ratio, 1973–2010



Source: Compiled by Productivity Commission using various ABS, *Schools Australia*, Cat. no. 4221.0.

- The cultural background of the workforce has also changed. However, teachers born overseas are still under-represented in the workforce. Similarly, while the number of Indigenous school workers has been increasing, they too remain significantly under-represented on a share of population basis. In 2008, one per cent of teaching staff in government schools were Aboriginal or Torres Strait Islander Australians, while Indigenous students comprised around four per cent of the total student population.
- There is evidence to suggest a lowering of the average literacy and numeracy skills of females entering teacher training courses.
- While most teachers continue to enter the profession via the undergraduate or graduate diploma route, more students are enrolling in master of teaching courses. Also, the newly implemented Teach for Australia initiative is designed to open up a new pathway for acquiring a recognised teaching qualification.

Other aspects of the schools workforce have displayed less change.

- Centralised allocation of staff across much of the government and Catholic schools systems, conditions in awards and enterprise agreements, and established custom and practice continue to limit the scope for many individual schools to tailor staffing arrangements to their particular circumstances. The upshot is that workforce composition is relatively uniform across individual schools. And while there has been some shift over time in the responsibilities of

different types of school workers (see, for example, CPSU/SPSF Group, sub. 6), at least on a system-wide basis the consequent change in workplace roles has been quite small (see chapter 7).

- There continues to be relatively little explicit differentiation in teachers' pay on the basis of performance, or linked to shortages in particular subject areas. In most jurisdictions, teachers reach the top of the pay scale within about 10 years of service, and must then take on some non-classroom responsibilities to secure additional remuneration.

Another notable feature of the remuneration environment is that increases in teachers' pay have not kept pace with those in many other professions. Indeed, average weekly ordinary time earnings in the broader education sector are now only about 7 per cent above the average for all surveyed industries, compared to 14 per cent in 1994 (ABS 2011b). There are likely to be several reasons for this relative decline in remuneration, some of which lie outside the purview of schools and schools workforce policy. However, the persistent surpluses of general teachers (see below) and the longstanding pressures on governments to exercise fiscal restraint have most likely been contributing factors. Also, there may have been a trade-off between wage increases and smaller average class sizes.

2.3 Workforce issues and challenges

As participants' input to this study illustrates, there are many well-documented issues and challenges that bear on the capacity of the schools workforce to contribute to high quality outcomes for students, or that will do so in the future. A number are explored below so as to lay a foundation for the policy discussions in subsequent chapters.

Growing and changing demand

Strong growth in student numbers

The Department of Education, Employment and Workplace Relations has forecasted that, due to demographic factors and expected growth in year 11 and 12 retention rates, the total number of Australian school students will increase by around 26 per cent (or about 900 000 students) from 2010–2022.

These increases will not be uniform across the 'system'.

- The forecast growth in student numbers is much higher in some states — for example, 45 per cent in Queensland and 40 per cent in Western Australia.

Conversely, New South Wales (16 per cent) and Tasmania (5 per cent) are forecast to have much lower enrolment growth (table 2.3).

- The growth in primary school enrolments is expected to be nearly double the growth in secondary enrolments (32 per cent and 18 per cent, respectively).
- The drift of students to the non-government sector is expected to continue, with forecast growth in enrolments in non-government schools (34 per cent) outstripping the growth in government schools (22 per cent).

Table 2.3 Projected increases in student enrolments, by jurisdiction
2010–2022

<i>Jurisdiction</i>	<i>Projected increase in student enrolments</i>	
	'000	%
Australian Capital Territory	20	34
New South Wales	180	16
Northern Territory	50	36
Queensland	323	45
South Australia	46	18
Tasmania	4	5
Victoria	179	21
Western Australia	142	40

Source: DEEWR estimates.

Collectively, the additional enrolments will add to pressures in areas of current workforce shortage and, more generally, reinforce the need for policy settings and institutional arrangements that facilitate flexible adjustments in workforce numbers and deployment to accommodate changing circumstances.

Increased demand for teachers from the early childhood sector

As discussed in the Commission's final report for its concurrent study on the early childhood development workforce (PC 2011b), the pedagogical component of early childhood teaching has been increasing and will continue to do so in the future. Reflecting this, the National Partnership Agreement on the National Quality Agenda for Early Childhood Education and Care will introduce a requirement that all preschools and long day care centres employ a qualified early childhood teacher by 2014.

It may be that a significant part of the new demand for teachers in the early childhood sector will be met through an up-skilling of the existing workforce and by attracting some individuals who are currently outside of the teaching profession.

However, a number of teachers graduate from pre-service courses that qualify them to teach at both the primary and early childhood levels. Hence, some of this new demand will most likely be met by recruiting teachers who would previously have sought employment in the primary schools sector — thus exacerbating the demand-side pressures arising from growing student enrolments.

A more complex and demanding teaching environment

Today's classrooms and schools place more demands and pressures on teachers, principals and other school workers.

As a result of both broader societal changes and the evolution of education policy, the student population is more diverse. For example:

- a more varied influx of immigrants has led to an increase in the number of countries and first languages represented in the classroom
- there are now more students from single parent homes or otherwise disadvantaged family backgrounds
- less academically engaged or proficient students who would previously have entered the workforce at the completion of year 10 or 11 are now being encouraged and supported to finish year 12
- an increasing number of special needs students are being taught for at least some of the time in mainstream classrooms.

On top of this, the demands on curriculum and pedagogy have expanded and become more complex. In regard to the latter, for example, teaching methods are less regimented than previously, with more emphasis on tailored, personal interaction with students. Also, more testing and reporting of student outcomes than in the past, as well as the greater difficulty in attracting and retaining school volunteers, has increased the administrative load on teachers, principals and other school workers. And while technological change is opening up new opportunities to enhance students' learning experiences and increases the avenues for undertaking professional development, it is also requiring many school workers to learn new skills.

Parental and community expectations on what schools can and should deliver also continue to grow. For example, schools are asked to deal with, and educate students on, an increasing range of social problems. Moreover, there is now more information available to parents on the performance of their children's schools, along with a greater emphasis on improved transparency of school outcomes and

governance. Although these developments are inherently desirable, they have added to the non-teaching demands on principals and teachers in particular.

Finally, there continues to be concerns about the incidence of inappropriate classroom behaviour. While the conception of what is ‘inappropriate’ will depend on the particular context — and despite conflicting evidence on the matter (see, for example, *Uniting Care Children Young People and Families*, sub. 8; and OECD 2010a) — it is certainly the case that the relationship of students with their teachers and other school workers is a less subservient one than in the past. Even though this can have many benefits for both parties, the change will also give rise to some additional challenges for school workers — especially when students push the boundaries of what is acceptable behaviour.

Such changes are relevant to a range of workforce policies, including those directed at recruitment and retention and at helping to ensure that school workers have the right skills.

Supply-side concerns

Age-related retirements

As noted earlier, the schools workforce is ageing. Over the next 5 to 10 years, a large number of school workers — especially in government schools — will reach minimum retirement age. For example, in Western Australia and Victoria around 40 per cent of teachers working in government schools are currently aged 50 years or more, while in South Australia the share is 50 per cent (SA Department of Education and Children’s Services, sub. 35; WA Department of Education, sub. 45). Stakeholders in the non-government sector have similarly raised concerns about an ageing teacher workforce (National Catholic Education Commission, sub. 7; Queensland Catholic Education Commission, sub. 20).

The degree of exit from the workforce at minimum retirement age will partly depend on the state of the economy and on the effect of perturbations in financial markets on superannuation balances (WA Department of Education, sub. 45). The nature of the particular superannuation schemes applying in individual jurisdictions may similarly affect the incentives to leave at retirement age. Even so, a significant number of age-related retirements over the next decade seems likely.

In the short to medium term, the pool of general teachers on waiting lists will help to ameliorate the numerical effects of such retirements. And while an accelerated rate of generational change will result in a loss of valuable experience from the teaching profession, there may be some offsetting benefits — such as making it

easier to introduce new technologies to the classroom and to modify rigidities in workplace practices.

However, over the longer term, retirees from the teaching profession will become harder to replace due to increased demand for teachers from the early childhood sector and the tightening of the labour market as a result of population ageing more generally. Indeed, ageing is expected to reduce labour force participation by more than four percentage points by 2050 (Treasury 2010) — a reduction that could potentially have a substantial impact on the capacity of schools to continue to deliver high-quality education services.

The Council of Australian Government's human capital reform agenda — including the schools workforce component (see chapter 3) — is partly directed at offsetting the general effects of ageing on labour supply. For example, as discussed in chapter 1, there is a positive correlation between educational attainment and labour force participation. The prospective increase in the pension age and various recent changes to social welfare arrangements will likely also boost participation rates. In addition, an upward drift in wages as labour market conditions tighten should encourage some people to re-enter the workforce or work for longer.

Nonetheless, most sectors of the economy are likely to find it more difficult and/or costly to attract and retain skilled workers. These pressures could be especially acute in sectors such as education where the scope to substitute capital for labour is more limited, and where a heavy reliance on public funding may constrain the extent to which wages and salaries can be increased to 'meet the market'. Moreover, as the WA Department of Education (sub. 45) noted, current and planned initiatives to improve workforce quality are likely to be a source of upward pressure on the cost of labour in the sector.

In this environment, it is likely to become increasingly difficult to address shortages of school workers through recruitment and retention strategies (see box 2.2). Rather, there will need to be greater attention on getting maximum value from available workers through workplace policies and arrangements that promote efficiency and effectiveness, responsiveness to changing circumstances and needs, and an openness to different ways of doing things.

Declining 'entry quality' standards

Since at least the early 1980s, there appears to have been a decline in the prior educational achievement of those entering the teaching profession. In one often-cited study, Leigh and Ryan (2006) showed that the average percentile rank (based on literacy and numeracy tests) of those entering the profession between 1983 and

2003 fell from 70 to 62. This decline in prior educational achievement was particularly pronounced for females — with the study reporting that the measure for males actually increased slightly — and appears to be linked to the previously noted wider career choices now available to women. That is, female students with high university entrance scores are increasingly pursuing tertiary studies in areas other than teaching and are being replaced in teaching courses by mainly female students with lower prior educational achievement.

Box 2.2 Retention issues

A commonly expressed concern is that a significant number of teachers leave in the first few years after graduating and gaining employment.

However, it is not clear whether the rate of exits is unduly high. For example, over the past five years about 10 per cent of teachers in NSW with less than five years of experience left the profession (NSW Department of Education and Communities, sub. 14). While comparable figures are not available for the other states, some evidence indicates the separation rate for early career teachers could be even lower in Queensland (Queensland Department of Education and Training, sub. 40).

And though there are some indications that the portion of early career teachers leaving the profession may have been higher in the past (CRTTE 2003; Ramsey 2000), it is not clear whether the rate is any higher in teaching than for other sectors.

From an employer perspective, there are some obvious costs associated with early exits. Hence, school operators have put in place measures that seek to ensure a well-structured transition into teaching for new starters, such as internships and mentoring programs. It may also be the case that improvements to pre-service training could decrease attrition rates further (see chapter 5).

Yet an arguably bigger issue for policymakers is the apparently very low rates of attrition after the initial years in the workforce (Department of Education — Tasmania, sub. 33; TSDRG 2009; Queensland Department of Education and Training, sub. 40). With low rates of natural attrition, there is a risk of retaining a cohort of underperformers. This in turn serves to focus attention on the importance of good performance appraisal and feedback, including effective processes for managing underperformance (see chapters 6 and 11).

Prior educational achievement is only one indicator of the quality of fully trained school workers. In the case of teachers, for example, quality will also depend on such things as their general aptitude for teaching; the nature of their pre-service training; the standards they must satisfy to achieve full registration; the teaching environment in which they work; the quality of the support, mentoring and feedback they receive; their degree of experience; and their participation in ongoing professional development. Indeed, to at least some extent, shortcomings in one or more of these areas can be offset by strengths or specific policy initiatives in others.

Even so, any persistent decline in prior educational achievement is likely to make it harder to maintain the longer term quality of the workforce and, in turn, increase the demands on other quality enhancement mechanisms. As such, it will exacerbate the pressures arising from the likely general tightening in the teaching labour market.

Access to practicum

Notwithstanding the intention to increase employment-based pathways into teaching (see chapter 4), the largest number of student teachers will continue to be enrolled in university-based courses. An important component of these courses is the practicum, which provides students with an opportunity to experience, and practice their skills in, a classroom environment. Currently, the minimum number of days of practicum required (set by the teacher regulatory authorities) varies across the states and territories. However, new national course accreditation requirements provide for a nationally uniform practicum load for both postgraduate and undergraduate teacher education programs (see chapter 3).

This practicum process also provides schools with an opportunity to gauge the skills and aptitude of potential future employees.

But the accompanying supervisory, evaluation and reporting requirements can consume considerable teaching and administrative resources. Partly reflecting the growth in other demands on teachers and schools (see above), it appears practicum placements are becoming harder — or at least more time consuming — to secure (Australian Primary Principals Association, sub. 41; NAFEA, sub. 1). Moreover, the planned national course accreditation requirements will increase the minimum number of days of practicum in some jurisdictions, and hence likely make it more difficult to secure places for students there.

Difficulty in accessing practicum placements may over time put downward pressure on the number of teacher training places offered by the universities and thereby lead to some ‘self-correction’ of this problem. Nonetheless, as discussed in chapter 5, the question arises as to whether more proactive initiatives are required to help ensure that tomorrow’s teachers get suitable and sufficient practical experience as part of their pre-service training, and that the resources employed in providing practicum are allocated efficiently.

Persistent imbalances in demand and supply

Especially within the teaching segment of the schools workforce, there are areas of longstanding under and oversupply. Some of these imbalances are general in nature.

Others, especially some of the shortages, are more specific to particular types of skills, schools or geographic regions, and hence relate as much to the distribution of the available workforce as to the overall number of workers. While not all of these imbalances require policy action, some — especially those of a long standing nature — can have significant costs for both the schools system and the wider community, including through exacerbating educational disadvantage.

More specifically, on the surplus side of the ledger, there is a significant number of qualified — mainly primary — teachers on stand-by for ongoing positions, or for contract or casual relief work. Though the precise extent of this surplus varies across jurisdictions, in all states and territories it is considerable. In NSW alone for example, there are 33 000 persons — equivalent to around two thirds of the permanently employed school teachers in the State — on waiting lists. Of these, more than half are qualified primary teachers. Further, in some jurisdictions these surpluses have persisted for a number of years despite growing student enrolments and falling average class sizes. Such large and persistent surpluses mean that a sizeable part of the community's investment in teacher training is providing no direct workforce benefit.

On the other side of the ledger, there are some significant subject-related teacher shortages at the secondary school level, including in mathematics, science, technology and languages other than English. Special needs teachers are likewise in generally short supply. One consequence of subject-based shortages is that teachers are often required to teach subjects in which they have no specialist knowledge or training (see chapter 4). Also, the Independent Schools Council of Australia (sub. 18) said that while the quality of employed principals is high, finding suitable replacements for principals who leave is an increasing challenge. At least partly reflecting this difficulty, several participants highlighted the important role of succession planning (Catholic Education Commission of Victoria, sub. 13; Catholic Education Office — Diocese of Toowoomba, sub. 11; Independent Schools Council of Australia, sub. 18; WA Department of Education, sub. 45).

As well, it is generally accepted that the geographic distribution of the schools workforce does not reflect the distribution of the student population. In particular, schools in rural and remote centres, including in Indigenous communities, can find it very difficult to attract teachers and principals, particularly those who have a number of years of experience, or to retain them for any length of time. It is also apparently becoming increasingly difficult to staff low SES schools in some urban areas.

To help overcome shortages of this nature, most teacher regulatory authorities allow schools to temporarily employ individuals with a 'limited authority to teach' in

order to remain operational. Even so, as alluded to above, recruiting teachers to work and remain in rural locations in particular continues to be a significant challenge facing policymakers and school operators.

That these difficulties exist despite the large surpluses of primary teachers in particular, illustrates the limited mobility that characterises the teaching workforce. Indeed, a growing reluctance to work outside the major urban areas, and increasing constraints on the capacity to do so, is evident in many pursuits. Nonetheless, as discussed in chapter 4, aspects of pay and conditions applying to school workers may serve to reinforce inherent preferences and constraints.

3 Policy considerations

Key points

- The core objectives of Australia's school and schools workforce policies are that there should be universal access to high quality schooling, that all students meet or exceed basic educational standards, and that schooling promotes social inclusion and addresses educational disadvantage.
- An array of schools workforce reforms are in place or in prospect to further these objectives, with a particular focus on improving workforce quality and performance.
 - While the majority of these reforms are being implemented by state and territory governments and non-government school operators, many have been brought under national umbrellas. And new national professional standards and course accreditation requirements are being introduced.
 - There are also new national level reporting and assessment frameworks and additional funding from the Australian Government to support the reform process.
- In assessing the current reforms, the Commission has interpreted equity in educational outcomes to mean that all students should have equal opportunity to realise their educational potential, irrespective of their individual, economic or social circumstances. It has also been mindful of:
 - the critical role played by quality teachers and their effective deployment across the schooling system
 - the need to consider the cost-effectiveness of different policy approaches
 - the importance of predicating policy on robust evidence — or of putting in place structures that will generate that evidence
 - the need to balance the benefits of nationally consistent approaches with those that arise from the scope for policy experimentation at the jurisdictional level
 - the need to coordinate different aspects of workforce policy.
- Most importantly, while the current reform suite has some broad strengths, it is too early to come to definitive judgements on the merits of many of the specific reforms. Hence rather than proposing a plethora of new initiatives, the Commission has sought to add value by:
 - putting forward a small number of targeted measures that build on what is in place or in prospect, address some particular approaches that appear problematic in light of the available evidence, and address aspects of workforce arrangements that have so far received insufficient policy attention
 - proposing some changes to strengthen policy and program governance and evaluation, and to enhance the future evidence base. Efforts to enhance the robustness of policy evaluation should be a particularly high priority.

As alluded to in the previous chapter, an array of schools workforce policy reforms have recently been implemented or will shortly be so. This chapter outlines the essence of those reforms and the objectives that underpin them. It then details the considerations that have been central to the Commission's assessments in subsequent chapters of the efficacy of those reforms, and the Commission's broad conclusion on how this study can best add value to what is now a very busy and active policy landscape.

3.1 Objectives of the schooling system

The objectives of Australia's schooling system — and hence the ultimate goals of the schools workforce and other schools-related programs and policies — are articulated in the Melbourne Declaration on Educational Goals for Young Australians (the Melbourne Declaration) and the National Education Agreement (NEA). Though expressed in slightly different ways, the central themes are that:

- all young Australians should have access to high quality schooling
- there are basic educational standards which ideally all students should achieve or exceed
- schooling should help to address educational disadvantage and promote social inclusion.

The Melbourne Declaration was agreed to by all Australian education ministers as part of a commitment to work collectively with all school sectors and the broader community to improve educational outcomes for young Australians (MCEETYA 2008). In addition to reaffirming broad objectives, the NEA (COAG 2008) specifies some targets relating to those objectives and details various funding and performance reporting requirements and responsibilities. More information is provided in box 3.1.

3.2 Current schools workforce reforms

A jurisdictionally tailored approach within new national umbrellas

As part of Australia's human capital reform agenda, various reforms are being implemented to improve Australia's schooling system and the outcomes it delivers for students. And more are on the horizon — including in response to the Review of Funding for Schooling (see chapter 1).

Box 3.1 Melbourne Declaration and National Education Agreement

Melbourne Declaration on Educational Goals for Young Australians

Signed in December 2008, the declaration is underpinned by two goals — that:

- Australian schooling promotes equity and excellence
- all young Australians become successful learners, confident and creative individuals, and active and informed citizens.

In pursuit of these goals, the declaration sets out an action agenda focusing on:

- development of stronger partnerships
- support for quality teaching and school leadership
- strengthened early childhood education
- enhanced middle years development
- support for senior years of schooling and youth transitions
- promotion of world class curriculum and assessment
- improved educational outcomes for disadvantaged young Australians
- strengthened accountability and transparency.

National Education Agreement

The NEA, which took effect from 2009, details the Australian Government's financial contribution to the states and territories for assisting with delivering schooling services over the subsequent five financial years. The agreement is intended to contribute to the following outcomes — that:

- all children are engaged in, and benefit from, schooling
- young people meet basic literacy and numeracy standards, and overall levels of literacy and numeracy achievement improve
- Australian students excel by international standards
- schools promote social inclusion and reduce the educational disadvantage of children, especially Indigenous children
- young people make a successful transition from school to work and further study.

More specifically, it targets achievement of a 90 per cent attainment rate in year 12 (or equivalent qualifications) by 2020, and closure of the gap in schooling outcomes between Indigenous and non-Indigenous students (as discussed further in chapter 9).

Consistent with the new Intergovernmental Agreement on Federal Financial Relations, the NEA gives the states and territories flexibility in the allocation of the Australian Government's funding contribution, and emphasises realisation of the outcomes of the agreement, rather than specifying the means by which this should occur. However, this flexibility is conditional on the implementation of a performance reporting framework to assist with monitoring student outcomes and assessing how well schools are addressing students' needs.

In recognition of the important role that an efficient and effective schools workforce can play in helping students to achieve their educational potential, initiatives to improve the quality and performance of the workforce are prominent in this reform effort.

Most workforce reforms are being implemented by state and territory governments and non-government school operators — reflecting their responsibilities for delivering schools services. Until recently, the Australian Government served chiefly as a funding provider (to both government and non-government schools).

However, the Australian Government has now become more directly involved in workforce and other policies influencing schooling outcomes. In particular, and underpinned by the Melbourne Declaration and the NEA, much of the current reform effort has been bought under national umbrellas by the Council of Australian Governments (COAG) or by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA).

Accompanying the NEA are several education-related National Partnership Agreements (NPAs) that make additional Australian Government funding available to the states and territories to facilitate and/or reward reform initiatives agreed to be of national significance. Of particular relevance to the schools workforce are the Smarter Schools NPAs, which support initiatives aimed at improving teacher quality, raising student literacy and numeracy outcomes, and addressing educational disadvantage in low socioeconomic-status (SES) communities. As part of these particular NPAs, states and territories have agreed to share and collaborate on six reform areas:

- school performance improvement frameworks
- innovative strategies for small and remote schools
- parental engagement in schooling in low SES communities
- extended service models in schools
- literacy and numeracy diagnostic tools
- school leadership development strategies.

The Australian Government will be providing up to \$2.5 billion in funding for the Smarter Schools NPAs, which will run for between four and seven years. Several other NPAs (Digital Education Revolution, Nation Building and Jobs Plan, Youth Attainment and Transitions, and Trade Training Centres in Schools) — and the National Indigenous Reform Agreement — are also relevant to future schooling outcomes.

As well, two new national-level institutions have been established.

- The Australian Institute for Teaching and School Leadership (AITSL) — which in 2010 replaced a previous body, Teaching Australia — was initially tasked by MCEECDYA with developing a set of national professional standards for teachers and principals. AITSL is now progressing related functions, including building a national accreditation system for pre-service teacher education courses linked to the new national standards.
- The Australian Curriculum, Assessment and Reporting Authority (ACARA) — an entity established in 2009 following agreement by the Ministerial Council and COAG — is responsible for developing a national curriculum by 2013, a national assessment program aligned to the curriculum, and a national data collection and reporting program for student outcomes.

In addition to ACARA's data and reporting functions, several other steps have been taken to enhance national level performance assessment (see below). And the Australian Government has introduced, or announced, a number of specific schools workforce initiatives — including a proposed national performance bonus scheme for teachers and financial incentives to help facilitate greater school autonomy.

Importantly, however, the new national level reform framework is not intended to remove the ability for the states and territories to tailor policy settings to their particular jurisdictional circumstances, or to experiment with different approaches. Reflecting this, the performance targets that the states and territories must meet to receive NPA incentive payments are jurisdiction-specific.

Main types of policy reform

Broadly, the policies in place or in prospect to improve schools workforce arrangements fall into one of three overlapping groups.

First, there are initiatives designed to promote an appropriate balance between the demand for, and supply of, school workers. This group includes policies intended to:

- boost recruitment in areas of shortage — through, for example, scholarships and employment incentives for students with pre-existing qualifications in certain subjects to undertake teaching courses, fast-tracking the pedagogical component of teacher training for some graduates or skilled professionals (via the Australian Government's Teach for Australia and Teach Next programs), and boosting the number of Indigenous school workers via specialised training programs and the development of job roles linked to the particular ways in which they can assist the learning of Indigenous students

-
- increase early career retention — including through accelerated salary progressions, improvements in non-working conditions, stronger classroom support and mentoring, and greater access to professional development
 - encourage qualified teachers to fill hard-to-staff positions — through, for instance, allowances, salary adjustments, retraining incentives and incentives relating to future placements (although, as noted in chapter 4, not all of these incentives are openly publicised)
 - improve engagement between universities and those responsible for employing school workers, in regard to areas of teacher under and oversupply.

Second, there has been a growing focus on improving the efficiency and effectiveness of the workforce, with a particular emphasis on enhancing the quality and performance of teachers and principals. As well as the agreement by governments to new national professional standards (see above), measures include:

- minimum numeracy and literacy standards for those entering pre-service training
- new pre-service course offerings — such as the University of Melbourne’s Master of Teaching course which adopts a ‘clinical’ training approach
- a lengthening of pre-service training for postgraduate qualifications from one to two years (recently agreed to by the jurisdictions)
- experimentation with different practicum arrangements
- some (often school-level) changes to job design — such as reducing the administrative load on teachers to allow them to concentrate more on face-to-face teaching, and (mainly minor) modifications to the respective roles of principals, deputy principals and senior teachers
- more flexible staffing arrangements to accommodate specialist teaching and to support groups of teachers to plan and deliver programs jointly
- improved performance-management systems and increased pay dispersion to reward quality teaching
- trials of performance pay regimes in some jurisdictions, as well as the previously mentioned national scheme which is to pay bonuses to the top 10 per cent of teachers from 2014
- initiatives to build leadership skills, especially for current or aspiring principals
- increased autonomy within some government school systems, with the intention of giving principals and senior teachers greater scope to determine the staffing and operating arrangements that best meet the needs of their students.

Also, the just released National Disability Strategy (COAG 2011) sets out a range of broad strategies for improving the quality of education provided to students with

disabilities — including to better equip teachers with the necessary skills to teach these students (see chapter 9).

Third, and in support of the other reforms, there have been various initiatives to strengthen policy governance and transparency — including through improved data collection and better performance reporting and assessment. Although individual jurisdictions have been pursuing improvements in these areas, allied to the new national reform umbrellas, the extent of national-level performance reporting and oversight has increased considerably. For example:

- The COAG Reform Council has responsibility for assessing jurisdictional performance against the targets set in the education-related NPAs.
- ACARA’s functions include the facilitation of national student assessments and publication of data on school and system performance (including the My Schools website).
- Beyond its standards and accreditation-related functions, AITSL is expected to collect and disseminate data relating to the performance of the schools workforce.

Consistent with the Melbourne Declaration and the NEA, a key objective of these national level governance initiatives is to help ensure that the policy framework is serving to promote equality of educational opportunity and to ameliorate educational disadvantage. In this regard, the Commission notes that the publication of more performance data has a particularly important role to play. As long as such data are soundly based and comprehensive, they will not only be of direct benefit to those responsible for policy making and service delivery, but will help to empower parents and students and thereby provide an additional source of better-informed pressure for improved performance.

There is, of course, considerable overlap between the first two of the above three reform groupings. For instance, as well as boosting the quality of the schools workforce, improvements to professional development and mentoring are likely to aid job matching and recruitment and retention.

Reflecting the flexibility within the new national-level reform umbrellas, the nature and extent of the particular initiatives in the first two broad reform groupings also varies considerably across jurisdictions and individual school systems. For instance, the precise incentives employed to address workforce shortages differ (chapter 4), as do the student–teacher ratios prescribed in awards and enterprise agreements. And Victoria has gone much further than other jurisdictions in providing autonomy to well-functioning government schools. Jurisdictional divergences in such things as the demand–supply balance and the extent of remoteness and indigeneity, also contribute to policy variation.

3.3 The Commission's assessment framework

As indicated in chapter 1, in accordance with the Commission's legislation, this study has been guided by the wellbeing of the community as a whole. The Commission has therefore taken into account the interests of students, the schools workforce and society more generally. In doing so, it has been cognisant of several factors that bear upon policy formulation in the schools workforce area and on how this study can best add value.

Equity in educational outcomes

A critical underpinning for the objectives enunciated in the Melbourne Declaration and the NEA is that schools policy should promote equity in educational outcomes.

In defining equity, it is important to distinguish between the aim of all students having equal opportunity to realise their educational potential irrespective of their individual, economic or social circumstances, and that of equality of student outcomes in terms of levels of achievement. The intrinsic abilities of students vary considerably. This means that even if high quality education were to be equally available to all students, there would still be variation in achievement levels.

A focus on promoting equality of educational opportunity also underscores the constructs of equity adopted by the OECD and the current Review of Funding for Schooling. Further, the OECD construct encapsulates the notion of inclusion — 'ensuring a basic minimum standard of education for all' (OECD 2008, p. 2). But in countries such as Australia with well-developed schooling systems, success in promoting a high level of equality in educational opportunity should ensure that the large majority of students meet or exceed basic minimum standards. Hence, the practical focus should be on assessing whether policies are helping to offset educational disadvantage that stems from a student's individual, economic or social circumstances. As the Review of Funding for Schooling observed (RFS 2010, p. 5):

... a commitment to equity means that differences in educational outcomes should not be the result of differences in wealth, income, power and possessions ...

Comparing the outcomes of different student groups is of course very important in this context. For example, while the intrinsic abilities of Indigenous students will vary across the spectrum of achievement (as with any cohort of students), their significantly lower average level of educational achievement is testimony to the profound disadvantage that many of them experience (see chapter 9).

More generally, as is widely recognised, schools and schools workforce policies need to be accompanied by broader policy actions to help tackle the sources of

educational advantage. Thus initiatives that target health, family and community-related impediments to the learning outcomes of disadvantaged students have important roles to play in promoting equality of educational opportunity.

Finally, and very importantly, giving prominence to the important role of schools and schools workforce policies in ameliorating educational disadvantage should support and not detract from the objective of promoting high quality learning outcomes for all students. A well-functioning schooling system should be able to identify and assist students at risk of failing to realise their potential, irrespective of their background or family circumstances or where they sit on the ability spectrum.

- Notable in this regard is that the recent declines in the literacy and numeracy performance of Australian students in the PISA tests have not been concentrated in the lower performing end of the student population. Indeed, in the case of numeracy, the performance decline seems to have been mainly in the upper half of the ability spectrum (Ryan 2011).
- And as elaborated on in chapter 9, workforce policy initiatives that offer the prospect of better outcomes across the whole of the student population will sometimes promise the biggest gains for students from disadvantaged backgrounds.

That said, the Commission remains very aware of the pressing need to directly improve the outcomes for certain groups, particularly Indigenous students.

Quality teaching

For very good reason, schools workforce reforms in Australia and around the world have a strong focus on improving the quality of teaching. Indeed, an often cited observation on what underlies the success of the best performing schools across the globe is that ‘the quality of an education system cannot exceed the quality of its teachers’ (McKinsey and Company 2007, p. 16).

Quality teaching entails both a professional dimension (relating to content and pedagogy) and a personal dimension (spanning a range of attributes and capabilities). As noted by Banks (2010, p. 9) it can, in various ways, have a significant impact on the learning outcomes of students.

A good teacher will not only effectively impart required knowledge to students, but also enliven their interest in the subject matter and in learning itself,... help elevate the aspiration of their students, and help them shape their career goals and choices, based on a good understanding of their ability.

In contrast, poor teachers can be deleterious for students' progression, especially for those experiencing learning difficulties or coming from a background with minimal encouragement and support for learning at home. Moreover, these impacts — positive or negative — can compound over time. In the case of poor quality teaching, the effects of even a one-off experience can persist for many years (Sanders and Rivers 1996).

Yet while critical for learning outcomes, fully understanding what constitutes quality teaching remains an ongoing challenge. In part this is due to the great diversity in ways that individual students learn. Mapping the professional and personal capability dimensions of teaching is also complex and context-specific. For example, the importance of subject knowledge is frequently emphasised in teaching mathematics (Jan Thomas, sub. 3; Australian Association of Mathematics Teachers sub. 7). And the conception of quality teaching extends to factors such as the quality of teacher–student and teacher–parent relationships, and the contribution made to the performance of fellow teachers and to leadership within a school.

Even so, there are some recurring themes in the research evidence and submissions to this study on what makes for quality teaching.

Synthesising the available research evidence, Masters (2007) concluded that highly effective teachers are those who:

- create classroom environments where all students are expected to learn successfully
- have a deep understanding of the subjects they teach
- identify where their students are up to in their learning, and then direct their teaching to student needs and readiness
- provide continuous feedback to students about their learning
- reflect on their own practice and strive for continuous improvement.

Similarly, other researchers have summed up the best teachers as those 'who challenge, who have high expectations, who encourage the study of their subject, and who value surface and deep aspects of their subject' (Hattie 2009). Of particular note in the context of addressing educational disadvantage is the finding that quality teachers set appropriately challenging goals for students (Hattie and Clinton 2008; Smith, Baker, Hattie and Bond 2008).

Significantly, these sorts of skills and behaviours were also prominent in the commentary on quality teaching by the Victorian Student Representative Council. Amongst other things, the council said that from students' perspective, high value is placed on teachers who:

- are sensitive to the different learning approaches and needs of individual students
- relate to students as 'partners' in their learning process
- provide students with the freedom and responsibility to explore a range of learning options to cater to a range of learning styles
- have expectations of both students and themselves that spring from their passion to see students succeed in life, not just in school
- hear and respond to feedback from both students and other teachers (sub. 24, p. 2).

The collegial dimension to teacher quality was also emphasised by AITSL (sub. 39, p. 8), which observed that quality teachers are able to 'provide models and leadership for less experienced and less capable colleagues and in so doing help raise the overall performance of the teaching workforce'.

In light of the above, in framing its analysis and draft recommendations, the Commission has been continually mindful of the critical role of quality teaching and the importance of deploying quality teachers effectively across schools. A number of its recommendations are directed at improving the framework in which detailed policy measures — including those related to teacher quality — are determined and evaluated. And some others are directed at reforming the systems and processes in place to more directly enhance teaching (and leadership) quality.

Cost effectiveness

In seeking to improve community wellbeing, the costs as well as the benefits of particular schools workforce policies must be considered. Hence, the Commission has viewed the efficacy of the current reforms and possible changes to them through a cost-effectiveness lens.

Like equity and quality, the application of a cost-effectiveness approach is not straightforward. In particular, and as in other areas, some of the benefits and costs of schools workforce policies will be difficult to identify, attribute and/or measure. Conclusions in regard to cost-effectiveness will therefore often involve the exercise of judgement.

However, there will be situations where application of the cost-effectiveness criterion provides direction on the merits or otherwise of particular policy

approaches. Longer graduate diploma courses (see chapter 5) and further across-the-board reductions in average class sizes (see chapter 7) are cases in point.

Other specific assessment considerations

In making its assessments, the Commission has been mindful of several other factors.

- It is clearly desirable that schools workforce policies are underpinned by a sound evidence basis. In some areas, good evidence is available. But especially where the efficacy of particular policy approaches is context or country specific, the evidence base may be lacking. While this does not mean that reforms should be put to one side — in many cases trialling changes may be the only way to generate relevant evidence — it does put a premium on robust processes for evaluating such trials and for iterating policy accordingly.
- Because of the heterogeneity of the schooling system, government-initiated workforce policies will have differing levels of ‘reach’ across the system. Government policies affecting overall workforce demand or pre-service training are likely to have implications for all schools. But for matters such as remuneration and school autonomy, approaches and outcomes in non-government schools will be influenced by considerations and imperatives that are often beyond the direct control of governments.
- As outlined above, in some particular areas of school and schools workforce policy — including professional standards and curriculum setting — national approaches are replacing jurisdictional approaches. The assessment of such changes gives rise to a need to balance the benefits that can arise from national consistency against the likely greater opportunity for policy experimentation under a jurisdictional approach.

As well, the effectiveness of particular reforms will often depend heavily on complementary initiatives. Thus, efforts to improve teaching quality will call for action on a range of fronts including in regard to pre-service training and professional development, performance management and remuneration arrangements. Leadership and school autonomy policies are intertwined — the impacts of autonomy on student outcomes will depend to a significant extent on the quality of leadership skills which, in turn, are likely to be easier to exercise and develop in an environment where schools have autonomy over hiring and deploying staff and over day-to-day management tasks. More broadly, the capacity to address workforce shortages and attract, develop and retain a high quality teaching workforce will clearly depend heavily on overall school resourcing — the subject of the concurrent Review of Funding for Schooling. As mentioned, broader societal

policies such as health and housing also have an important role to play in delivering better and more equitable educational outcomes.

Progressing the current reform agenda

Finally, and most importantly, this study is occurring at a time when schools workforce policies are undergoing significant change, and when there is also considerable innovation occurring within some schools. There are limits on how much reform can be prosecuted and properly evaluated at the one time.

Moreover, while the current suite of reforms has some important broad strengths (box 3.2), many of the specific reforms are of very recent origin or are still to be implemented. This limits the scope to make definitive judgements about their merits. As one discussion participant observed, short of implementing the wrong policy, the second biggest policy mistake is to evaluate too early. Indeed, some reforms may need to be in place for a considerable time before they have any appreciable impact — a point emphasised by the Catholic Education Commission of Victoria (sub. 13, p. 9) in commenting on the teaching quality agenda. Also, further policy changes are in prospect in response to recently completed, or soon to be finalised, reviews — including the Review of Funding for Schooling.

Given the above, the Commission considers that it would be unhelpful for this study to propose a plethora of new initiatives. Rather, in keeping with the approach adopted by the OECD in its recent report on Australia's framework for assessing and evaluating schooling outcomes (Santiago et al. 2011), a more circumspect and iterative approach is warranted. Specifically, in the subsequent chapters of the report, the Commission has put forward a small number of targeted measures that:

- build on what is in train or in prospect
- address some particular approaches that appear problematic in light of the available evidence on what is important for delivering better schooling outcomes
- address aspects of workforce arrangements that have so far received insufficient policy attention.

In addition, it has proposed some changes to strengthen policy and program governance and evaluation, and to enhance the future evidence base. Particularly important in this regard is embedding robust evaluation as an integral component of the schools workforce policy landscape (see chapter 10). The need for a better understanding of the effectiveness and efficiency of different policy approaches was a key theme in many of the submissions to the study.

Box 3.2 **Strengths of the current reform suite**

For the reasons spelt out in the text, it would be premature to come to judgement on the merits of many of the specific components of the current schools workforce reform suite. Nonetheless, in general terms, that suite seemingly has a number of strengths.

The reforms are collectively broad and encompass most of the workforce-related factors that the evidence indicates are important for good student outcomes. And as noted earlier, in focusing heavily on improving the quality and performance of the workforce, the thrust of the reforms is consistent with the reform emphasis in most other developed countries. In fact, the premium on identifying cost-effective means to improve workforce quality and performance is likely to increase in coming years as the expected general tightening in labour markets makes it more difficult to directly address workforce shortages through recruitment and retention policies.

The new reform framework also retains considerable scope for jurisdictions to tailor policies to meet their particular requirements. As well as providing continuity with what has gone before, such jurisdictional flexibility will facilitate policy experimentation and the generation of better evidence on what approaches work best. At the same time, the new national level reform umbrellas and reporting and assessment requirements should help to provide impetus, common direction and discipline to the reform process. In the words of the OECD (Santiago et al. 2011, p. 9):

The Australian approach combines the development of goals, monitoring and reporting at the national level with local evaluation and assessment practices shaped by jurisdiction-level school improvement frameworks.

It is conceivable that the new national professional standards could constrain jurisdiction-level experimentation and policy tailoring. However, the endorsement of the standards by all of the jurisdictions suggests that any such constraints are likely to be small and/or outweighed by other benefits. In regard to the latter, one consideration is the platform that the new standards are intended to provide for several other reform directions, with the Catholic Education Commission of Victoria (sub. 13, p. 9) observing that the standards for teachers will serve as a reference point for teacher education, registration, professional learning and appraisal, and career structure and remuneration. Similarly, the Association of Heads of Independent Schools of Australia noted that:

... a national standard of professional practice for principals [will be] valuable in creating an overarching framework for existing leadership models and a common language for dialogue on school leadership issues. Provision of a national clearinghouse of leadership research also supports the professional development of school leaders. (sub. 2, p. 4).

Given the close to unanimous support for the new national standards, the Commission has not subjected the broad approach to further scrutiny in this study. That said, as for other aspects of workforce policy, robust evaluation of the impacts of the new standards, and the surrounding institutional arrangements, will be important. Moreover, as detailed in subsequent chapters, there are some specific aspects of the new standards which the Commission considers to be problematic. These should be addressed along with other gaps and weaknesses in the current suite of reforms.

4 Addressing imbalances in teacher supply and demand

Key points

- There are ongoing imbalances in the supply and demand of different groups of teachers.
 - Shortages persist in certain secondary subject disciplines, and more generally in rural, remote and Indigenous schools. Low socioeconomic status schools in urban areas are also becoming increasingly difficult to staff. And there are reports that special-needs teachers are in short supply.
 - At the same time, there have been persistent surpluses of general primary teachers in metropolitan areas.
- Many of these imbalances — some of which can compromise student outcomes — seem likely to persist for some time, although future magnitudes are difficult to predict and will be affected by a number of factors.
- A number of measures are currently used to address these imbalances, including the use of scholarships and other incentives for individuals to enter teacher training.
- However, there is merit in exploring options for more explicit and extensive use of wage differentiation based on areas of shortage, including for particular subjects and some hard-to-staff positions in low socioeconomic status schools.
 - While not providing sufficient reason to avoid any experimentation in this area, there would be a number of implementation issues involved with differentiating teacher pay on a more explicit and systematic basis. Accordingly, the Commission has requested further input from participants.

As noted in chapter 2, there are a number of long-standing imbalances of some school workers. The causes of these imbalances are multi-faceted, reflecting the variety of conditions that influence the demand for, and supply of, school workers. The magnitude of these influences differ substantially across jurisdictions and (to a lesser extent) across school levels and sectors. Thus, in seeking to achieve a better balance in the demand and supply of school workers, multiple and sometimes tailored responses are required.

This chapter examines current and potential initiatives to address workforce imbalances. The focus is on teachers, reflecting both their central role in student learning outcomes and the fact that it is in teaching where the most significant

imbalances currently exist. While some participants also highlighted problems with recruiting school leaders, these matters are considered separately in chapter 8.

4.1 Current and expected imbalances

Surpluses of general primary teachers

To varying extents, most jurisdictions have large numbers of qualified teachers on waiting lists for positions at (mainly) urban primary schools. For example, of the 33 000 individuals on waiting lists for permanent positions in NSW, about 19 000 are qualified primary teachers.¹ These surpluses have continued for a number of years — notwithstanding growing student enrolments and falling average class sizes.

Despite these surpluses, large numbers of students continue to graduate as general primary teachers. Of the approximately 16 000 domestic students completing pre-service teacher education courses each year, just over half are estimated by the Commission to graduate with a primary education degree.² This, combined with a recently low separation rate for teachers in most states and territories (NSW Department of Education and Communities, sub. 14; Queensland Department of Education and Training, sub. 40; Tasmanian Department of Education, sub. 33), has meant that surpluses of general primary teachers have either been maintained, or increased.

Geographic and subject-based shortages

At the same time as there have been surpluses of general primary teachers in metropolitan areas, there have been persistent shortages of suitably qualified teachers in secondary school subject areas such as mathematics, science, technology and languages other than English, as well as a lack of teachers able to instruct special-needs students. Some participants highlighted other parts of the workforce with shortages, including teachers with particular skills considered important for educating disadvantaged students (chapter 9).

¹ Several participants suggested that some individuals may place themselves on waiting lists only for a back-up employment option. Thus, surpluses may not be as large as the numbers suggest.

² This estimate is based on the portion of education graduates who completed a primary teaching qualification in a separate unpublished DEEWR survey.

Some of the subject-based shortages are substantial. For example, of the over 600 mathematics department heads surveyed by Harris and Jensz (2006), about three-quarters experienced difficulty recruiting suitably qualified teachers. And in a 2006 survey of secondary school principals, 13 per cent had at least one unfilled position in mathematics, with a similar figure for science (11 per cent). In contrast, the average for all other subjects was less than 4 per cent (McKenzie et al. 2008).

Persistent subject-based shortages have required some teachers — most of whom are relatively new to the profession — to teach subjects in which they are not qualified (Independent Schools Council of Australia, sub. 18). It is difficult to determine how widespread the occurrence of such ‘out-of-field’ teaching is (Australian Association of Mathematics Teachers, sub. 10; Australian Education Union, sub. 28). Nonetheless, a range of surveys indicate that somewhere between 15–25 per cent of teachers in certain subjects are not fully qualified for that role (Dr Linda Darby, sub. 32). This supports the large body of anecdotal evidence suggesting there is a reliance on out-of-field teachers in particular secondary subjects (Australian Education Union, sub. 28; Catholic Education Commission of Victoria, sub. 13; Dr Linda Darby, sub. 32).

In some subject areas, the magnitude of the shortfalls have apparently increased over time (Centre for the Study of Higher Education 2006). This could be due to a number of factors, including greater competition from other sectors of the economy for skills like mathematics and science, and the potential feedback effects from fewer numbers of school students enrolling in these subjects. Indeed, some participants highlighted the declining numbers of students studying advanced and intermediate levels of mathematics in Year 12 as a potential threat to the future supply of teachers in that subject (Australian Mathematical Sciences Institute, sub. 31; Deakin University, sub. 24; Jan Thomas, sub. 3).

There have also been ongoing difficulties filling teaching positions in a range of subject areas and positions in rural and remote communities (including Indigenous), as well as some low socioeconomic status (SES) schools in urban areas. Despite the recruitment difficulties in disadvantaged urban schools, in aggregate, principals in the major population centres still face less problems hiring teachers than in rural and remote areas. For example, 35 per cent of metropolitan school principals surveyed as part of the 2007 Staff in Australia’s Schools study indicated they have a major or moderate difficulty filling staff vacancies, while the same measure for provincial and remote schools was 45 per cent and 50 per cent respectively (McKenzie et al. 2008).

In seeking to help overcome these shortages, most jurisdictions enable schools to employ individuals who are not registered to teach (but have still satisfied the usual

background checks). Yet despite the availability of this option, there has been an apparent narrowing of the subjects offered in some rural and remote schools due to a lack of staff (ASPA 2006; McKenzie et al. 2008).

Expected future imbalances

Projections made by school operators generally suggest that shortages of teachers in particular secondary subject areas will continue in the foreseeable future. In some cases, mainly owing to the older age profile of many secondary teachers, the shortfalls are expected to increase (Dr Linda Darby, sub. 32).

However, the picture for surpluses of general primary teachers varies somewhat across the states and territories. For example, the NSW Department of Education and Communities (sub. 18) predicted that even were resignation and retirement rates to double, supply would still be sufficient to meet the future demand for teachers in government primary schools until at least 2018. Conversely, in Victoria, forecasts suggest that surpluses of primary teachers will continue, but the gap between demand and supply is predicted to fall to just over 100 teachers by 2013 (DEECD 2009d). Similarly, the surpluses of primary teachers in Queensland and Western Australia are expected to reduce over the coming years (Queensland Department of Education and Training, sub. 40; WA Department of Education, sub. 45).

4.2 Costs of imbalances

While the future extent of imbalances are subject to some uncertainties (see section 4.3) — and despite an oversupply of teachers potentially having some benefits for employers — both surpluses and shortages can impose considerable costs.

In the case of ongoing surpluses, costs can be imposed on both the schools system — where there is pressure to provide practicum training to a greater number of prospective teachers than will be required — and the wider community, which subsidises the price of ‘underutilised’ pre-service training. Furthermore, these costs assume greater significance in the context of ongoing shortages of other groups of teachers. That is, within the confines of teacher education, there is an apparently large opportunity cost of the funds being used to train teachers who may never work in the schools sector while shortages persist elsewhere. Also, graduates who do not find employment bear some obvious (though not completely unforeseeable) costs.

Ongoing shortages of teachers can also pose problems, notably that student learning outcomes can be compromised — either by schools dropping the range of subjects available or by the use of out-of-field teaching.

Not all out-of-field teaching is necessarily negative to the teacher or student. Some out-of-field teachers are genuinely interested in the subject matter (Dr Linda Darby, sub. 32), and may have considerable relevant subject knowledge through other professional experience. And for those teachers without the required amount of subject knowledge, they may be able to build this through on-the-job experience and participation in professional development, making them appropriate candidates for some of the retraining schemes offered by school operators (see below).

Even so, teaching out of field is widely considered to have a negative influence on student learning, making it more difficult to maintain, let alone improve, outcomes for students — especially those from disadvantaged backgrounds. Additionally, there are stresses placed on some of the teachers who are required to teach outside their own subject discipline, as well as on principals and some other school workers. And given that many teachers who teach out of field are apparently relatively inexperienced, the additional pressures placed on them may be a contributor to early-career resignations (McConney and Price 2009).

4.3 Initiatives to address imbalances

Government and non-government school operators have introduced various initiatives to address imbalances in teacher demand and supply. Some of these measures also have the aim of improving the quality of the workforce (such as attempts to attract highly performing graduates to the profession).³ Most of these have been used in one form or another for some time, providing policymakers with an opportunity to understand their effectiveness.

However, as far as the Commission is aware, there is a paucity of publicly available Australia-specific evaluation on the effectiveness of the broad approaches used. Thus, while all these measures could be sound, their cost-effectiveness in either an absolute or relative sense is much less certain. It is therefore important for there to be much more evaluation of these sorts of programs (chapter 10). Also unclear — and important to understand — is the impact of some of these approaches on workforce quality (chapter 5).

³ Likewise, some measures aimed at addressing quality issues, such as more stringent entry requirements for teacher training (chapter 5), can impact on teacher supply.

What is clear is that the initiatives used to date — while ‘pulling in the right direction’ — have been insufficient to overcome persistent imbalances. In an environment of constrained education budgets, there will always be limits on what can be achieved by these sorts of measures. Nonetheless, as outlined below, the Commission considers that there are some changes that could be made to policy settings that would potentially help to improve the demand-supply balance. Paramount amongst these is more explicit and/or extensive salary differentials to address workforce shortages.

Workforce planning

The state and territory education authorities, in most cases in partnership with their respective non-government sectors, have on-going workforce planning regimes intended to help ensure that there are sufficient numbers of appropriately qualified teachers and leaders in schools.

The Australian Education Union (AEU, sub. 28) among others (Australian Mathematical Sciences Institute, sub. 31; CPSU/SPSF Group, sub. 6; Jan Thomas, sub. 3) questioned the robustness of current planning and forecasting processes and by implication the numbers emerging from them.

The Commission observes that there are clearly numerous uncertainties that can bear on the accuracy of demand-supply forecasts (box 4.1). It is therefore always possible for workforce planners to refine current projections and undertake sensitivity analyses so as to get a better handle on these uncertainties. There is also likely to be scope to improve the relevant datasets used for workforce planning. In this regard, the Commission notes the current development of two national databases of teachers by the National Teaching Workforce Database Working Group (chapter 5). And it is also likely that the activities of the Australian Curriculum, Assessment and Reporting Authority, and the Australian Institute for Teaching and School Leadership will see the assembly of further information that is relevant in a workforce planning context.

However, such enhancements would be unlikely to change the broad picture that will condition workforce policy making in the next few years — namely, that some significant imbalances will persist in most jurisdictions and school systems in the short to medium-term at least. Given that the nature of these imbalances is generally well-known, improved workforce planning, whilst potentially useful, is unlikely to have a significant impact. Rather, the focus in seeking to overcome surpluses and shortages will likely need to be on other policy responses.

Box 4.1 Uncertainties in predicting the future workforce balance

On the demand side, while the number of teachers required clearly looks set to increase, the extent of this increase is subject to some uncertainty.

- As noted in chapter 2, another 900 000 students are predicted to be in Australian schools by 2022. However, accurately forecasting the precise magnitude of any increase in enrolments relies on assumptions relating to such factors as grade progression ratios, birth rates and immigration levels.
- Any continuation in the downward trend in student-teacher ratios (STRs) would see the need for new teachers increase. But the precise future trajectory of STRs is difficult to predict beyond the period that existing teacher awards and agreements apply. As an illustration of how changes in STRs over the long term could affect supply, if the average STR decreased from the current level of 13.9 to 12 by 2022, the expected number of student enrolments at this time would require 50 000 more school workers than if the ratios remained unchanged. Conversely, if the average STR increased to about 17.5, no increase in school workers would be necessary to cater for currently forecast student enrolments.
- A requirement that by 2014 all preschools and long day care centres employ a qualified teacher will increase the demand for teachers with certain skills. However, the impact on the demand for individuals eligible to teach at the primary level will depend on how many of such teachers are also qualified to teach early childhood.

On the supply side, the common perception is that there will be an increase in the number of age-based retirements from the profession over the coming decade (ISCA, sub. 18; NCEC, sub. 7). However, pressures arising from workforce ageing will be variable across the jurisdictions (NSW DEC, sub. 14; SA DECS, sub. 35). Moreover, recent events have shown that the timing of future retirements could be heavily influenced by the state of the wider economy (WA Department of Education, sub. 45).

Also, while the average number of education course completions has been relatively stable in the past 5 years, some planned government policies have the potential to increase completions.

- There is a widespread expectation that, without other changes, the lifting of the cap on the number of Commonwealth Supported Places that can be offered by universities from next year will result in substantially more primary education graduates (NSW DEC, sub. 14; Queensland DET, sub. 40).
- The Australian Government has allocated extra funding for pre-service early childhood course places in response to the new qualification requirements in that sector. Insofar as some of the extra funding is for combined early childhood-primary degrees, this could increase the number of primary qualified teachers.

Also, overlaying any schools-specific pressures will be the impact of the broader tightening of the general workforce due to population ageing.

Availability of pre-service training

Reducing surpluses of general teachers has to date received much less policy attention than the amelioration of shortages (see below). This is perhaps due to the risk that such policies could ‘overshoot the mark’. Indeed, Deakin University (sub.24) argued that targeting surpluses is particularly difficult due to the uncertainties associated with future government policy and the state of the wider economy.

For the most part, efforts to reduce surpluses have involved engagement by state and territory education authorities, as well as some non-government school operators, with their relevant universities on matters such as the number of course places offered. The arrangements for such engagement vary across the jurisdictions, with some states (such as Victoria and South Australia) bringing together the universities and employers under the auspices of a working party, and some others conversing on a more ad hoc basis.

Feedback from study participants indicated that some universities are more willing to participate in these sorts of processes than others. Further, it is clear from the ongoing nature of some surpluses that even where engagement does seem to occur on a constructive basis (such as in Victoria), the results have been mixed.

A more direct strategy for managing surpluses would be to increase the costs of particular education degrees.

In this context, the Commission sees some merit in examining the current university fee-repayment discounts offered to education graduates by the Australian Government. In particular, recent graduates of teacher education courses are provided with a discount (of around \$1 600) off their annual university fee-repayment liabilities if they are employed in the teaching profession, irrespective of where, or what subject, they teach. In an environment of ongoing surpluses in some areas of the workforce, providing the same discount to nearly all teachers may not be the best use of scarce education funding.⁴

However, and as noted above, some jurisdictions are expecting the size of their teacher surpluses to attenuate over time. Also, there are some other factors that may constrain future supply, including increased entry standards (whether in place or in prospect), the general difficulty associated with securing practicum places, and the expected additional tightening of the wider labour market due to population ageing. Thus, any such changes in course costs would need to be targeted at particular areas to avoid creating new shortages, or exacerbating current ones.

⁴ Early childhood teachers receive a slightly higher discount for working in a hard-to-staff school.

And while there are concerns that the new demand-driven funding arrangements for higher education (box 4.2) may exacerbate workforce imbalances, the Australian Government will still be able to influence, or if necessary, directly control, the number of course places offered in particular universities or regions. Hence, the Commission considers that it would be premature to consider any new initiatives to restrict the supply of course places until the new arrangements have been allowed to play out.

Box 4.2 The demand-driven funding model for higher education

A new demand-driven university funding arrangement has been introduced by the Australian Government. Under this initiative, from 2012 universities will be able to determine the number of students that they admit to undergraduate courses. Thus, the Government will no longer directly regulate this aspect of a university's operations and the Commonwealth Grant Scheme funding for these places will not be limited.

However, under the new arrangements the Australian Government can specify that a course is a 'designated course of study', enabling it to allocate the number of student places for that course as part of each university's three-year funding agreement.

During the negotiations for the first round of agreements (2012–2014) the state and territory governments brought to the Australian Government's attention the issue of primary teacher surpluses. While opting at this stage not to designate general teacher education courses, the relevant Minister indicated in the second reading speech for the legislation an intention to closely monitor areas of oversupply.

The government will be monitoring demand and supply for graduates in all disciplines in the early years of implementation of the new funding system. The bill ensures the government has the capacity to respond to any new skills shortages and, if necessary, to the oversupply of graduates in particular areas. (Lundy 2011)

Scholarships to complete teacher training

Scholarships to complete a postgraduate diploma in teacher education are commonly made available to students enrolled in particular discipline programs. For example, the WA Department of Education's final-year teaching scholarships provide recipients with a guarantee of full-time employment and either \$30 000 (for mathematics, science and technology graduates) or \$20 000 (for languages and special-needs graduates) in return for working at least two years in a rural or remote government school. The Australian Government's program Teach for Australia targets graduates from any discipline with a strong academic record, providing them with fast-tracked teacher training so that they can begin working within the profession in a matter of weeks (chapter 5).

In general, scholarships are seemingly effective in compensating individuals for the upfront costs associated with becoming qualified as a teacher. Considering that annual student fees for education courses were capped at \$5 442 in 2011, the payments identified above are substantial. And while at the same time these benefits are small in comparison to the salary differentials that exist for particular subjects between teaching and other professions over a working career, such programs are only intended to help facilitate entry to the profession.

However, their effectiveness in attracting additional entrants to teaching could potentially be constrained by the proposed national accreditation standards for pre-service teacher education courses. In particular, these standards require individuals wishing to enter a graduate teacher education program to have achieved a discipline-specific qualification (chapter 3). The Commission considers that any standards that would prevent those with high-level mathematics, science or other subject skills — even if not achieved through a discipline-specific qualification — from enrolling in postgraduate teacher education courses would be problematic in the context of current shortages.

Another important consideration is the cost-effectiveness of these sorts of programs. Indeed, there is a perception that Teach for Australia is expensive on a per-teacher basis (AEU 2009a; Jan Thomas, sub. 3). In this regard, the Commission notes that the Australian Council for Educational Research is due to report on the costs of the program in early 2012. Also relevant in a cost-effectiveness context will be the attrition rate of graduates from the profession. While outcomes from similar initiatives in other countries are not always directly relevant in an Australian context (chapter 1), an assessment of the affiliated Teach for America program reported an attrition rate of around 80 per cent in the first three years of teaching (Heilig and Jez 2010).

Niche pathways into shortage areas

Policymakers have also introduced a number of niche pathways into some parts of the profession that have a shortage of teachers. These initiatives are not intended to be panaceas for overcoming imbalances — rather, they exist to help facilitate easier entry into particular parts of the profession. Nonetheless, like the scholarships outlined above, it is important to understand their cost-effectiveness.

Measures targeting individuals in other professions

Individuals with particular skills who are working in other professions can be offered incentives to become qualified teachers. For example, the Victorian Government's Career Change Program (currently funded as part of the Smarter

Schools National Partnership) offers a third-year teacher salary, travel and training allowances, study leave and various retention benefits to certain professionals who participate. The training allowance paid varies according to how difficult it is to staff the school in which the individual is appointed, and can range from \$8 000 to \$14 000. The Australian Government's recently announced initiative Teach Next will be aimed at qualifying skilled professionals — principally in the areas of mathematics and science — to become teachers through a combination of fast-tracked training courses and school-based learning (chapter 5). Additionally, various school operators have sought to attract and facilitate the entry of qualified teachers working in other occupations by offering refresher courses.

While some participants highlighted the importance of professional-entry programs for the work and industry experience it brings to teaching (Australian Association of Mathematics Teachers, sub. 10; DEEWR, sub. 42), initiatives of this nature are not typically designed to attract large numbers of individuals. For example, although there were 137 trainees in the NSW Accelerated Teacher Training Program in 2002-03, only 42 people participated in 2005-06. And there were even fewer participants in the Victorian Career Change Program, with a total of 57 individuals receiving training through the program between 2005 and 2007 (PhillipsKPA 2007). As alluded to above, these numbers should not necessarily be viewed as evidence of failure. Indeed, the usual requirement as part of these programs that participants teach in a hard-to-staff school for some period of time means that the impact of these initiatives on helping to staff disadvantaged schools is likely to be greater than the raw numbers of participants would suggest.

Measures targeting current teachers

Teachers who are currently employed are sometimes offered retraining packages to become qualified in shortage subjects. For example, under the NSW Teacher Retraining programs, funding is made available for current teachers to reskill into disciplines such as mathematics, science, technology, special-needs and languages other than English. Participants receive full payment of their university course fees and an allowance, while continuing to receive their usual salary. As with most programs of this nature, at the completion of the training course recipients are required to teach in a hard-to-staff school for a minimum period of time.

In the Commission's view, some important considerations in any analysis of these sorts of programs would include the associated benefits of any reduced surpluses, and the length of time that individuals who receive such training remain in the profession afterwards.

Pay differentiation

In addition to the standard pay that teachers receive (box 4.3), there is typically some extra remuneration made available to encourage individuals to work in areas of shortage.

Box 4.3 Teacher remuneration in Australia

Most teachers in Australia are paid according to jurisdiction-based collective agreements or awards (chapter 11), which each set out an incremental pay scale for the teachers covered. In the independent sector, most agreements are made at the school-level, with some pay and conditions also negotiated on an individual basis.

Remuneration levels for beginning teachers are relatively high, with median starting salaries for graduates in the education sector about \$4 000 (or around 8 per cent) more than the median for all surveyed professions (Graduate Careers Australia 2011).

However, teachers in Australia reach the top of their pay scale relatively quickly — usually within around 10 years. Teacher pay structures are also generally ‘flat’ — that is, the difference between salaries for beginning and experienced teachers is comparatively small. In particular, the ratio of salaries paid at the top of pay scales to starting salaries is about 1.4 in Australia, compared to the OECD average of just over 1.6 (OECD 2011b). This differential amounts to about an extra \$9 000 in Australia. Movement through the salary scales is essentially based on length of service, although some agreements and awards also provide limited opportunities for additional pay if a performance standard is met (chapter 6).

Remuneration arrangements normally include a schedule of location-based allowances for teachers working in areas outside the major city centres, with Western Australia also explicitly offering extra pay for teachers in some low SES urban government schools. However, explicit subject-based differentiation in pay is much more limited.

ABS (2010a; 2011b) data indicate that average real salaries for both teachers and the education and training sector as a whole have increased over the past 15 years. At the same time, the data also support the contention by some participants (APPA, sub. 41; Deakin University, sub. 24) that teacher pay has not been growing as fast as salaries in other professions. Data published by the OECD (2011b) show that experienced teachers’ salaries in Australia did not change in real terms between 1995 and 2009.

Explicit location-based allowances for teachers working in hard-to-staff schools are outlined in most of the teacher awards and/or agreements. The manner in which location-based payments are determined varies, and can depend on experience, school location, the number of dependants and whether travel allowances are included (box 4.4 provides an example for South Australian government schools). While allowances for rural and remote schools are common, only the WA

Government's teacher agreement explicitly outlines extra payments for teachers working in disadvantaged urban schools.

Box 4.4 SA annual remote incentive payments

The South Australian Education Staff (Government Preschools and Schools) Enterprise Bargaining Award 2010 outlines an annual cash incentive payment to be paid to teachers working in remote schools. As the 2011 payment schedule below shows, these payments are higher: (a) the longer a teacher has been working at the particular school; and (b) how remote the school is.

Total annual cash incentive payments, 2011^a

Years	Zone 2		Zone 3		Zone 4		Zone 5	
	\$	% salary	\$	% salary	\$	% salary	\$	% salary
1	901	1.6	2 059	3.7	3 989	7.2	6 947	12.5
2	1 160	2.0	2 315	4.0	4 374	7.5	7 205	12.3
3	1 480	2.4	2 573	4.2	4 632	7.5	7 462	12.2
4	1 801	2.8	2 895	4.5	4 889	7.6	7 721	12.0
5	2 059	3.1	3 218	4.8	5 146	7.7	7 977	11.9

^a The annual cash incentive payment as a percentage of salary for a given year is calculated as the particular cash incentive divided by the standard salary a teacher would receive for the corresponding number of years of service.

Source: South Australian Education Staff (Government Preschools and Schools) Arbitrated Enterprise Bargaining Award 2010; Productivity Commission estimates.

There are also various bonus payments available to teachers working in rural and remote schools. For example, the Victorian Graduate Retention Incentives Program, which is currently funded under the Improving Teacher Quality National Partnership, provides periodic bonus payments to eligible teachers in rural and remote areas. Teachers receive \$4 000 after 18 months service, another \$4 000 after a further 12 months employment and a final payment of \$7 000 payable on completion of another 18 months service. Financial incentives offered as part of other initiatives include subsidised housing and utility payments.

While explicit pay differentials based on subject area are rare, in some jurisdictions extra payments can be offered to teachers in any area of short supply. For example, in Victoria, principals in the public sector are able to offer up to \$7 000 per year to any teacher, including those teaching subjects where there are shortages, as an attraction or retention incentive. And in South Australia, remuneration on top of that available in the relevant award is sometimes paid in areas of skill shortage (South Australian Department of Education and Children's Services, sub. 35). Moreover, the Commission understands that some schools have created new leadership positions in order to offer teachers in particular subjects extra pay.

These extra payments are recognition of the role that remuneration can play in addressing workforce shortages. Indeed, and given the nature of many of the other measures outlined above, formalising and extending variations in pay may provide policymakers with the best opportunity to further ameliorate shortages.

4.4 Greater use of pay differentials to address shortages

More widespread and explicit use of subject-based payments would not be a panacea for dealing with shortages, and would raise various practical issues (see below). Nonetheless, in an environment of ongoing teacher shortages, it makes little sense to preclude explicit forms of remuneration adjustment from the policy toolkit — especially where the effect is simply to push such payments under the counter.

In this regard, teaching cannot be treated as a single labour market, a point emphasised by the Grattan Institute:

Centralised agreements also fail to recognise that there are numerous labour markets for school teachers, with differences stemming from subject and year level taught. Treating these labour markets as homogenous creates both surpluses and shortages in particular areas. (sub. 30, p. 3)

More specifically, there is a distinction between pedagogical and subject-specific components of teachers' skills. While pedagogical skills are essentially unique to the teaching profession (and largely generic across it), subject-specific knowledge is applicable in other professions.

In some areas of subject shortage, such as mathematics and science, remuneration is considerably higher in other sectors (ACT Council of Parents and Citizens Association, sub. 17; Australian Mathematical Sciences Institute, sub. 31; Independent Education Union of Australia, sub. 12). In these circumstances, and as various participants noted, if salaries for some subsets of teachers do not match what their subject-specific skills can attract in other professions, then shortages are almost inevitable.

As long as there is a perception in the community that teaching is not as rewarding a career as those in the medical, legal and business disciplines and that working conditions are not attractive either, it will not be possible to attract the 'best and brightest' to the profession in the numbers that are required. Especially in fields demanding skills in mathematics, science and in some of the more technical areas where wages and working conditions are more attractive in non-teaching roles. (Independent Education Union of Australia, sub. 12, p. 7)

Unfortunately the teaching profession is often not viewed as a profession of choice due to its lack of prestige and low salary expectations. This is particularly the case in the areas of Maths and Science ... where higher paying occupations are available elsewhere. (ACT Council of Parents and Citizens Associations, sub. 17, p. 11)

The level and structure of remuneration is important to the retention of teaching staff. A number of teachers leave the profession to take up industry specific roles to seek greater remuneration. (Queensland Catholic Education Commission, sub. 20, p. 5)

Against this backdrop, some participants endorsed the general principle of paying teachers in shortage areas relatively more as an attraction and retention incentive, irrespective of whether shortages are geographically based or linked to particular subjects (Australian Mathematical Sciences Institute, sub. 31; South Australian Department of Education and Children's Services, sub. 35).

At the same time, there was also some broad opposition to the principle, especially to the notion of paying teachers in particular subjects more. In arguing against such differentiation, the AEU (sub. 28) highlighted results from the 2007 Staff in Australia's Schools survey that showed teachers rated a number of factors, such as personal fulfilment and a desire to work with children, as being more important than salaries for motivating them to join the profession. The conclusion drawn from this by the AEU is seemingly that remuneration differentials will be largely ineffective in helping to overcome shortages.

However, as also recognised by the AEU, surveys of practising teachers do not address the motivations of individuals who decide *not* to become teachers. Indeed, a 2006 synthesis of attitudinal research found that remuneration, conditions and workload are important factors for those who decide not to pursue teaching (DEST 2006). Also, a number of international studies have found that variations in pay, once other factors are held constant, are an important determinant of the recruitment and retention of teachers (Manski 1987; Murnane et al. 1991; Gritz and Theobald 1996; Hanushek et al. 1999; Dolton and van der Klaauw 1999; Dolton et al. 2003; Milanowski 2003; Wolter and Denzler 2004; Bradley et al. 2006). Even without the benefit of this evidence, in the Commission's view, the teacher labour market would be very unusual if remuneration did not have a significant impact on workforce supply.

An additional argument put forward by the AEU, and seemingly the basis for the current lack of explicit subject-based wage differentiation, is that the value of a teacher does not depend on what subject they teach. But in the Commission's view this fails to take into account the value to the community of overcoming shortages, including those related to subject area. Indeed, the unpublicised subject-based pay differentials referred to above are reflective of this multidimensional value concept. Viewed in this light, subject-based differentials are no less valid for helping to

deliver good student outcomes than location-based allowances — which are already widely used and have greater support.

Another often-raised contention is that varying remuneration by subject could adversely impact on the cohesiveness and collegiality of the profession. The Commission accepts that if more overt subject-based wage differentials were introduced there would likely be some short-term effects of this nature. Yet there is widespread acceptance of differentiation of this kind in some other professions — including in higher education. Moreover, especially as variation in teacher pay is already accepted along rural-urban lines, over time, the Commission considers that opposition to subject-based differentials would likely soften.

A further concern raised by Deakin University (sub. 24) was that varying pay by subject would be unsuccessful in addressing shortages due to the current low overall numbers of graduates in the discipline areas such as mathematics and science.

While wage differentials would also be expected to influence current teachers' decisions in regard to retraining and retention, the Commission acknowledges that if the overall supply of particular graduates are tight, the influence of these measures will be limited. That said, preventing this sort of differentiation is effectively handicapping the profession in competing with other industries for graduates of particular disciplines.

As outlined in the previous section, school operators and principals are already varying pay to help overcome teacher shortages. Moreover, it is seemingly the case that the number of areas of the workforce targeted by these payments has been increasing. In light of all of the above, the Commission considers that the effort to address workforce shortages and thereby improve outcomes for students would be enhanced by a remuneration environment that is open to the use, in appropriate circumstances, of remuneration-based incentives.

The Commission is not suggesting that such variations in pay would be a panacea for overcoming current shortages of teachers. Rather, and like other policy levers, remuneration incentives should be viewed as one complementary part of a package of initiatives aimed at overcoming shortages. Formalising and extending some of the current, more implicit efforts to offer particular teachers extra pay would also help to identify the particular circumstances in which such incentives would be most useful.

In addition to the explicit and widely used location allowances for teachers in rural and remote areas, some school operators are increasingly using — often unpublicised — variations in pay to address teacher shortages in other hard-to-staff positions, including in particular subjects and some low socioeconomic status schools. The Commission considers that there would be benefit in exploring options for embedding such variation more explicitly into the remuneration framework.

Implementation issues

In endorsing the concept of explicitly paying some teachers more, the Commission recognises that implementation of any such scheme would need to address several issues.

- How to ensure that incentives are directed at areas of ongoing shortage, and that there is effective monitoring so that the appropriate parts of the workforce continue to be targeted.
- How such measures might be applied without giving rise to an overly complex salary structure — especially if there is also to be additional gradation in salaries related to professional standards (chapter 6).
- What complementary arrangements are required. As well as the degree of autonomy necessary, other relevant considerations include appropriate leadership and school governance, and effective evaluation mechanisms.

The Commission does not see such issues as being a reason not to experiment with approaches for paying some teachers more. Importantly, the current efforts by some jurisdictions indicate that it can reasonably be done. But before moving to any more formal proposal, the Commission is seeking to get a better handle on the implementation issues and how they might be best addressed.

The Commission seeks further input on the implementation issues that would arise in designing arrangements to increase the remuneration of teachers in hard-to-staff positions, and what measures should be used to address these issues.

5 Training and professional development

Key points

- Available evidence on the effectiveness of different kinds of teacher pre-service training in improving student outcomes is equivocal. It is therefore a high priority to build the evidence base on what approaches work best through trialling and evaluation of different modes of delivery, and better tracking of the impacts of training on the subsequent performance of teachers.
 - There are a number of seemingly promising avenues for improvement, including greater use of university–school partnerships.
 - A longitudinal dataset that tracks the experiences of graduate teachers over time should be developed, to enable rigorous assessment of what aspects of pre-service training, induction and professional development are most effective in improving student outcomes. This could involve either expanding the scope of the Longitudinal Teacher Workforce Study (commissioned under the National Partnership Agreement on Improving Teacher Quality) or a separate data collection.
- The states and territories have agreed to a new national system for accrediting pre-service teacher education courses, based on standards developed by the Australian Institute for Teaching and School Leadership.
 - The minimum literacy and numeracy requirement to enter accredited courses has the potential to increase the quality of the teacher workforce.
 - But, the planned increase in the minimum length of graduate courses from one year to two years under the standards should not be mandated at this stage. The significance of the potential benefits is uncertain, there could be sizeable costs, and workforce shortages could be exacerbated.
 - It is important that the review processes related to the new national accreditation system thoroughly assess whether graduate standards are being met.
- Pre-registration tests for aspiring primary teachers — such as those that the Queensland Government is currently trialling — should at this stage be left as an option for individual school operators as part of their employment selection processes, rather than be added to the national accreditation apparatus.
- Professional development could be made more effective by strengthening its link to performance-appraisal processes. Initiatives to link teacher remuneration to performance (chapter 6), and improve the quality of school leadership (chapter 8) may also improve the effectiveness of professional development.

School workers acquire and develop the skills and knowledge relevant to their roles through a mixture of structured training and practical experience. Both of these forms of learning occur during pre-service training (through instruction and practicum) and employment (through on-the-job practical experience, mentoring by other teachers, and professional development).

The quality of Australia's schools workforce is heavily dependent on how effectively these mechanisms provide the workforce with the skills they need. This chapter examines both pre-service training and professional development (including induction and mentoring), and evaluates whether there are any impediments to their effectiveness and how they might be improved. While this chapter primarily focuses on the teaching workforce, some of the issues raised are relevant to the schools workforce more broadly. The training of school leaders is discussed in chapter 8.

5.1 Pre-service teacher education

The current landscape

Prior to the 1960s, teacher training was conducted in state-controlled teacher colleges. Primary school teacher training involved a two-year course, while secondary school teacher training generally consisted of a one-year diploma of education after the completion of a three-year university bachelor degree (Barcan 1995).

Since then, initial teacher training has changed in a number of ways. The two most visible changes have been the move to conduct teacher training at universities instead of teacher colleges and the increase in the length of primary undergraduate training courses to four years.¹

Another noticeable change is that both primary teachers and secondary teachers are now trained through undergraduate and postgraduate courses. Indeed, the change in the training of secondary teachers has been so pronounced that there is an even split between the number of secondary teachers trained through undergraduate and postgraduate courses.

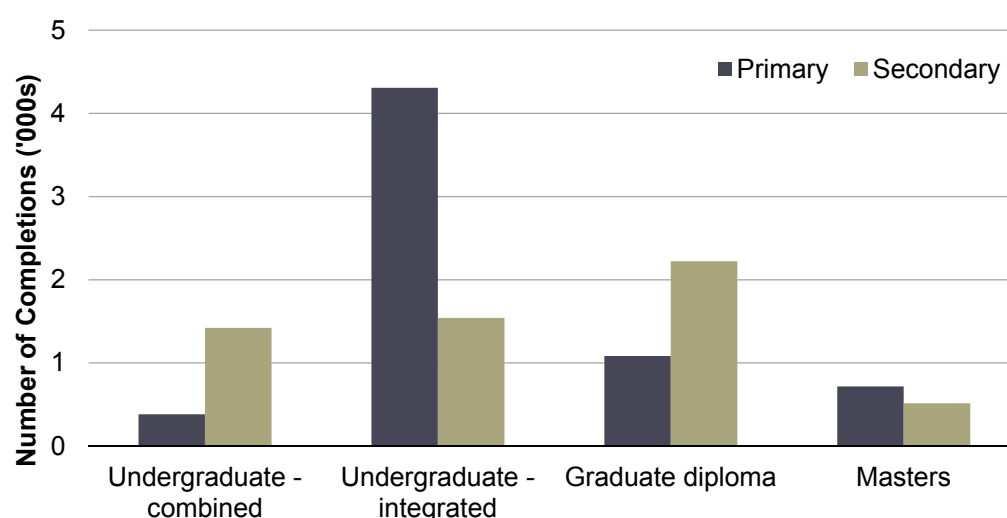
The nature of undergraduate and postgraduate training has also changed considerably. There are now two types of undergraduate (combined or integrated) and postgraduate (graduate diploma or masters) teacher training courses, available

¹ Between 1967 and 1974, the training of teachers was transferred to Colleges of Advanced Education, which were then amalgamated into universities in the 1990s (Barcan 1995).

to both primary and secondary pre-service teachers.² Of the four main course types, the integrated undergraduate degree is the most popular among pre-service primary school teachers, while for pre-service secondary teachers there is a more even spread in completions across the course types (figure 5.1).

Generally, only individuals who have completed a pre-service training program can be employed as a teacher. However, there are provisions in some jurisdictions that allow teachers to be employed while they are still completing their teaching qualification, if they are employed in an area where teacher shortages exist. While these provisions have traditionally been used on an ad hoc basis, in recent years they have been used more systematically by governments to provide alternative pathways to teaching that involve beginning teachers obtaining their teaching qualification while working full time (in either a government or private school). The most prominent examples are the Teach for Australia program and recently announced Teach Next program, which have been implemented to ameliorate skill-based shortages, especially in disadvantaged schools (box 5.1).

Figure 5.1 Pre-service teacher training completions by course type, 2009^a



^a Pre-service teacher training courses for which the field of education is classified as 'Teacher Education not further defined' and courses relating specifically to the teaching of special needs children, Indigenous students, English as a second language or physical education are not included.

Source: DEEWR (2011c).

² In a combined undergraduate course, pre-service teachers are taught subject matter knowledge as part of a separate bachelor degree, whereas in an integrated course both subject matter knowledge and teaching practice are taught within the one teaching degree. The primary difference between a masters qualification and a graduate diploma is that a masters qualification is longer (typically two years in length rather than one) and therefore includes more training relating to teaching practice.

Box 5.1 Australian Government programs providing alternative entry pathways into teaching

Teach for Australia

This program, which began in 2009, seeks to attract recent university graduates from all disciplines who have strong academic records.

Initially, participants must complete an intensive, six-week course on basic teaching skills. Following this, individuals commit to teaching in an area of educational need for two years while studying toward a Postgraduate Diploma in Teaching at the University of Melbourne, which is fully paid for by the Australian Government.

About 130 individuals began teaching under this initiative in its first two years. While initially only available in Victoria, the ACT joined in 2011 and from 2012 the program will also include Western Australia.

Teach Next

Teach Next will aim to attract skilled professionals — principally in the areas of mathematics and science — into teaching.

The intention is for participants to initially undergo an intensive, eight-week training course. Over the following two years, individuals will undertake school-based training as part of a postgraduate teacher education qualification, of which the Australian Government will fund around half the cost.

While state and territory governments have a smaller direct role in teacher training than when they operated teacher colleges, they have in recent years increased their involvement through the establishment of School Centres for Teacher Education Excellence. These centres have been created under the National Partnership Agreement on Improving Teacher Quality, and are designed to provide pre-service teachers with high quality practical teaching experience, mentoring and training in addition to that provided by pre-service training courses (DEEWR, sub. 42).

How effective is pre-service training?

Australia currently invests heavily in the training of future teachers. Through the Commonwealth Grant Scheme, the Australian Government alone will spend approximately \$10 000 on the pre-service training of each student who commences a one-year postgraduate and almost \$40 000 in the case of students completing a four-year undergraduate teaching qualification in 2012 (DEEWR 2011a). Given the size of this investment, it is important to ensure that these resources are being used effectively, and in a way that promotes good student outcomes.

However, both survey and empirical evidence raises doubts about whether this is the case. As a number of participants noted (AITSL, sub. 39; MGSE, sub. 38), surveys of beginning teachers conducted by the Australian Education Union and the Australian Centre for Education Research (Staff in Australia's Schools survey) have found that many teachers do not consider that their pre-service training adequately prepared them for teaching (box 5.2).

More specifically, many teachers feel that pre-service training places too little focus on imparting practical skills. Some criticisms of this nature are that pre-service training does not adequately prepare teachers to manage classrooms, perform assessment and reporting tasks or to communicate with parents (SCEVT 2007). Similarly, the Diocese of Toowoomba (sub. 11) argued that there is a mismatch between the content of current courses and the requirements of employers.

Of course, pre-service training cannot be expected to provide teachers with all the skills that they could ever need. As in every profession, there will be some skills or knowledge (especially those which are employer-specific) that will be most easily obtained and refined through on-the-job practical experience.

But the question marks raised by these surveys serve to reinforce some of the similar uncertainties that emerge from the empirical evidence. As noted in the Commission's report on the vocational education and training workforce (PC 2011c), international empirical evidence regarding the general effectiveness of pre-service training in improving student outcomes is mixed. In particular, several studies have found that there is little difference in the student outcomes of teachers with different types of certification — some of which involve quite minimal training prior to placement in the classroom (box 5.3).

Box 5.2 Australian survey evidence on the effectiveness of pre-service training

Australian surveys of graduate teachers suggest that many initial teacher education programs are not effectively preparing individuals for teaching. For instance, the AEU's New Educators Survey in 2008 found that only 41 per cent of new teachers indicated that their pre-service training had left them well prepared for the reality of teaching (AEU 2009b). Similarly, the Staff in Australia's Schools survey (McKenzie et al. 2008) found that in 2007:

- A majority of early-career teachers found their pre-service training helpful or very helpful in preparing them in relation to only four (primary) or six (secondary) out of 14 specified teaching skills.
- A majority of principals considered that recent teacher graduates were only well prepared or very well prepared in two (primary) or six (secondary) areas out of ten specified areas.

These and other similar surveys (SCEVT 2007), highlight several areas in which teachers think that current pre-service training courses are lacking. These include perceptions that:

- the link between 'theory' and 'practice' is weak
- some of the theoretical components of courses are not relevant.

More specifically, the surveys point to scope for improvement in regard to:

- managing a classroom
- conducting assessment and reporting
- communicating with parents — especially difficult parents.

That said, such survey results need to be interpreted carefully. One obvious limitation is that such surveys rely on teacher and principal perceptions, rather than student outcomes. The level of satisfaction that would constitute 'success' is always problematic in surveys of this nature — especially given the wider role of a university degree in imparting general knowledge. Also, the importance, or lack of some aspects, of training may not become apparent to teachers until they have been in the workforce for several years.

Box 5.3 International empirical evidence on the effectiveness of pre-service training

Most empirical evidence on the effectiveness of pre-service training examines the experiences of US teachers. Effectiveness is typically assessed by comparing student outcomes for teachers who have obtained different types of certification, which in turn have different pre-service training requirements. The three forms of teacher certification are:

- traditional certification — available to teachers who have completed an approved college education program
- alternative certification — designed to provide a pathway into teaching for professionals who have work experience and subject-area knowledge, but who do not have any teaching qualifications. These teachers are permitted to teach while concurrently completing a teaching qualification
- emergency certification — generally only issued in response to location or subject-based teacher shortages. Emergency-certified teachers are usually required to hold a bachelor's degree and may also need to pass a short form of testing. It is only granted on a temporary basis, and often requires the teacher to concurrently complete a teaching qualification.

Research that compares student outcomes for teachers with traditional and emergency certification suggests that students of traditionally-certified teachers perform only slightly better (Qu and Becker 2003).

Research that compares the effectiveness of teachers with alternative and traditional certification generally find similar student outcomes. Aside from a study by Darling-Hammond et al. (2005), which found that traditional teacher certification did improve student outcomes, studies either find no significant difference between these two categories of teachers (Qu and Becker 2003; Kane, Rockloff and Staiger 2008; Constantine et al. 2009) or that traditionally-certified teachers perform only marginally better (Boyd et al. 2006).

Teach for America is an example of alternative certification, and has been analysed extensively. Consistent with the bulk of the previous research, this work finds that there is little difference in student outcomes between Teach for America associates and traditionally-trained teachers. For example, Glazerman, Mayer and Decker (2006), Henry et al. (2010) and Xu, Hannaway and Taylor (2009) all found that Teach for America trainees were only slightly more effective than traditionally-certified teachers, especially in mathematics and science.

However, the above evidence must be qualified by the observation that there is likely to be significant variation between and within US states in the quality and characteristics of training provided under traditional and alternative certification. Furthermore, this research base often only analyses the performance of first or second-year teachers, and therefore does not assess how effectively training programs enhance the ability of teachers to learn through practical experience.

While the available empirical evidence confirms that innate ability and early on-the-job experience play a large role in determining or improving the effectiveness of teachers, this does not mean that pre-service training cannot also improve student outcomes. International research undertaken by Boyd et al. (2009) and Hattie (2009) suggests that certain aspects of pre-service training courses are associated with improved student outcomes (box 5.4).

The one Australian study which specifically attempted to analyse the effect of different aspects of pre-service training on teacher effectiveness (Louden et al 2010), was terminated prematurely due to a low response rate. The only other form of useful evidence in what the Commission has seen comes from assessments of specific training programs.

One such assessment was undertaken by the Australia Council for Educational Research (ACER) (Scott et al. 2010) to examine the newly developed Melbourne Graduate School of Education's Masters of Teaching (MTeach), which claims to employ a unique approach to teacher training (box 5.5). ACER found that 90 per cent of MTeach graduates considered that they were well prepared for teaching, compared to about 40 per cent of graduates from other courses. While this early evidence seems promising, and may support the notion that teacher training could be made more effective, it does not establish the degree to which these results are due to the program's focus on teaching as a clinical discipline or its reliance on partnerships with schools. Additionally, given the program's short history the longer-term comparative outcomes remain to be established.

The extent to which alternate pathways to teaching are more cost effective than mainstream approaches is also unclear. As mentioned in chapter 4, an initial evaluation of Australia's most prominent fast-tracking program, Teach for Australia, was conducted by ACER (Scott, Weldon and Dinham 2011), but it was primarily concerned with improving the implementation of the program after its first year of operation, rather than considering its cost effectiveness as a method for training teachers. It will be possible to draw stronger conclusions regarding the appropriateness of alternative pathways after ACER completes two final assessments which will draw on more case history. These are due to be released in March 2012 and March 2013.

Given the mixed nature of the available evidence, and the size of the investment in pre-service training, building the evidence base in this area by trialling and properly evaluating different ways of delivering pre-service training should be a high priority. One proposal to improve the evidence base is presented in section 5.3.

Box 5.4 What aspects of pre-service training are related to improved student outcomes?

Some limited international empirical evidence highlights the aspects of initial teacher education programs that are correlated with better student outcomes.

Boyd et al. (2009) analysed the effects of different aspects of pre-service training courses on student outcomes. They found that teachers tend to be more effective in the early years of their employment if their training had focused more on the work of the classroom and provided opportunities to study what they will be teaching. They concluded that good student outcomes were most likely to occur when teachers completed programs that:

- provided more oversight of student teaching
- required a capstone project (typically a portfolio of work done in classrooms with students)
- provided the opportunity to engage in actual teaching practices
- reviewed the curriculum that teachers are eventually required to teach.

That said, the authors also noted that these results were exploratory and that more research in this area is needed.

Darling-Hammond (2006) examined more effective pre-service training programs and among other things concluded that these usually:

- had a curriculum grounded in current research relating to child and adolescent development, learning, social contexts, and subject matter pedagogy
- possessed well-defined standards of practice and performance that are used to guide and evaluate coursework and practical work
- developed practical experiences that supported the ideas and practices presented in coursework.

Microteaching is one specific type of practical training for teachers that appears to have large positive results for teacher knowledge and instructional behaviour (Metcalf 1995; Hattie 2009). This approach typically involves a pre-service teacher teaching a small group of students (typically in a laboratory setting), and then engaging in a post-lesson discussion, which often will involve reviewing a recording of the lesson.

Box 5.5 Melbourne Graduate School of Education's MTeach

The Melbourne Graduate School of Education began a Master of Teaching (MTeach) course in 2008. It is a pre-service teacher training qualification with three streams — early childhood, primary, and secondary.

The program for the early childhood and primary streams is for two years. Three-quarters of the secondary stream is completed intensively in one year, after which students receive a post-graduate diploma in teaching. To receive a Master of Teaching, students must complete the remaining quarter of the secondary stream, which can be done on a part-time basis while working as a teacher.

According to the Melbourne Graduate School of Education (sub. 38, p. 1), this program represents a 'significantly different approach to the standard models of teacher preparation'. Its underpinning philosophy is that teaching is a clinical practice, where the best outcomes will occur if teachers can meet the individual needs of learners. To do this, teachers need to be able to use data to plan and implement teaching interventions.

To implement this approach, the Melbourne Graduate School of Education has attempted to increase the link between practical experience provided by practicum and what is taught on campus. Students spend three days a week on the core compulsory subjects, and two days a week undertaking teaching practice and attending professional seminars in partnership schools with the support of Teaching Fellows. These experts are teachers who are partially paid by the university, and are employed to ensure that theory that students learn in university is linked to practical experience in classrooms. The employment of these experts is the primary reason that the cost of this form of teacher training is notably higher than other courses.

5.2 Practicum and induction

Pre-service teachers have the chance to gain professional experience during the practicum component of their pre-service training course, where they teach in schools under the supervision of a mentor teacher. Specifically, this arrangement gives pre-service teachers the opportunity to implement the practices taught in training courses while it is fresh in their mind, and to improve their skills through the provision of constructive feedback and advice, in an environment where student learning outcomes are not compromised.

Structured support is also often provided to graduate teachers as part of school induction processes, which are designed to smooth the transition into full-time teaching. Generally, this support includes being provided with:

- an experienced teacher as a mentor
- professional development relevant to their specific needs

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- a reduced teaching load to allow them time to reflect on their practice, meet with their mentor, observe other classes and to undertake professional development (SCEVT 2007).

This support is generally less intensive than what is provided on practicum placements. In particular, graduate teachers tend to meet with their mentor on fewer occasions to discuss progress, and mentor teachers will only occasionally observe the graduate in a classroom situation.

The benefits of supported practical experiences

There is evidence to indicate that both practicum placements and the initial support provided to graduate teachers can increase teacher effectiveness and reduce attrition rates among beginning teachers. For instance, Boyd et al. (2009) found that pre-service courses which provide the opportunity to engage in actual teaching practices and provide strong oversight of student teaching produce more effective teachers than those that do not. A review of relevant research by Ingersoll and Strong (2011) found that beginning teachers typically have higher levels of satisfaction, commitment and perform better in certain aspects of teaching (such as keeping students on task and successfully managing a classroom) if they have undertaken induction processes.³

A number of study participants emphasised the importance of both practicum and mentoring. The Independent Education Union of Australia (IEUA, sub. 12, p 6) argued that ‘time for suitably qualified and skilled supervising teachers to spend with student teachers to mentor them is essential’. The Australian Association of Mathematics Teachers, the Independent Education Union of Australia and Jan Thomas all stressed the importance of quality mentoring of beginning teachers (sub. 3; sub. 10; sub. 12).

Governments invest in a variety of practicum and induction processes. For instance:

- under jurisdictional accreditation systems, courses are required to provide a minimum number of days of practicum placement⁴

³ A notable exception was a study by Glazerman and Seifullah (2010), which employed a randomised controlled-trial methodology and found no differences between teachers in the treatment and control groups. However, as noted by Ingersoll and Strong (2011), this study compared the effect of comprehensive induction with the generally less intensive induction already occurring in schools.

⁴ In most jurisdictions, undergraduate courses must incorporate a minimum of 80 practicum days, while graduate entry courses usually require between 45 and 60 practicum days depending on

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- under the Commonwealth Grant Scheme, the Australian Government provides universities that train teachers with extra funding (currently \$773 per teacher annually) to reflect the costs associated with undertaking practicum (DEEWR 2010a)⁵
 - state and territory education departments generally require beginning teachers in government schools to have some form of induction, and provide resources to support this (SCEVT 2007).

Similarly, Catholic systems and Independent schools associations claim to place a strong emphasis on the induction of new teachers (CEVC, sub. 13; ISCA, sub. 18).

There is scope to improve both practicum and induction programs. For example, while beginning teachers consistently rate practicum as the most useful part of their pre-service training (SCEVT 2007), many are also concerned that their training more generally does not adequately provide them with practical teaching skills. As noted earlier, surveys of beginning teachers point to scope for improvement in regard to training people how to manage a classroom, conduct assessment and reporting and communicate with parents. This suggests that either a greater amount, or a more effective deployment of, practicum is required.

Evidence regarding the prevalence of induction programs is somewhat mixed. The OECD Teaching and Learning International Survey (TALIS) of lower-secondary principals found that, in 2008, 99 per cent of relevant Australian schools had a formal induction program. Around 94 per cent had a mentoring program for new teachers (OECD 2009a). However, the ‘Top of the Class’ report concluded that there was a wide variation in the level and quality of support that is given to beginning teachers in Australia (SCEVT 2007). Similarly, the Staff in Australia’s Schools survey found that about 25 per cent of primary and 15 per cent of secondary beginning teachers did not receive any initial support, while some 20 to 30 per cent of beginning teachers who did receive an induction found it to only be of some help or no help at all (McKenzie et al. 2008).

Although some teachers will adapt more quickly to teaching and may therefore find induction less useful, given the concerns that pre-service training is not adequately providing teachers with sufficient practical skills, this evidence would imply that induction processes could be enhanced.

their length. Under the new national accreditation system, courses are required to provide 80 and 60 days practicum for undergraduate and graduate courses respectively.

⁵ From 2010, funds for the Improving the Practical Component of Teacher Education (IPCTE) program were transferred into the higher education Commonwealth Grant Scheme funding (DEEWR 2011d).

Avenues of improvement

The available evidence is not sufficiently well developed to provide a useful, generally applicable, guide to the most effective way to implement either practicum or induction. As Boyd et al. (2009, p. 435) noted, analysis of the relationships between different aspects of pre-service training (including how practicum is provided) and teacher effectiveness ‘is still in its infancy’. Ingersoll and Strong (2011, p. 227) observed that more research is needed to ‘clarify and sort out which elements, supports and kinds of assistance [for beginning teachers] are best and why’. Hence while there are again some promising initiatives, they will need to be accompanied by evaluations of their cost effectiveness.

The structure of practicum

Currently, the structure of practicum placements varies considerably between courses. For instance, most universities utilise a combination of block placements, where students are sent into schools for a number of weeks at a time, and placements where students are sent one day a week on a continuing basis. While block placements are often favoured because they provide students with continuity and the opportunity to engage more fully with the broader school environment, continuing placements provide students with the opportunity to implement teaching theory closer to when it is learned (SCEVT 2007). Similarly, courses differ in when students first commence practicum, with some courses starting practicum in the first year, while in others it starts much later.

Study participants proposed a number of approaches to improve the structure of practicum placements. These included:

- extending the practicum experience of pre-service teachers to better enable them to develop the required practical skills (CECV, sub. 13). However, this may be difficult in the current circumstances as many universities are already struggling to source sufficient practicum placements (NAFEA - Victoria, sub. 1; Centre for Educational Futures and Innovation, sub. 24)
- providing practicum experiences to pre-service teachers earlier in their training, to enable them ‘to make an informed choice in relation to their study choice’, and thereby reducing the likelihood that those unsuited to teaching will remain in the profession (Catholic Education Office - Diocese of Toowoomba, sub. 11, p. 12)
- greater use of internships, where pre-service teachers have an extended and less supervised practicum placement at the end of their pre-service training (Australian Primary Principals Association, sub. 41).

Ensuring that mentors are of high quality

A number of study participants noted that it is important to ensure that mentors of pre-service and graduate teachers are of a high quality (Queensland Catholic Education Commission, sub. 20). They contended that this could be achieved by better involving high-quality teachers in mentoring, and/or by providing training for mentors. One suggestion is to include the mentoring of beginning teachers and/or practicum placements as a part of the job description of the highly accomplished and lead teacher categories of the new 'National Professional Standards for Teachers' (CECV sub. 13; IEUA, sub. 12). Indeed, in New South Wales the mentoring of beginning teachers is already one of the roles expected of 'professionally accomplished' teachers, (NSW Institute of Teachers 2005).⁶

Some study participants also pointed to the importance of either rewarding teachers, financially and/or providing extra release time, for mentoring pre-service and graduate teachers (IEUA sub. 12). They argued that this would increase the quality of those willing to undertake those roles. In reality, this is already occurring to some extent. For instance, the NSW Department of Education and Communities (DET (NSW) 2007), through the Beginning Teacher Resource Allocation, provides extra resources to schools with graduate teachers, which can be used by those schools to compensate mentors of beginning teachers or provide them with release time. Furthermore, some teacher-training course providers, such as Victoria University and University of Tasmania, pay supervising teachers above the award rate (though this award was recently abolished) (NAFEA -Victoria, sub. 1).⁷

Another suggestion was to provide mentor teachers with more training (ISCA, sub. 18). The need for such training is already recognised in some jurisdictions. For instance, all mentor teachers in Victorian government schools receive training through the Teacher Mentor Support Program (DEECD (Victoria) 2011d). The WA Department of Education and NSW Department of Education and Communities have specialist coaches for public schools with a large number of graduate teachers (NSW Department of Education and Communities, sub. 14; Western Australian Department of Education, sub. 45). The NSW Department of Education and Communities claimed that its program had led to improved retention rates among first-year teachers.

⁶ In Queensland all teachers are required to mentor pre-service and beginning teachers under the Professional Standards for Queensland Teachers. (QCT 2006)

⁷ In October 2011, the 'Australian Higher Education Practice Teaching Supervision Award' was abolished by Fair Work Australia (Fair Work Australia 2011).

University–school partnerships

A notable innovation designed to improve the effectiveness of practicum placements is to implement formal university–school partnerships. These are intended to strengthen the links between universities and the schools which provide practicum. While the nature of these partnerships varies considerably, they often involve universities providing training and other support to supervising teachers, and a group of students undertaking practicum at the school at the one time (enabling universities to more easily monitor the practicum experience of students) (SCEVT 2007). Strong partnerships may also facilitate the involvement of schools and teachers in the development of the curriculum of pre-service training courses (Kruger et al. 2009). Indeed, in at least one case (University of Canberra) the partnership extends beyond the university’s education faculty (box 5.6).

There is significant support for university–school partnerships to play a larger role in the training of teachers. For instance, a review of university–school partnerships commissioned by Teaching Australia argued that while not all of the failings of pre-service training are practicum related, those that are ‘can be seen as being solved by enhanced partnership relations between university teacher education faculties and schools’ (Kruger et al. 2009, p. 45). In fact, the ‘Top of the Class’ report suggested that governments should make investing in such partnerships a priority. This view is somewhat supported by the early evidence regarding the Melbourne Graduate School of Education’s Master of Teaching program, which has a strong focus on university–school partnerships, as discussed previously.

Box 5.6 University of Canberra schools

In March 2011, The University of Canberra launched partnerships with University of Canberra Senior Secondary College, Lake Ginninderra, and University of Canberra High School, Kaleen.

Aside from improving the practicum experiences of pre-service teachers, and increasing teachers’ access to professional development and research, this relationship is also intended to:

- make the entrance to university and other tertiary training easier for students
- see university researchers and students from other faculties working together with school and college teachers and students.

Source: University of Canberra (2011).

The need for better evaluation

While the previously-mentioned initiatives appear to be promising ways to improve practicum and mentoring, there is little empirical evidence regarding their cost effectiveness. Therefore, before significant resources are expended at a national level on them, more trialling and evaluation is needed.

DRAFT FINDING 5.1

The provision of high-quality practicum and induction experiences for pre-service and graduate teachers plays a key role in developing an effective teaching workforce. While there are a number of promising avenues for improvement, including university–school partnerships, trialling and evaluation is needed. This should focus on better understanding what forms and combinations of practicum and induction, and what types of university–school relationships, are most cost-effective in improving the quality of beginning teachers.

5.3 A longitudinal dataset

The Commission considers that the collection of longitudinal data that tracks the experiences of recently-appointed teachers over time would be valuable as it would enable a more rigorous assessment of what aspects of pre-service training — as well as induction and professional development — are most effective for enhancing student outcomes. The Commission considers that such a data collection would be most useful if it:

- includes information on the characteristics of the different pre-service teacher training programs (including opportunities to engage in professional experiences), induction programs and professional development opportunities that pre-service and beginning teachers undertake. This information would ideally encompass:
 - the length, structure, content and delivery of these programs, and any linkages between schools and universities that are involved
 - the views of beginning teachers on the effectiveness of these programs, and their different features, in preparing them for the different aspects of teaching — for instance, how well they felt their practicum placements prepared them to manage a classroom, or to assess students' performance.
- follows cohorts for at least five years of teaching. Research suggests that practical experience obtained in the first three years of teaching significantly improves the effectiveness of teachers (Hattie 2009; Rivkin, Hanushek and Kain 2005). Therefore, to properly assess relative capacities of different

approaches (including alternative pathways) to increase student outcomes over the long term, in addition to short-term effects, it is necessary to follow teachers until the effects purely attributable to on-the-job experience taper off. Furthermore, following cohorts for these years would also capture the experiences and performance of those early-career teachers who exit the profession

- includes measures of teacher effectiveness, particularly student outcomes — though given its limitations (chapter 6) it should also embrace other sources of evidence, such as principal assessments and parent surveys
- includes teachers who entered teaching through fast-tracking pathways (such as Teach for Australia and Teach Next). Encompassing these pathways could provide valuable evidence on the suitability of alternatives to the standard form of entry
- follows multiple cohorts to assess the effectiveness of any experimentation in the delivery of pre-service teacher training which might occur in the future.

A longitudinal study of graduate teachers is already being undertaken by Mayer et al. (unpublished) with funding from an Australian Research Council linkage grant. However, at this stage this study is only tracking graduates from some selected universities in Victoria and Queensland.

A more comprehensive longitudinal data collection — the Longitudinal Teacher Workforce Study — will be commissioned under the National Partnership Agreement on Improving Teacher Quality (DEEWR, sub. 42). In addition to providing data on the career progression of beginning teachers, this study — which will follow a single cohort of pre-service teachers for two years into their teaching careers — is also intended to provide better information about the relevance and quality of teacher education courses (box 5.7).

At the time of writing this report, a contractor had yet to be appointed to undertake this study, and so the precise details about how it will be undertaken were unavailable. However, the tender document indicates that it will have some of the required elements discussed above. In particular, it will collect data on the characteristics of different pre-service teacher training programs, and the views of beginning teachers on the effectiveness of these programs. On the other hand, in its current form, the study will only run for two years and it is unclear what measures of teacher effectiveness will be included.

Box 5.7 Longitudinal Teacher Workforce Study

The Longitudinal Teacher Workforce Study will track a single national cohort of teacher-education graduates over three years — in the first year as pre-service teachers, and as teaching graduates in the two subsequent years. It is to be funded under the National Partnership Agreement on Improving Teacher Quality, with the budget for this project, together with the National Teaching Workforce Database, being approximately \$3 million.

The study is designed to gain information on the early career progression of teachers, and the relevance and quality of teacher education.

The early career progression of teachers will be tracked by collecting data on attrition and retention rates (including the factors that are correlated with them), utilisation of new graduates, mobility of new graduates, long-term intentions of new teachers, demographic characteristics of teachers, and the schools they are employed in.

The relevance and quality of teacher education will be monitored by collecting data on the different characteristics of teacher training courses, including their approaches to delivering training, how professional experience is incorporated, and assessments of the quality of content (both pedagogical and discipline-based expertise). Additionally, the Commission understands that principal assessments of graduate teacher competencies will be included in the study.

Source: DEEWR (2011e).

It may be possible to address these concerns by increasing number of variables collected, extending the length of study, and by implementing a second teacher cohort. There would be an associated cost, but it would be small compared to the national investment in teacher training and the potential benefits of improved student outcomes that could ensue from more effective pre-service training. Alternatively, the Commission's proposal could be implemented independently from the Longitudinal Teacher Workforce Study.

DRAFT RECOMMENDATION 5.1

The Australian Government should commission a longitudinal data collection that:

- ***follows a sample of recently appointed teachers for at least five years***
- ***encompasses an assessment of the pre-service training, induction and professional development that each teacher receives***
- ***includes measures of teacher effectiveness, including an indicator of student outcomes.***

The study should follow more than one cohort of graduate teachers to analyse any future experimentation in pre-service training, induction and professional development.

This study could be implemented either by expanding the scope and duration of the Longitudinal Teacher Workforce Study that is forming part of the National Partnership Agreement on Improving Teacher Quality, or by commissioning a separate study focusing on the specific matters identified above.

5.4 Screening for teacher quality

There are currently various quality-control measures in place to ensure that those graduates who obtain permanent teaching positions meet certain standards. These measures are currently being enhanced as part of the national teaching-quality reform program, with individual jurisdictions also separately introducing some changes in this area.

The current system

In order to obtain a permanent teaching position, individuals currently have to pass through a number of quality-control measures.

- First, students must gain entry into, and then successfully graduate from, a teacher training course. Gaining entry into courses involves obtaining a sufficiently high Australian Tertiary Admission Rank (ATAR) score, and possessing any pre-requisites specified by training providers. Then to graduate from a teacher training course, students must successfully pass the necessary theoretical and practical assessments conducted by the training provider.
- The teacher training course has to be accredited by the jurisdictional teaching authority. Broadly speaking, these accreditation systems are primarily designed to ensure that all students who obtain teaching qualifications meet the standards required of graduate teachers (Ingvarson et al. 2006). Teaching authorities do this by only accrediting courses which they consider adequately prepare students for the requirements of teaching.
- Employers screen potential teachers before appointing them to a permanent position. As in other career pursuits, this process can involve written job applications, interviews, referee consultations and documentation of university results. Schools may also have a firsthand experience of the capabilities of applicants, if they have been employed on a short-term contract or practicum.

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- Even after a permanent position has been awarded, schools still have the opportunity to remove a new teacher who is subsequently deemed unsuitable during their probation period.

The Commission heard some concerns from participants regarding the effectiveness of this system for ensuring the quality of graduate teachers, both in relation to the accreditation of courses and the processes by which graduates are employed. However, many were anecdotal. Moreover, no set of screening instruments will ensure that every graduate teacher given a permanent position is of high quality. Realistically, therefore, the issue is whether the existing screens do a sufficiently good job in either the current form or as modified as part of the current reform agenda.

There is currently a move to place a greater emphasis on national approaches to teacher quality control, particularly in the area of accreditation.

National accreditation system

As part of the teaching quality agenda, the process for accrediting teacher training courses is changing. The states and territories have agreed to a new national system for accrediting pre-service teacher education courses, based on standards developed by the Australian Institute for Teaching and School Leadership (AITSL) (box 5.8).

Given the lack of Australia-specific, and limited international, evidence regarding what aspects of pre-service training are most effective, training-course providers need to be given adequate flexibility to experiment with the delivery of pre-service training. At the same time, it is also important for policymakers to be aware of the potential limitations associated with certain forms of experimentation, and ensure that they are appropriately addressed. For example, the Centre for Research in Educational Futures and Innovation (sub. 24) observed that, even if teachers who are trained through fast-tracking pathways are able to rapidly acquire teaching skills on the job, there is still likely to be a short period in which their skills are below the standards of traditionally-trained teachers. Thus, to avoid disadvantaging the students concerned, these programs need to place a premium on early support for trainees.

Box 5.8 National accreditation of pre-service teacher training

In April 2011, the Ministerial Council for Education, Early Childhood Development and Youth Affairs approved a new national accreditation system for pre-service teacher training courses. It was developed by AITSL in consultation with a wide range of stakeholders, including government organisations, pre-service training providers and education unions. When implemented, the new system will replace the current individual state and territory accreditation systems.

Broadly speaking, training programs will be accredited on the basis of whether their graduates possess the skills, knowledge and attributes that are expected of graduate teachers under the new National Professional Standards for Teachers (also developed by AITSL). To this end, there are some specific features that are expected of programs in order for them to be accredited.

The accreditation of training courses will continue to be undertaken by the relevant state and territory authorities, but using agreed national accreditation processes.

The timetable for transitioning to the new system is still to be negotiated. However, the first nationally-accredited programs are unlikely to commence before the 2013 academic year. Even then, programs will not need to be separately accredited under the new system until their current jurisdictional accreditation ends.

Source: AITSL (2011b, 2011c).

In most respects the new national system for accrediting teacher training courses appears to give course providers an appropriate level of flexibility. This is achieved by linking the accreditation of courses to whether graduates meet a set of national teaching standards (AITSL 2011c), rather than being highly prescriptive about what features a training course should possess. While it may be initially difficult for teaching authorities to assess whether graduates will meet the required standards, this will be less of a problem when course providers apply for re-accreditation — as under the new system they will need to provide evidence that the standards are being achieved. It is also important that expectations of what graduate teachers should be able to do are realistic, especially given the scope for induction and on-the-job practical experience to quickly enhance teachers' capacity.

The Commission understands that the new system of accreditation will be reviewed by AITSL (amongst other changes) and emphasises the importance of this review undertaking a detailed and thorough assessment of whether the new accreditation system provides a robust system of quality control of pre-service training.

Increasing the length of graduate entry courses

The new accreditation arrangements require graduate-entry teacher training courses to be at least two years in length. This will remove the commonly used one-year graduate diploma of education as a pathway to teaching (box 5.9). The change was adopted in response to concerns that one-year courses are not long enough to adequately prepare pre-service teachers for teaching (AITSL 2011b).

While the desire to produce better-trained graduate teachers is well intentioned, in light of the equivocal nature of the evidence regarding the contribution of pre-service training, it is far from certain that the change will improve the quality of graduate teachers, and it may not be cost effective. While Loudén et al. (2010) did find that Australian masters students in their final year of study had a greater knowledge of literacy and mathematics teaching than other final year teaching students, these results should be interpreted with caution. In particular, this conclusion was based on a very small sample of masters students from just two universities. Hence, it is unclear whether it was either the specific characteristics of these programs or the length of the training that were responsible for the improved results.

Box 5.9 Course lengths under the national accreditation standards

Program standard 1.3 of the Accreditation of Initial Teacher Education Programs in Australia – Standards and Procedures states that education qualifications can be structured in the following way:

- a three-year undergraduate degree providing the required discipline knowledge, plus a two-year graduate entry professional qualification, or
- an integrated qualification of at least four years comprising discipline studies and professional studies, or
- combined degrees of at least four years covering discipline and professional studies, or
- other combinations of qualifications identified by the provider and approved by the teacher regulatory authority ('the Authority') in consultation with AITSL to be equivalent to the above, and that enable alternative or flexible pathways into the teaching profession.

Source: AITSL (2011c).

For some students these added costs — and lack of benefits — could be sufficient to dissuade them from pursuing a career in teaching. This would be of particular concern in areas like mathematics and science, where there are already shortages and where graduate salaries are already considerably higher outside the teaching profession (AMSI, sub. 31; IEUA, sub. 12).⁸ The Australian Mathematics and Science Institute (sub. 31, p. 15) claimed that extending the minimum required length of graduate-entry teacher training to least two years would have a ‘detrimental impact on supply’.

Additionally, in light of these costs, some students who wish to enter teaching may decide to enrol in a four year undergraduate teaching degree rather than undertaking a discipline-based undergraduate degree and a graduate teacher training course, as they can be qualified as a teacher in one less year. This may have an effect on the quality of those entering the teaching workforce as it is generally more difficult for pre-service teacher training courses to assess the quality of applicants at the completion of secondary school than it is after the completion of an undergraduate degree.

Given the lack of evidence and potential drawbacks, the Commission therefore considers that extending the minimum required length of graduate-entry teacher training to at least two years should not be mandated until there is compelling evidence, including from current courses, that it is cost effective.

DRAFT RECOMMENDATION 5.2

The Ministerial Council for Education, Early Childhood Development and Youth Affairs should direct the Australian Institute for Teaching and School Leadership to modify Program Standard 1.3 of the Accreditation of Initial Teacher Education Programs in Australia; Standards and Procedures, governing the length of graduate entry teacher training courses. The revised standard should indicate that two-year courses remain an option rather than a mandatory requirement.

Minimum entry-level requirements

The new system for accrediting teacher training courses also contains elements that are intended to improve the quality of teachers entering pre-service training courses. The most notable of these are the requirements which stipulate that all entrants to

⁸ The *Australia’s Teachers, Australia’s Future: Advancing Innovation, Science, Technology and Mathematics* report noted that ‘between 80 and 90 per cent of those qualifying to teach senior secondary chemistry and physics, and around 75 per cent of those qualifying to teach advanced mathematics, do so through a graduate teacher education course following completion of an undergraduate degree’ (CRTTE 2003, p. 19).

pre-service teaching courses should have literacy and numeracy skills broadly equivalent of those of the top 30 per cent of the population (box 5.10). These mandated requirements will be separate from any additional entry requirements which individual universities impose.

Almost axiomatically, these requirements have the potential to improve the quality of the teaching workforce. Of course, there are more dimensions to teaching quality than just literacy and numeracy skills. As noted in chapter 3, the capacity to set ‘appropriately challenging’ goals for students, a passion for teaching and learning, and the ability to create a positive classroom environment that fosters learning, are also important traits of a high-quality teacher. However the flexibility inherent in the new national arrangements seems to give pre-service training providers the opportunity to take other dimensions into account where relevant and necessary.

However, it is not yet clear how these requirements will be practically assessed or how they will compare to the skills of those currently entering teacher training courses.⁹ In particular, it is unclear whether these requirements will be set in relation to the literacy and numeracy skill of the whole population, or a subset thereof. In the Commission’s view, setting these requirements relative to the literacy and numeracy skills of year 12 students would seem preferable, given that older sections of Australia’s population tend to have significantly lower literacy and numeracy skills compared to the majority of the adult population (ABS 2007).

Box 5.10 Entry-level requirements in the national accreditation standards

Program standard ‘3’ of the Accreditation of Initial Teacher Education Programs in Australia developed by AITSL, states that:

3.1 All entrants to initial teacher education will successfully demonstrate their capacity to engage effectively with a rigorous higher education program and to carry out the intellectual demands of teaching itself. To achieve this, it is expected that applicants’ levels of personal literacy and numeracy should be broadly equivalent to those of the top 30 per cent of the population.

3.2 Providers who select students who do not meet the requirements in 3.1 above must establish satisfactory additional arrangements to ensure that all students are supported to achieve the required standard before graduation.

AITSL, in conjunction with ACER, is currently in the process of determining how these requirements will be practically assessed.

Source: AITSL (2011c, p. 13).

⁹ AITSL, in conjunction with ACER, is currently determining how these literacy and numeracy requirements will be expressed in terms of Year 12 scores.

Even if these minimum literacy and numeracy requirements are greater than the skills of some students currently enrolling in teacher training courses, in areas where shortages exist, they are likely to have only a limited impact on teacher quality in the short term. This is because most teachers that would be screened out by tougher entry requirements are likely to be the same teachers that already find it most difficult to gain employment. While this may be a desirable outcome in its own right, the quality of the employed workforce will not increase until the surpluses dissipate.

In sum, the Commission considers that the minimum literacy and numeracy requirements under the national accreditation system have the potential to improve the quality of the teaching workforce and may even have some ancillary benefits. However, the improvement in quality is unlikely to be substantial in the short term, particularly in primary education given the current teaching surpluses, and may be limited in the long term if there are not complementary measures to increase the attractiveness of teaching as a profession. Additionally, there is a need for these requirements to be reviewed over time to ensure that the requirements have no unforeseen effects, such as exacerbating shortages in particular areas.

Graduate-level testing

In an attempt to improve the quality of those entering the teaching workforce, the Queensland Government is currently in the process of implementing a pre-registration test for teachers, which is intended to ensure that teaching graduates have the skills required of them (box 5.11). In essence, this performs the same role as the accreditation system for pre-service training courses by ensuring that individuals who obtain teaching qualifications meet a certain standard.

Currently all employing authorities can introduce additional screening measure if desired. However, the Commission is not attracted to adding an additional layer of mandatory testing to the quality system currently in place. As Santiago et al. (2011) noted, the introduction of such a scheme risks unnecessarily reducing the public's confidence in the accreditation system. Hence, the Commission therefore considers that it is best to first determine whether the new accreditation system improves the quality of graduate teachers through a thorough review process, before adding a duplicate form of mandatory assessment.

Box 5.11 Queensland pre-registration test for primary teachers

In 2010, the Queensland Government announced the implementation of a pre-registration test for primary-school teachers in response to a recommendation by the Queensland Education Performance Review (Masters 2009). This test, which will be administered by the Queensland College of Teachers, is currently being trialled and will commence for all aspiring primary teachers in 2012.

The test will involve three separate computer-based assessments focused on literacy, numeracy and science. The assessments will test applicants' knowledge of subject content, teaching of the subject, and personal skills (for literacy and numeracy).

Candidates will be able to re-take each element of the test as many times as they wish, if they do not initially achieve a satisfactory result.

Source: QCT (2011).

5.5 Professional development

Teachers will need a greater amount of knowledge and skills over their working life than can be covered during their pre-service training. For instance, the 'Top of the Class' (SCEVT 2007) report observed that teachers will often need to:

- stay up to date with the developments in the knowledge base in their discipline area and in corresponding pedagogical approaches
- develop specific skills that complement their current skills set
- take on new functions or roles
- understand and implement new policies.

While these skills and knowledge can sometimes be developed through professional experience, more structured training — commonly termed professional development or professional learning — also plays an important role.

Depending on its purpose, professional development may be undertaken on a school-wide or an individual basis. Currently it is delivered by a mix of private operators, professional associations, and system administrators (for the government and catholic sectors). As the Independent Education Union of Australia observed, this training can take the form of:

... professional reading, collegial discussion and team work, professional reflection on students' learning, assessment and reporting, conference participation, staff presentations, in service seminars, action research projects, and formal university studies. (IEUA, sub. 12, p. 2)

Professional development is usually linked to teacher-registration processes. In most jurisdictions, teachers are required to undertake a prescribed amount of professional development in order to maintain their registration. Indeed, in New South Wales, to fulfil registration requirements, a certain portion of each teacher's professional development must come from a provider endorsed by the NSW Institute of Teachers (NSW Department of Education and Communities, sub. 14; NSW Institute of Teachers 2011a).

The linking of professional development to registration is a partial explanation of relatively high participation rates of Australian teachers in professional development. According to the OECD Teaching and Learning International Survey (TALIS), in 2008 Australia had one of the highest rates of professional-development participation among lower-secondary teachers, (96 per cent over 18 months compared to the average across all surveyed countries of 88 per cent). However, although more Australian teachers participate in professional development, they appear to spend less time in that activity. The average number days that lower secondary teachers spent participating in professional development was relatively low for Australia compared to the other surveyed countries.

How effective is professional development?

Professional development was widely viewed by study participants to be an important tool for fostering an effective teaching workforce. For instance, the Independent Schools Council of Australia submitted that:

... ongoing professional learning is vital for teachers to be able to maintain their currency of information about teaching and learning as well as to improve levels of performance and student learning outcomes. (ISCA, sub 18, p. 13)

Likewise, the Catholic Education Commission of Victoria (CECV, sub. 13, p. 15), argued that 'professional learning is crucial in providing opportunities to improve practice'.

Survey evidence suggests that the professional development undertaken by teachers in Australia is reasonably effective in improving teacher performance. For example, the 2007 Staff in Australia's Schools survey (McKenzie et al. 2008) showed that between 60 and 70 per cent of teachers thought their professional learning activities over the previous 12 months had increased their skills and capacity to perform their roles to a major or moderate extent. Similarly, the TALIS survey found that, about 80 per cent of Australian lower-secondary teachers considered the courses and workshops they participated in during 2008 had a moderate or high impact on their development as teachers (table 5.1).

Table 5.1 Lower-secondary teachers' perceptions of the effectiveness of their professional development

<i>Percentage of teachers who considered their professional development to be effective^a</i>		
<i>Form of professional development</i>	<i>Australia</i>	<i>TALIS average</i>
Courses and workshops	79	81
Education conferences and seminars	68	74
Qualification programmes	79	87
Observation visits to schools	72	75
Professional development network	74	80
Individual and collaborative research	86	89
Mentoring and peer research	73	78
Reading professional literature	66	83
Informal dialogue to improve teaching	86	87

^a Percentage of lower secondary teachers who indicated that the professional development they received in the previous 12 months had a high or moderate impact on their development as teachers.

Source: OECD (2009a).

The Staff in Australia's Schools and TALIS survey findings also suggest that the deployment of professional development could be improved. In particular, the TALIS survey established that for each broad type of professional development, a smaller percentage of lower-secondary teachers in Australia considered that it had a high or moderate impact on their development than the average of the other countries participating in the survey. Indeed, there is some empirical evidence to suggest that teacher perceptions of the impact of professional development may overestimate the actual effect on student outcomes (Hattie 2009).

Participants also raised concerns about the effectiveness of professional development of non-teaching staff, with some contending that school support staff are often required to undertake new and complex tasks (such as implementing new technology systems, managing staff, financial management and dealing with difficult parents) without appropriate training (CPSU/CSA, sub. 16).

Possible areas of improvement

Available evidence indicates that one means by which the effectiveness of professional development could be improved is by strengthening the link between professional development and performance appraisal (chapter 6) (The Catholic Education Office — Diocese of Toowoomba, sub. 11; Jensen 2011). This is a view supported by a recent review of Australia by the OECD (Santiago et al. 2011), which concluded that the provision of professional development is often not systematically linked to teacher appraisal.

While, aside from this proposal, the Commission has found limited evidence about the specific ways in which the provision of professional development could be improved, participants have suggested that in some cases institutional impediments are inhibiting the effective delivery of professional development. For instance, study participants noted that it can be difficult for some staff to undertake individual professional development as staff shortages mean that there is no appropriately-qualified teacher to replace them. This is a concern which has been explicitly raised in relation to the professional development of non-teaching staff, as well as for teachers (CPSU/CSA, sub. 16). General initiatives to ameliorate shortages (chapters 4 and 9) will obviously be helpful in this context. However, it also points to the advantages of implementing more school-based professional development, which may be desirable in any case as research suggests that it is more likely to be linked to the specific needs of individual schools (and therefore more related to student outcomes) (Hawley and Valli 1999).

In regards to non-teaching staff, some state education departments have recognised the difficulties associated with providing these staff with professional development and have made concerted efforts to provide those working in the public school system with professional development. For example, the NSW Department of Education and Communities (sub. 14, p. 11) noted that it provides ‘professional learning programs for all school administrative and support staff at every stage of their career’. However, the concerns of some participants would suggest that there remains a need for governments and schools to reconsider their approach to the professional development needs of non-teaching staff.

Many participants have noted that the effectiveness of professional development is partly dependent on the quality of individual school leaders. That is, school leaders need to accurately assess where professional development is best targeted, given the characteristics of their school and teachers. In particular, as a part of the performance-management process, school leaders have a responsibility to provide teachers with guidance as to the most appropriate form of professional development given their skill and knowledge. Hence, better professional-development outcomes should be one of the many benefits arising from successful initiatives to improve school leadership (chapter 8).

Finally, active participation in relevant professional development is more likely to be forthcoming if school workers can see a benefit. While that benefit can include improved student outcomes and increased personal satisfaction, a financial reward for being a better a teacher is also likely to encourage participation in professional development (NAFEA - Victoria, sub. 1). This could be particularly relevant for teachers who have been employed for more than ten years, given that they have fewer opportunities to have their performance recognised through remuneration.

The Commission emphasises, however, that there should not be an automatic nexus between participation in professional development or the acquisition of higher qualifications and higher pay. As discussed in chapter 6, appointments should be made through a needs-based competitive selection process. But equally, there must be a reasonable prospect of obtaining a higher position if the incentives to become more skilled are to be maintained.

6 Teacher performance

Key points

- The provision of regular feedback to teachers on how they are performing is important to facilitate their professional development. While a majority of schools can claim to have a performance appraisal system, many teachers do not receive the feedback and support they need.
- Efforts to address this issue are more likely to be effective if principals and teachers have a major role in determining how appraisals are undertaken in their school.
 - This should include the use of school-based indicators and criteria, with more than one method used to gather evidence — including an indicator of student outcomes — so that various dimensions of performance are captured.
- Central agencies can play a supporting role by providing schools with broad guidelines and templates, sufficient resources to maintain an effective appraisal system, training, and guidance on performance measures and data management.
- Study participants are invited to comment on whether processes for managing unsatisfactory teacher performance could be improved and, if so, how.
- There is limited use of performance-based remuneration in Australian schools.
 - Pay increments are notionally conditional on satisfactory performance, but are rarely withheld in practice. Nevertheless, current increment systems appear to be a cost-effective means of rewarding performance improvements typically observed in new teachers in their first few years of teaching.
 - Advanced-skill teacher positions have merit, but they generally only provide a single higher-paid classification for a relatively small number of more effective teachers. Study participants are invited to comment on the alternative of a broader performance-based career structure with several classification levels.
- Whether teacher performance bonuses are effective remains an open question.
 - Bonuses are rare in Australia, but US schools have experimented with them over many years and the results have been mixed.
 - There is still much to learn about how to design an effective bonus system for teachers, particularly in an Australian context. A current trial in some Victorian government schools will help, but is unlikely to provide all the answers.
 - Full-scale implementation of the national bonus scheme proposed by the Australian Government should be deferred. In the interim, the Government should fund smaller-scale experiments with performance pay. It could also provide further assistance to address current deficiencies in appraisal systems.

Empirical research confirms that, for a given student, schooling outcomes primarily depend on what their teachers know and do (Hattie 2009; OECD 2009c). The research also confirms, as every student, parent and principal knows, that there is marked variation in teacher effectiveness (AITSL, sub. 39; Podgursky 2009). Thus, there is considerable interest in how schools and education authorities can encourage and support their teachers to become more effective. Potential options include:

- mentoring
- professional development
- performance management (a system of appraisal, feedback and support)
- procedures for managing unsatisfactory performance
- performance-based remuneration.

These options are not mutually exclusive but inter-related. Mentoring and professional development are examined in chapter 5. This chapter focuses on the use of performance management to facilitate high quality teacher performance, as well as the related issues of managing unsatisfactory performance and performance-based remuneration.

6.1 Current approaches to performance management

The provision of regular feedback to teachers on how they are performing is important to facilitate their professional development. While a majority of Australian schools can claim to have some form of performance appraisal for teachers, it also appears that many teachers are not getting the feedback and support they need. For example, the Grattan Institute (sub. 30) observed that the current system of appraisal and feedback has serious shortcomings and little impact on teachers' careers or student learning in classrooms. The Australian Government's Department of Education, Employment and Workplace Relations (DEEWR, sub. 42, p. 19) noted that 'teacher evaluation needs to be more systematic and meaningful and provide a better indication of where teachers are at in relation to career progression'. The SA Department of Education and Children's Services (sub. 35) commented that until very recently its performance management procedures did not meet the current needs of schools. It has therefore developed a new system that involved shifting from a prescriptive step-by-step procedure to a high-level principle-based guideline.

The view that performance management could be improved is supported by an OECD survey of lower-secondary teachers in 2007-08. Around 60 per cent of

surveyed Australian teachers thought that appraisal of their work was largely done to fulfil administrative requirements and had little impact on the way they teach (OECD 2009a). Around 70 per cent thought that a teacher would not be dismissed in their school for sustained poor performance, and about 90 per cent did not think that they would receive any recognition for improving the quality of their teaching.

The findings of various recent reviews also raise concerns about performance management arrangements for Australian teachers. For example, a study commissioned by the Ministerial Council for Education, Early Childhood Development and Youth Affairs (Nexus Strategic Solutions 2009) made a number of findings.

- Most appraisal systems lacked a succinct set of criteria against which a teacher's performance could be assessed. Some system policy statements included suggestions that schools use standards as a guide, others made no reference to standards and some schools (particularly independent ones) developed their own.
- There was a multiplicity and complexity of documents associated with performance management that inhibited its usefulness for busy schools.
- Monitoring processes focused on whether appraisals were being conducted, rather than on their effectiveness. The Victorian Auditor General's Office (VAGO 2010) made a similar finding in an audit of performance management in Victorian government schools.
- Responsibility for performance management training generally resided with individual schools, and costs typically had to be met from existing resources.
- Independent school associations and catholic-education offices tended to focus on performance management for school leaders, although some did, or were starting to develop, policies for all teachers.

More recent reviews by the Australian Government (DEEWR 2010b), OECD (Santiago et al. 2011) and Jensen (2011) confirm that arrangements continue to vary between jurisdictions for government schools (box 6.1).

There appear to be no studies that have systematically documented appraisal policies for teachers in the non-government sector, possibly reflecting a continued absence of formal policies in many cases. The OECD review reported that, unlike government schools, performance management in the non-government sector may not be mandated, and there is considerable variability in objectives, number of schools with formalised programs, and the frequency of appraisals (Santiago et al. 2011). Nevertheless, there are case studies of individual schools that do have formal policies. Jensen (2011), for example, reported the use of 360-degree feedback and student surveys at Anglican Church Grammar School ('Churchie') in

Brisbane. He also reported that appraisal and feedback at Methodist Ladies College in Melbourne is based on each teacher setting clear classroom objectives, with the focus often on curriculum and classroom teaching.

Box 6.1 Performance appraisal and feedback in government schools

All jurisdictions have a system of annual performance appraisal for their government schools, with principals typically assigned responsibility for providing feedback to teachers. However, the details differ across jurisdictions.

Arrangements in South Australia, Western Australia and the Northern Territory are derived from policies used for all government employees. In the Northern Territory, classroom observation is mandatory for the development of a teacher's performance plan and performance data is a required input for performance reviews.

In other jurisdictions, policies tend to be more school specific. NSW teachers have to satisfy professional standards and show continuing efficiency, satisfactory performance and professional growth. Types of evidence expected to be used in appraisals are conferences between the teacher and principal; observations of educational programs; and a review of documentation such as lesson planning, lesson material and student work and evaluations and reports. A Teacher Assessment and Review Schedule includes the standards used to assess and develop teacher performance in alignment with the NSW Institute of Teachers' Professional Teachers Standards.

In Victoria, teachers have to demonstrate their skills against professional standards set by the education department. These describe the responsibilities for three career stages (graduate, accomplished and expert teacher).

Professional standards are also used as a reference point in Queensland schools, but they are not explicitly linked to appraisals. Queensland also differs from other jurisdictions by conducting appraisals on a team basis, rather than for individual teachers.

In Tasmania, teachers must have a performance plan that is guided by their role description. Teachers in the ACT are assessed against expected skills that are based on years of experience.

Jensen (2011) found that teachers are almost always required to provide their own evidence on how they have met performance requirements, with little consistency in the methods and types of evidence used. He further noted that only teachers in Victoria and the ACT are required to identify professional development as part of the appraisal process. However, the Developing Performance Framework used in Queensland does specify professional development as a matter to be considered at each step in its processes.

Sources: DEEWR (2010b); Jensen (2011); DET (Queensland) (2010); Santiago et al. (2011); SA Department of Education and Children's Services (sub. 35).

The absence of a systematic approach to performance management is also evident when comparing individual schools. For example, the authors of the recent OECD review noted that they had seen examples of principals establishing well-structured performance management processes, but also examples of principals who perceived performance management as simply ‘signing off’ a teacher’s salary increment and recording their professional development needs (Santiago et al. 2011). As a result, they concluded that ‘there are no guarantees in Australian schools that performance management processes are addressing the real issues and complexities of teaching and learning’ (Santiago et al. 2011, p. 86).

Moreover, the OECD (Santiago et al. 2011) and Jensen (2011) found that the identification of professional development needs is not always a requirement of performance management processes. The OECD review noted that ‘even though the necessity of professional development is widely recognised in Australia, the review team formed the view that its provision appears not thoroughly planned, fragmented and not systematically linked to teacher appraisal’ (Santiago et al. 2011, p. 88). The Catholic Education Office (Diocese of Toowoomba) (sub. 11) observed that linking performance management with professional development would help to increase the benefits from that development.

Since 2009, the Australian Government has, in collaboration with each jurisdiction, sought to facilitate reforms through the National Partnership Agreement on Improving Teacher Quality. Among other things, this provides financial incentives to establish or improve performance management systems, and improve pay dispersion to reward quality teaching (box 6.2). However, jurisdictions’ progress reports for this national partnership suggest that it has, from a national perspective, led to relatively minor changes in performance appraisal systems.¹ This is consistent with the findings of the above-mentioned reviews.

In light of the above, the Commission has concluded that there remains significant scope to improve teacher performance management. Specific areas for reform are considered in the next section. The case for change may be greater in some jurisdictions and sectors (government, catholic and independent) than others, given the variability of existing approaches. Moreover, it is recognised that some education authorities are currently in the process of reforming their arrangements. Nevertheless, all parties should be open to considering improvements.

¹ Based on jurisdiction reports on the Smarter Schools website (www.smarterschools.gov.au).

Box 6.2 National Partnership Agreement on Improving Teacher Quality

The National Partnership Agreement on Improving Teacher Quality (NPAITQ) is an agreement between the Australian, state and territory governments to deliver reforms to attract, train, place, develop and retain quality teachers and leaders in schools.

The Australian Government has allocated an indicative amount of \$550 million over 2008-09 to 2012-13 to fund initiatives under the NPAITQ. This includes \$444 million of direct funding to the states and territories, most of which will be 'reward' payments subject to meeting performance targets (assessed by the COAG Reform Council). The remaining \$106 million is to be retained by the Australian Government to fund the development of school principals (\$50 million) and joint national activities (\$56 million).

Many of the initiatives funded under the NPAITQ are not specifically for changes to teacher appraisal. However, the NPAITQ does list the establishment of, or improvement in, performance management systems as being eligible for (facilitation) funding. In addition, 'improved pay dispersion to reward quality teaching' is listed as a reform that is eligible for (reward) funding.

Each jurisdiction periodically reports progress under the NPAITQ, with the relevant reports made available on the Smarter Schools website (www.smarterschools.gov.au). Those progress reports mention a relatively small number of changes to performance management systems and associated financial rewards, including:

- introduction of a temporary more highly paid position for highly-accomplished teachers (New South Wales)
- a trial of alternative performance pay systems (Victoria)
- reviews of, and revisions to, performance management policies in government schools (South Australia, Western Australia and ACT).

Changes associated with performance management have also been reported for non-government schools, albeit on a smaller scale than for the government sector. The Catholic Education Commission of Victoria (sub. 13) noted that work was being done on identifying and rewarding high-performing teachers in Victorian catholic schools.

Sources: Australian Government (2011c); CRC (2010); National Partnership Agreement on Improving Teacher Quality; state and territory progress reports on the Smarter Schools website (www.smarterschools.gov.au).

6.2 Enhancing performance management

A one-size-fits-all approach across schools, sectors or jurisdictions would not be an appropriate response to the current deficiencies in teacher performance management. Principals and teachers should have a major role in determining how performance management is tailored to the circumstances of their school, given that they are better informed about local conditions. Indeed, without their input it is

likely that many teachers will continue to perceive performance management as a bureaucratic requirement imposed from above (Australian Education Union, sub. 28).

Central agencies can, however, support the schools they oversee by:

- encouraging all schools, including in the non-government sector, to have an effective performance management system for teachers
- providing schools with broad guidelines and templates, sufficient resources to maintain an effective appraisal system, performance management training, and guidance on performance measures and data management
- undertaking system-wide monitoring that focuses on effectiveness rather than just compliance with specific processes.

In the case of government schools, the central agency will often be a state or territory education department. Support may be best delivered through the relevant regional office of the department in many cases. Central bodies that oversee non-government schools — such as state and territory catholic education offices and independent school boards — can play a similar supporting role in their sectors. The Australian Government will continue to have a role in facilitating cooperation across jurisdictions when there is a case for doing so, such as in the development of generic standards and performance measures. In such cases, the central role might be assigned to a national agency.

The remainder of this section canvasses a range of issues that schools and central agencies are likely to encounter in seeking to improve performance management.

Teaching standards and performance measurement

In order to assess teacher performance, it is common to begin with a set of standards that describe the characteristics of quality teaching (Mancera and Schmelkes 2010). In Australia, schools have increasingly used teaching standards as a framework for performance appraisals (Ingvarson et al. 2008). To date, these standards have differed between jurisdictions, although the recently-developed National Professional Standards for Teachers may lead to a convergence of the broad framework used for performance assessment over time.

However, the current role of the national standards is to underpin teacher registration (AITSL 2011a). The OECD has cautioned that linking appraisal processes for registration with those for performance management could discourage teachers from seeking feedback on how to improve their performance (Santiago et al. 2011). There is also a risk that using the national standards as a template for

teacher appraisal would exacerbate the perception that performance management is a bureaucratic exercise (Jensen 2011). This is because the standards describe quality teaching in terms of a list of 37 descriptors that a teacher is expected to know and be able to do.²

In any case, teaching standards are not by themselves sufficient for performance appraisal because they usually only describe the ideal teacher or practice, rather than specify practical and valid measures of performance (Gerard Daniels Consulting 2009). Thus, the OECD has recommended that Australian schools should use teaching standards as a reference point, but should supplement them with school-based indicators and criteria (Santiago et al. 2011).

There is also a general consensus in the literature that appraisals should use more than one method of gathering evidence, because no single approach adequately captures the various dimensions of teacher performance (Ingvarson et al. 2008; OECD 2011c). However, what those methods should be is more contentious and schools need to make a judgement on this issue.

There are many potential ways to gather evidence (box 6.3) and it would be impractical to use all of them. In selecting which methods to use, schools can draw on a body of literature that reports the lessons from past experience, the pros and cons of different methods, and particular suites of measures that have been recommended by others. For example, Jensen (2011) advocated a system in which schools are required to base appraisals on measures of student performance, plus at least three out of seven other methods.³

The weight that should be given to student performance relative to quality teaching practice is the subject of ongoing debate. Hence, it is not surprising that an international comparison by the OECD (2009c) of performance management practices found that approaches vary, and continue to evolve, within and across countries. In Australia, the 2007-08 OECD survey of lower-secondary teachers suggests that student performance is only one of many aspects considered in appraisals and feedback, and is often not a major consideration.

² There is a set of 37 descriptors for each of four career stages (graduate, proficient, highly accomplished and lead teacher), resulting in an overall total of 148 descriptors (AITSL 2011a).

³ The seven other methods were peer observation and collaboration, direct observation of classroom teaching and learning, student surveys and feedback, 360-degree assessment and feedback, self assessment, parent surveys and feedback, and external observation.

Box 6.3 **Methods of gathering evidence for teacher appraisals**

Many different methods can be used to gather evidence for teacher appraisals, including:

- indicators of student learning, such as test scores and samples of student work
- observation of classroom practices by the principal, a peer, or an external party (such as a principal or leading teacher from another school)
- a portfolio showing examples of the teacher's recent work
- surveys of students and/or parents
- evidence of teamwork with colleagues
- teacher interviews
- tests of teacher knowledge
- teacher self evaluation
- evidence of professional development.

There is a consensus in the literature that more than one method should be used because no single approach can adequately capture the various dimensions of teacher performance. For example, classroom observations can provide insights that are not revealed in standardised tests, which often only cover specific subjects taught by a subset of teachers (OECD 2011c). Classroom observations are compulsory for teachers in the Northern Territory and inform the development of their performance plans (DEEWR 2010b).

It is also important to use evidence from more than one person because principals, teachers, peers, parents, students and external parties do not value the same teaching capacities and knowledge, do not refer to the same collection of evidence, and have different perceptions and degrees of objectivity (Isoré 2009). For example, studies indicate that principals are particularly effective at identifying the very best and worst teachers, but have less ability to distinguish between teachers within those extremes. External reviewers can assess teachers relative to system-wide professional standards and know the specific content and skills for each teaching area, but are less able to adapt to the school context, problems and values.

However, principals should have responsibility for ensuring that individual appraisals are undertaken, with this responsibility possibly delegated to a senior teacher, as is currently the common practice in Australia (Jensen 2011; Santiago et al. 2011). This ensures that appraisals take account of local circumstances, while making it clear to principals that they are accountable for performance management in their school.

Using measures of student performance

It may be superficially appealing to base teacher appraisals solely on measures of student outcomes, but how to measure and use data on student performance is particularly contentious. As noted by the Australian Education Union (sub. 28), the term ‘student outcome’ can have a range of meanings. This includes student attendance and retention rates, academic achievement, fulfilment and wellbeing, interpersonal or social relationships, and various types of participation in and contributions to school and general community life.

These wider perspectives are rarely reflected in student outcome measures, which are often based on standardised tests that only cover a subset of subjects and students. The OECD (2009c) has noted that such tests have gained popularity in the United States, but they capture only a fraction of the contribution that teachers make to student outcomes, and most teachers do not instruct in a tested grade or subject. Similar criticisms have been directed at the use of test scores in Australia, including in relation to the National Assessment Program – Literacy and Numeracy (NAPLAN) (for example, Australian Education Union, sub. 28; Australian Primary Principals Association, sub. 41; Centre for Research in Educational Futures and Innovation, sub. 24; SA Department of Education and Children’s Services, sub. 35). While the Commission considers that NAPLAN is a positive development and observes that its coverage of grades and subjects is significant, it recognises that NAPLAN does not, and cannot be expected to, cover the wider perspective of performance for every student.⁴

The partial nature of student tests could encourage teachers to focus on improving what is measured (and measurable) even if this comes at the expense of other important aspects of schooling (Australian Primary Principals Association, sub. 41; Isoré 2009; Neal 2009; OECD 2009c). This is particularly the case if test results were the sole basis for determining performance based remuneration. There may also be an incentive for teachers to avoid certain schools, and shift their efforts to students who are most likely to maximise the teacher’s chances of earning a reward — such as students who are close to a pass mark — at the expense of those who are behind or ahead (Isoré 2009; Neal 2011). Isoré (2009) noted that such an approach may even reward cheating by giving teachers an incentive to provide students with test questions and answers in advance.

A further concern arises when test results are used to give teachers feedback on how they are performing relative to their peers. The literature shows that a large

⁴ NAPLAN involves annual tests of numeracy, reading, writing and language conventions (spelling, grammar and punctuation) for all students in years 3, 5, 7 and 9 on the same days using national tests.

proportion of the variance in student outcomes is due to factors not controlled by a teacher, such as students' ability and socioeconomic background. Moreover, teachers can have an impact on student achievement for several years after having taught them. Thus, there has been interest in using statistical methods to isolate the impact that current teachers have on test scores. This involves the use of 'value-added' models that seek to control for the effects of non-teacher factors and past teaching.

It is not yet common practice for education systems to use value-added models as part of performance management, but they are used in countries with many years of experience in standardised student assessments, particularly the United Kingdom and United States (OECD 2011c).

There are a variety of technical issues associated with value-added models, such as the precise mathematical specification to be used. These issues are beyond the scope of this report, but it is apparent that there is an ongoing debate on the most appropriate methods and how to use the results. At their current stage of development, it appears that value-added models are more appropriate for comparing schools rather than teachers, because existing data and models are not yet sufficiently robust to make valid comparisons at the teacher level (Isoré 2009; Jensen 2011; OECD 2009c). Value-added models should therefore continue to be explored as a means of overcoming some of the drawbacks of raw student test scores, but not be used in isolation from other sources of evidence.

In conclusion, measures of student outcomes should, at best, only be used in combination with other evidence, such as the means of achieving those outcomes. This could include an assessment of the knowledge and skills the teacher has acquired and whether they use classroom practices that are considered to be part of quality teaching.

Stakeholder engagement

It is widely acknowledged that a performance management system is unlikely to be effective if school principals and teachers are not consulted on its design, and if they perceive the system as not being constructive or useful. Thus, engaging these stakeholders is critical. In doing so, it needs to be recognised that views about teacher evaluation range from pessimistic to optimistic (for example, Australian Education Union, sub. 28; Grattan Institute, sub. 30). On balance, the weight of arguments should favour evaluation if the system is designed to provide useful feedback and support to teachers. Nevertheless, depending on the existing workplace culture and the capacity for change (including the leadership skills of

principals), there may be a case for gradually phasing in any changes. The Australian Institute for Teaching and School Leadership (AITSL, sub. 39, p. 10) observed that time will be required for ‘broad and extensive consultation and trialling and meaningful research’ to ‘ensure performance management processes ... are focused on improvement and result in system improvement’.

Resourcing

The resources devoted to performance management is another key determinant of its effectiveness. This includes training assessors to provide constructive feedback that leads to improved teacher performance, and providing support to teachers to understand appraisal procedures and to benefit from evaluation results (Santiago et al. 2011). Moreover, there should be adequate resources to follow up appraisals with identified professional development.

Another resourcing consideration is that assessors and teachers have adequate time to prepare for, and undertake, appraisals, as well as follow-up professional development. The effectiveness of performance management is also very dependent on the capacity of leadership and management within schools. However, the OECD recently observed that Australian school principals generally seem to not have the time to engage properly in the coaching, monitoring, and appraisal of teachers (Santiago et al. 2011). School leadership is discussed further in chapter 8.

Managing unsatisfactory performance

There appears to be a widespread perception, including among teachers, that it is rare for unsatisfactory teacher performance to be addressed promptly. As noted previously, around 70 per cent of Australian lower-secondary teachers surveyed by the OECD in 2007-08 thought that a teacher would not be dismissed in their school for sustained poor performance (OECD 2009a). In Queensland, the Catholic Education Office (Diocese of Toowoomba) (sub.11) was concerned that performance management is non-existent. The WA Government (sub. 45) argued that school leaders must be given greater capacity within industrial agreements to support the management of underperformance.

Study participants submitted little specific evidence on the effectiveness of existing arrangements for managing underperformance. Moreover, the Commission is not aware of any Australian research that has examined this issue in depth. It is apparent, however, that very few teachers are ever officially deemed to be underperforming. The evidence, albeit somewhat dated, comes from past reviews in New South Wales and Victoria.

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- The Audit Office of New South Wales (2003) reported that, in 2001, only about 0.4 per cent of teachers in NSW government schools were subject to procedures for managing underperforming staff. The Audit Office argued that it was difficult to accept that, among a workforce of over 40 000 employees, so few had performance problems.
 - The Victorian Auditor General's Office (VAGO 2010) reported that, between 2004 and 2008, the Victorian education department initiated unsatisfactory performance procedures against only 61 teachers out of a workforce of around 37 000 classroom teachers. Earlier research by BCG (2003) estimated that only 0.15 per cent of teachers in Victorian government schools were rated as being unsatisfactory in their performance appraisal in a given year. In contrast, principals indicated in interviews with BCG that up to 20 per cent of teachers were 'significant underperformers'.

Jensen (2011) suggested that the limited use of procedures for managing underperformance may be explained by the absence of meaningful teacher appraisal and development processes, making it difficult for employers to justify taking action against a teacher. The incentives faced by school principals may also be a factor. For example, school systems in which there is a high degree of control by a central agency could discourage principals from addressing cases of underperformance, particularly if there is scope to use centralised systems to transfer teachers to another school.

It should also be noted that the SA Government has only recently issued a revised policy for managing unsatisfactory teacher performance (DECS (SA) 2011). The new policy provides greater flexibility to intervene in a timely fashion and will be reviewed in the second half of 2012 (Weatherill 2011).

The Commission does not have sufficient evidence at this stage to reach a conclusion on what, if any, further action is warranted to manage teacher underperformance. It is, however, apparent that this is an important issue, and thus the Commission is seeking further input from study participants.

INFORMATION REQUEST 6.1

The Commission seeks further evidence on whether current procedures for managing unsatisfactory teacher performance are effective and, if not, how they should be improved.

External monitoring and support

As noted previously, a major weakness in existing arrangements is that, where monitoring occurs, it tends to focus on whether appraisals are being conducted, rather than on the effectiveness of a performance management system. This contributes to the widespread perception that appraisals are largely undertaken to fulfil administrative requirements.

A more systematic approach to performance measurement and data management could facilitate improved monitoring of the effectiveness of performance management systems, but should not necessarily be seen as the only means of doing so. Another option would be to survey teachers on whether they consider that they are receiving useful feedback and support to become better teachers.

Where monitoring identifies scope for improvement in a school's performance management system, assistance by a central agency may be warranted to support the school. Thus, it would be useful for central agencies to have a clear framework specifying when such intervention would occur and what form it would take.

DRAFT FINDING 6.1

Many teachers are not being provided with the feedback and support they need to become better teachers. Efforts to address this deficiency are more likely to be effective if:

- principals and teachers have a major role in determining how their school undertakes performance appraisals and associated support*
- appraisals are based on school-level indicators and criteria*
- more than one method is used to gather evidence on performance — including an indicator of student outcomes — so that the various dimensions of teacher performance are adequately captured.*

Central agencies can help to improve performance management arrangements by:

- providing schools with broad guidelines and templates, sufficient resources to maintain an effective appraisal system, performance management training, and guidance on performance measures and data management*
- undertaking system-wide monitoring that focuses on effectiveness rather than just on compliance with processes.*

6.3 Performance based remuneration

The dominant system for remunerating teachers in most countries, including Australia, is a pay scale that is essentially based on qualifications and length of service (OECD 2009c).⁵ The appropriateness of this approach has been questioned because some overseas studies have found that the advanced qualifications being rewarded, and experience beyond the first few years of service, are not strongly correlated with student outcomes (Goldhaber 2009; OECD 2009c; Podgursky and Springer 2007; Springer 2009). This has fuelled interest in exploring alternative arrangements that more closely tie remuneration to outcomes, rather than to observed teacher characteristics. Springer (2009) has noted that this could have both:

- motivation effects — incumbent teachers have an incentive to raise performance
- selection effects — more effective teachers are attracted and retained.

In Australia, the Commission has previously observed that there may be a case for changing pay relativities within the teaching profession because, among other things, existing remuneration structures provide little recognition for differences in teachers' performance (Banks 2010; PC 2007). Various study participants noted that current teacher remuneration arrangements are inflexible and typically involve a 'flat' pay scale in which the difference between starting (minimum) and maximum salaries is relatively small compared to other professions (for example, Catholic Education Commission of Victoria, sub. 13; Dinham 2011a).

AITSL (sub. 39, p. 8) observed that current 'pay systems do not encourage the best teachers to remain in the classroom and many excellent practitioners move to leadership positions or leave the profession to increase their earnings'. DEEWR, (sub. 42, p. 9) claimed that 'generally there are no financial returns to reflect ability or skill in teaching, with a rigid pay scale structure, based on years of experience, that limits the ability to reward for greater effort ... This means the most able teachers are paid the same salary as the least able'.

The National Partnership Agreement on Improving Teacher Quality has the potential to facilitate change because it offers funding to jurisdictions that 'improve' pay dispersion to reward quality teaching. However, as previously noted, it seems to have involved relatively modest changes to date. This is despite a history of reports and inquiries commissioned by governments and parliaments to explore

⁵ In Australia, pay scales are primarily based on length of service, whereas qualifications are a prerequisite for entry to the profession. In contrast, pay scales for US schools also typically include a substantial component to recognise the acquisition of higher qualifications (Ingvarson et al. 2008).

performance-based pay for teachers (for example, Committee for the Review of Teaching and Teacher Education 2003; DEST 2007; Ingvarson et al. 2008; SCEWRE 2007).

Performance-based remuneration can take many different forms. Three broad categories are considered in this section:

- performance-based increments — automatic progression to a higher point on the pay scale, subject to having met performance requirements in the preceding period
- advanced-skill teacher (AST) positions — typically a single higher-paid classification for more effective teachers, subject to a selection process
- performance bonuses — lump-sum bonuses paid on the basis of recent performance.

Two or more of these could be used simultaneously.

Performance based increments

Teachers are typically subject to a system of salary progression in which they move up a pay scale in defined increments at regular intervals, usually annually, until they reach the maximum salary. In some jurisdictions — New South Wales, Victoria, and Tasmania — there is an explicit requirement that increments for government-school teachers are only granted if their recent performance has been assessed as satisfactory (Jensen 2011). The link between pay increments and performance appears to be less explicit in other jurisdictions. In the private sector, schools also typically have a system of incremental salary progression, with agreements usually providing scope to deny increments if a teacher's performance is unsatisfactory (Ingvarson et al. 2008).

While pay increments are notionally conditional on satisfactory performance, it appears that they are almost never withheld in practice (Ingvarson et al. 2008). As a result, where a teacher sits on the pay scale is largely determined by their length of service.

Length of service may be a reasonable proxy for performance improvements in the early years of a teacher's career. This is supported by past research which suggests that experience gained in the first few years of teaching is linked to an improvement in student outcomes (OECD 2009c; Podgursky and Springer 2007; Springer 2009).

In order to reward performance beyond this initial accumulation of experience, however, an alternative mechanism is required. Two options — advanced-skill

teacher positions (or the alternative of a career path with multiple classification levels) and performance bonuses — are considered below.

Another option would be to allow accelerated progression through the increment system for outstanding teachers who have not yet reached the top of the pay scale. This option already exists for government schools in Victoria and Tasmania (DEECD (Victoria) 2010a; PSMO 2010). While this can provide a useful means to reward the highest-performing teachers early in their career, it also brings forward the day when they reach the top of a pay scale and have to move out of teaching if they want to earn more. As such it may need to be accompanied by other action (as discussed below) to be effective.

Advanced-skill teacher positions

Unlike the process for receiving pay increments, teachers need to apply for an AST position and are then subject to a selection process. AST positions exist in government school systems in most jurisdictions, and use the following nomenclature:

- Highly Accomplished Teacher (New South Wales)
- Leading Teacher (Victoria)
- Experienced Senior Teacher (Queensland)
- Advanced Skills Teacher Level 2 (South Australia)
- Level 3 Classroom Teacher (Western Australia)
- Advanced Skills Teacher (Tasmania)
- Accomplished Teacher (Northern Territory).

Similar positions operate in the non-government sector, such as an Experienced Teacher (Level 2) classification in Victorian catholic schools and Advanced Skills Teacher in Queensland catholic schools (Santiago et al. 2011).

Teachers are typically appointed to AST positions for a limited tenure of up to five years (Santiago et al. 2011). For example, the position of Leading Teacher in Victorian government schools has a tenure of up to five years (DEECD (Victoria) 2011c). At the end of this period, the school principal decides whether the appointment is renewed, or the position is advertised or abolished. The Highly Accomplished Teacher position offered in NSW government schools is a temporary appointment of two years, reflecting its funding under the National Partnership Agreement on Improving Teacher Quality (DET (NSW) 2010). An extension beyond the two-year period is possible where the school participates in the National

Partnership on Low Socioeconomic Status School Communities, which has funding over four years.

The selection process for AST positions currently varies between jurisdictions and sectors. However, it appears that selection is typically based on experience, acquisition of additional qualifications and/or demonstration of quality teaching practice, but rarely an examination of evidence on student outcomes. For example, the position of Experienced Senior Teacher in Queensland government schools is restricted to teachers who have a minimum 14 years of experience, with at least four years of this as a Senior Teacher (Santiago et al. 2011). This could exclude some high-performing teachers who, on the basis of the student outcomes they achieve, should be considered for an AST position. As noted earlier, there is not a strong relationship between length of service and student outcomes beyond the first few years of a teacher's employment.

In NSW government schools, the position of Highly Accomplished Teacher is linked to accreditation by the NSW Institute of Teachers at the level of Professional Accomplishment or Professional Leadership.⁶ It is important that such 'inputs' only be rewarded if they are clearly linked to improved student outcomes. In the US school system, teacher pay typically increases with the acquisition of particular types of advanced qualifications, which the quantitative evidence suggests have little impact on student outcomes (Podgursky and Springer 2007).

Past Australian experience with the use of AST positions also provides a warning that they are not necessarily an effective means of improving student outcomes. Ingvarson et al. (2008) noted that AST positions were introduced in the early 1990s as a part of award restructuring, but did not lead to a robust link between remuneration and performance. They attributed this to flawed implementation. In particular, performance assessment was usually left to untrained school-based panels. Ingvarson et al. argued that this led to a lack of confidence in assessment processes which eventually resulted in some AST positions being incorporated into incremental pay scales. A shift to more effective appraisal processes, as advocated earlier in this chapter, might address this problem. Furthermore, appraisals would need to recognise that the level of performance required for AST positions is significantly higher than that for other teachers.

Ingvarson et al. (2008) also observed that, while the AST concept was supposed to be a pay-for-performance scheme, it sometimes transformed into a traditional pay-

⁶ A nationally-consistent approach to certifying highly-accomplished and lead teachers is being developed by AITSL (MCEECDYA 2011a). Following consultations with interested parties, it is expected that AITSL will present a final version to the Ministerial Council for Education, Early Childhood Development and Youth Affairs for endorsement in 2012.

for-extra work scheme by requiring AST teachers to take on extra duties beyond teaching students. The value of this approach would be dependent on the nature of the additional duties. For example, mentoring of other teachers would have a stronger link to teaching than taking on administrative tasks.

The risk that AST positions will remove more effective teachers from a teaching role still appears to exist. For example, guidelines for the position of Highly Accomplished Teacher in NSW government schools states that they have a reduced teaching allocation which, as a general rule, will be no greater than half the teaching load of a classroom teacher in a primary or secondary/central school (DET 2010). During their two-year appointment, they are expected to achieve accreditation at Professional Accomplishment or Professional Leadership, join the school executive team, and help develop the school plan (NSW Government, sub. 14). More generally, the Catholic Education Commission of Victoria (sub. 13) observed that currently there are relatively few senior positions available for high-quality teachers, and most of these involve less teaching.

A further issue is how the AST concept intersects with interest in a more developed career structure for teachers. The current system of relatively flat pay scales based on years of service, with the maximum usually reached within ten years, does not provide a career path for highly-effective teachers to remain in a teaching role over the longer term. By offering AST positions, schools are providing only a limited opportunity for career progression. This is particularly evident in the NSW government-school system, where only 118 people had been appointed to a Highly Accomplished Teacher position by late 2010, compared to a permanent teaching staff of around 49 000 (NSW Government, sub. 14). Moreover, as previously noted, these positions depend on funding from two national partnerships that will cease within the next few years. In contrast, the Victorian education department aims to maintain around 10–15 per cent of full-time teaching staff in a Leading Teacher position (Santiago et al. 2011). Nevertheless, the AST positions currently available across jurisdictions and sectors fall well short of a performance-based career path where teachers can progress through several classification levels on the basis of merit and the availability of a position.

Some study participants indicated interest in developing a more comprehensive career path for teachers as an alternative to performance pay (for example, ACT Council of Parents and Citizens Associations, sub. 17; WA Government, sub. 45). The Australian Education Union (sub. 28; AEU 2010) advocated a career structure based on professional standards. Professor Stephen Dinham (2011a) proposed that the new national teaching standards — with its four career stages of graduate, proficient, highly accomplished and lead teacher — and associated measures for assessment and certification, be integrated into salary and career structures. Such

proposals would address a concern expressed by the OECD that career structures in Australia are rarely linked to teaching standards and registration processes (Santiago et al. 2011). The challenge in doing so, however, will be to avoid rewarding ‘inputs’ that do not improve student outcomes. As Dinham (2011a) has noted, there is a risk that poorly-designed processes associated with a standards-based career structure could enable many unsuitable teachers to gain certification at higher levels, causing a salary ‘blowout’ with little improvement in outcomes.

In light of the above, the Commission has concluded that AST positions are a potentially worthwhile option, but the resulting benefit for student outcomes is likely to be limited. A performance-based career path with several levels could be more effective, provided that there are stringent selection processes for promoting teachers to available positions, rather than an automatic progression of teachers based on accreditation or qualifications. A further caveat is that a career structure is likely to be much more costly than current expenditure on AST positions.

Another issue is whether each jurisdiction and sector should adopt a common career structure, such as one based on the national teaching standards as suggested by Dinham (2011a). It would also be important to consider how a career structure would operate in conjunction with, as discussed in chapter 4, remuneration-based incentives to address teacher shortages.

Given the potential cost and complexity of moving to a performance-based career structure, and the limited comment on this topic from study participants to date, the Commission seeks further input.

INFORMATION REQUEST 6.2

The Commission seeks further input on what issues are likely to arise in establishing a performance-based career structure for teachers, and how those issues should be handled. This could include how to:

- *align career structures with the national teaching standards*
- *design selection processes for promoting teachers to defined positions so that there is not an automatic progression based on accreditation or qualifications*
- *ensure that the career structure is cost effective*
- *phase in the career structure.*

Performance bonuses

Lump-sum bonuses are another means of linking teacher remuneration to performance. They create an element of uncertainty about pay by requiring teachers

to repeatedly demonstrate high performance in order to keep receiving bonuses. This is in contrast to increments and AST positions, which provide a longer-term and more certain reward.

Performance bonuses can be paid on the basis of an appraisal of:

- individual teachers
- teams of teachers within a particular school, such as by grade or department
- a whole school.

In a review of teacher-pay reform, Goldhaber (2009) found no research that had assessed the efficiency of group versus individual teacher performance-pay plans. In principle, linking bonuses to teacher-level appraisals would provide a direct incentive to individual teachers. However, as noted previously, it can be difficult to attribute student outcomes to individual teachers. Teacher-level appraisals may also discourage teamwork (Australian Primary Principals Association, sub. 41). Team or school-based appraisals could address these concerns, but they can also create an opportunity for underperforming teachers to ‘free ride’ on the high performance of colleagues.

The Victorian Government is currently trialling both teacher and school-level appraisals as a basis for bonuses in government schools (box 6.4). The teacher-based trial measures performance relative to other teachers in a given year, whereas the schools-based trial measures a school’s performance relative to what it achieved in an earlier year. The number of schools participating in the trials has been lower than originally anticipated, particularly for the teacher-based trial, ‘because the magnitude of change required to current performance and development processes in schools presented a more significant challenge than anticipated’ (Victorian Government et al. 2011, p. 13).⁷ Nevertheless, a comprehensive evaluation of the trials planned for 2012 should provide useful insights on the use of performance pay in the Australian context.

⁷ The original plan was for 25 schools to participate in the teacher-based trial, but only 11 have (five schools participated in 2010, with the remaining six joining in 2011). The trial of school-based rewards was to involve 50 schools, but only 38 have participated.

Box 6.4 Rewarding Teaching Excellence trials (Victoria)

In 2010, the Victorian Government commenced a trial of two alternative models for rewarding teaching excellence — bonuses based on appraisals of individual teachers (labelled Teacher Rewards) and schools (School Rewards). Schools participate on an opt-in basis and cannot trial both models at the same time.

Teacher Rewards

This model is being trialled in 11 government schools. Participating schools receive a bonus pool equivalent to 1.5 per cent of teaching-staff base salaries. At least 80 per cent of the pool has to be paid to the top 30 per cent of teachers, based on a 'balanced-scorecard' assessment. This implies average bonuses of 4 per cent of salary.

Participating schools can customise their assessment method and rewards structure within broad guidelines set by the Government. This includes a requirement that measures (and minimum weightings) used in the balanced scorecard include classroom excellence (40 per cent), teaming and leadership (20 per cent), and professional learning (10 per cent). Assessments have to be undertaken by a panel of at least three school leaders, including the school principal. The distribution of rewards across teacher cohorts — graduate, accomplished, expert and leading — has to be broadly consistent with the school's distribution of teaching staff.

School Rewards

This model is being trialled in 38 government schools. Reward payments are made to the 20 per cent of schools that achieve the greatest improvement in performance, based on a weighted index of school performance. The index includes measures of student learning, student engagement and wellbeing, and student pathways and transitions. Different indices are used for primary and secondary schools. The indices are calculated by the Victorian education department.

Each school's performance is assessed annually to determine year-on-year improvement from a pre-assessment baseline. Reward payments total 7.5 per cent of teacher base salaries at the school, with half paid at the end of the assessment period and the remainder at the end of the following year if performance is sustained. Schools are free to allocate the monies within broad parameters set by the education department.

Funding and evaluation

The Rewarding Teaching Excellence program will run for two years and is expected to cost \$12 million. Part of the funding is coming from the Commonwealth through the National Partnership Agreement on Improving Teacher Quality. There will be an independent evaluation of the trials in 2012, with participating schools' progress assessed relative to a 'control-group' of similar schools.

Source: DEECD (Victoria) (2009c).

Independent Schools Victoria has also been trialling performance pay (ISV 2011). A teacher-quality pilot program involving twelve teachers from six member schools was run in 2009 with Australian Government funding from DEEWR. Following an independent review, the model was redeveloped in 2010 to be further trialled with schools each year from 2011 to 2013 under the National Partnership Agreement on Improving Teacher Quality. In 2011, participating teachers had to complete short pieces of reflective writings about their teaching (totalling about 11 000 words); submit student, peer and leadership survey results; have a number of classroom observations made of their teaching; and complete an interview after initial assessment. Outcomes will be reviewed and the model will continue to be refined and trialled in 2012 and 2013.

Box 6.5 Rewards for Great Teachers program (national)

The Australian Government has announced a national system of performance bonuses for teachers in government and non-government schools. It is expected that the first bonus payments will be paid in 2014 based on teacher performance in 2013.

The Government has committed up to \$9.2 million of funding from the National Partnership Agreement on Improving Teacher Quality to develop the national bonus system and supporting materials. This will include development of Australian Teacher Performance Management Principles and Procedures (ATPMPP) to specify how performance is to be assessed. The Australian Institute for Teaching and School Leadership (AITSL) has been assigned responsibility for developing the ATPMPP, which will:

- build on the National Professional Standards for Teachers developed by AITSL
- specify that assessments draw on a range of evidence, such as lesson observations, student-performance data, parental feedback, and teacher qualifications and professional development.

The Government has committed a further \$425 million over four years to implement the national bonus system:

- \$50 million will be provided to education authorities to assist them to align their performance management arrangements with those in the ATPMPP
- \$375 million will be paid out as bonuses, based on performance in 2013 and 2014.

The Government expects that bonuses will be paid to the top 10 per cent of teachers and will be worth up to 10 per cent of their salary. Based on the current number of full-time teachers and their remuneration, the Government forecast that:

- around 25 000 teachers will receive a bonus payment
- bonuses will be around \$5 400 for a teacher in the first few years of their career and \$8 100 for teachers with the most experience.

Sources: Australian Government (2011a); DEEWR (sub. 42); Garrett, Gillard and Swan (2011).

The Australian Government has announced a national bonus scheme for government and non-government schools, with the first bonus payments to be paid in 2014 based on teacher performance in 2013 (box 6.5). The details have yet to be agreed with the states, territories and non-government schools, but the Government has indicated that it expects bonuses of up to 10 per cent of salary to be paid to the top 10 per cent of teachers.

Lessons from past experience

Any attempt to introduce a bonus system should be informed by the long history of experiments with performance-based pay in schools. This history goes back to at least the nineteenth century, when Australian, English and US schools paid teachers according to student results, as assessed by tests and visiting inspectors (Podgursky and Springer 2007; Ingvarson et al. 2008). By the early twentieth century, this approach fell out of favour because, among other things, teachers were found to be using practices of doubtful educational value to secure their incomes (Ingvarson et al. 2008). As a result, the dominant remuneration system over the past century has been the ‘input-based’ pay scale based on a teacher’s level of education and/or experience. This has fuelled a persistent concern over many decades that teachers’ pay is not linked to outcomes, and led schools to periodically experiment with performance-related pay, particularly in the United States. Considerable funding has been provided for this in recent years — including \$US400 million for the US Teacher Incentive Fund in 2010 — and it appears that examples of performance-related pay now exist in almost all US states (NCPI 2011; USDE 2010).

Examples of performance-based pay also exist on a smaller scale in a handful of other countries, including the Australian schemes mentioned above (DEECD (Victoria) 2009c; ISV 2011; OECD 2009c). For example, in Singapore, teachers are eligible for bonuses equivalent to one to three month’s salary based on their rating in an annual evaluation. In the Netherlands, schools are able to award performance-related allowances or bonuses, with the conditions under which they are paid and the amounts awarded determined by the school within its personnel budget.

Despite the extensive experience over many years, there is surprisingly little empirical evidence that has rigorously tested the effectiveness of performance-based pay in improving student outcomes. The evidence that does exist is mixed, suggesting that performance pay has the potential to improve outcomes, but further experimentation and evaluation will be required to demonstrate this and identify the characteristics of a highly-effective bonus system (box 6.6).

Box 6.6 Empirical evidence on performance-based pay for teachers

The evidence on teacher performance pay is mixed. A number of studies have found no impact. For example, recent evaluations of a three-year trial of bonuses in New York schools found no improvement in student outcomes (Fryer 2011; Marsh et al. 2011). Similarly, Glazerman and Seifullah (2010) found no evidence of an increase in student test scores associated with a system of performance bonuses and more highly-paid positions in Chicago schools. Another example is a three-year trial of bonuses for maths teachers in Nashville, which did not yield consistent and lasting gains in student test scores (Springer, Ballou, Hamilton et al. 2010).

However, some studies have found a positive link between performance pay and student outcomes. The Victorian Government (DEECD (Victoria) 2010a) summarised several of these in the case it made for its trial of teacher bonuses (reproduced in the table below, with student outcomes based on standard tests of maths and languages). Another example is Springer, Lewis, Eglert et al. (2010), who found that an incentive-pay system operating in Texan schools since 2008 had a positive impact on student test scores.

<i>Study</i>	<i>Country</i>	<i>Model type</i>	<i>School type</i>	<i>Average reward size (% salary)</i>	<i>Standard deviation improvement per annum</i>
Winters et al. (2008)	US	Teacher	Primary	5–20	0.15–0.22
Figlio and Kenny (2006)	US	Teacher	High school	10–20	0.04–0.06
CTAC (2004)	US	Teacher	High school	~2 per objective	0.03–0.08
Muralidharan and Sundararaman (2006)	India	Teacher	Primary	~5	0.15
	India	School	Primary	~4	0.08
Angrist and Lavy (2004)	Israel	School	High school	1–2	0.1 (approx)
Lavy (2002)	Israel	Teacher	Grades 10 & 12	6–25	0.2 (approx)

Such results should be interpreted with care. For example, Figlio and Kenny (2006) cautioned that the correlation they found between US teacher incentives and student test scores could be due to better schools being more likely to adopt teacher incentives, rather than the incentives themselves. Similarly, the OECD (2009c) warned that US evaluations are often positive, but must be considered in light of the voluntary participation. More robust evidence comes from a handful of randomised trials in India, Israel and Kenya, with the Indian and Israeli results being positive (Springer 2009). The relevance of the approaches and results to Australia should be treated with caution.

Thus, further research is required. Podgursky and Springer (2007) perhaps best summed up the situation as one where the empirical literature is not yet sufficiently robust to prescribe how systems should be designed, but it does make a persuasive case for further experimentation. This should include robust evaluation, preferably involving randomised trials with control groups of similar schools and teachers, and detailed data that measures student outcomes.

At present, critics are able to point to a long-term pattern of performance-based remuneration schemes being dropped after a relatively short period, suggesting that such schemes typically fail to meet expectations. For example, the OECD (2009c) noted that performance-based pay systems developed by a number of US school districts in the 1960s and 1970s were rejected by principals and teachers because the basis for teachers receiving a reward was unclear. Similarly, a widely-cited critique by Murnane and Cohen (1986) argued that most US attempts to implement performance-based pay up to the mid 1980s failed because it was impractical to observe and measure all aspects of teacher performance. Other arguments have included that performance-pay schemes are ill suited to schools' team-based culture and the non-financial motivations for teachers to be in the profession (OECD 2009c; Podgursky and Springer 2007; Springer 2009).

On the other hand, Springer (2009) argued that US compensation reforms in the 1980s and 1990s had a troubled history because they focused heavily on educational inputs and processes, whereas current reforms focus more on rewarding educational outputs. This is becoming increasingly possible because comprehensive school datasets are now being collected by governments (Goldhaber 2009; OECD 2011c; Podgursky and Springer 2007). The availability of such data was also a factor in making Victoria's trial of bonuses feasible (DEECD (Victoria) 2009c). These data collections should also make it somewhat easier to evaluate the effectiveness of future experiments with performance-based pay. This does not, however, guarantee that all trials will be successful, as evidenced by the most recent US examples mentioned in box 6.6.

Where to from here?

Clearly there is still much to learn about how to design an effective bonus system for teachers. This will inevitably require a continuation of the process of trial and error that has occurred over many years. The Victorian experiment with performance bonuses is therefore a welcome development. In contrast, the limited information currently available on the proposed national bonus scheme makes no mention of experimentation with different approaches or ex post evaluation.

A further reason for taking a more cautious approach than envisaged for the national bonus scheme is that there is considerable scepticism among key stakeholders about the concept of performance-related pay (for example, ACT Council of Parents and Citizens Associations, sub. 17; Australian Education Union, sub. 28; Catholic Education Commission of Victoria, sub. 13; Catholic Education Office (Diocese of Toowoomba) sub. 11; National Association of Field Experience Administrators, sub. 1; National Catholic Education Commission, sub. 7; Queensland Catholic

Education Commission, sub. 20; Queensland Department of Education and Training, sub. 40; SA Department of Education and Children's Services, sub. 35). As noted previously, a performance management scheme is unlikely to be effective if stakeholders are not convinced that it is useful.

Study participants also had specific concerns about the proposed national bonus scheme. The Queensland Department of Education and Training (sub. 40) noted that the Australian Government had not explained how a national scheme could operate across a diverse range of schools. It observed that Queensland has a large number of small (one or two teacher) schools as well as a sizeable distance-education component. The Department also claimed that the proposed scheme is inflexible, not aligned with the new national teacher standards, and could have a significant impact on school workloads.

The WA Government (sub. 45) was also concerned that a national approach is unlikely to take account of the circumstances of individual schools. It further noted that a national scheme would be inconsistent with schools working towards greater autonomy. It also argued that performance pay for individual teachers would be divisive because education is moving towards a multi-disciplinary team approach. It therefore expressed a preference for the alternative of rewarding schools for achieving targets.

A further issue is that the proposed national bonus scheme would only provide bonuses to 10 per cent of teachers. As Neal (2011) has noted, few research papers have formally explored the design of teacher incentive systems, but having a low probability of reward may cause some teachers to treat the incentive as a lottery and not change their behaviour. Moreover, it could be argued that the budget allocated to paying bonuses — around 1 per cent of salary expenditure (based on 10 per cent of teachers receiving a 10 per cent bonus) — is too small to cause a widespread change in teachers' behaviour.

Given the above, the Commission has concluded that the full-scale implementation of the proposed national bonus scheme should be deferred. In the interim, it is likely to be more useful to fund smaller-scale experiments with performance pay that build on the Victorian trials and evaluate the results using control groups of similar schools and teachers.

One way of organising future experiments would be for the Australian Government to have a broad national agreement with the states and territories that they receive funding in return for trialling one or more systems of performance pay in schools. Bilateral agreements with each jurisdiction could specify the details, giving each state and territory scope to experiment with one or more model. Common guidelines

would be needed to ensure that robust evaluations were undertaken and that results could be compared across trials.

Using at least some of the funding allocated to the national bonus scheme to address current deficiencies in teacher appraisal and feedback would also be of benefit in that it would target a more pressing concern, and be an important prerequisite for the effectiveness of any future bonus system. This could include funding for appraisal training, gathering evidence on performance from more than one source, and external monitoring. While the current proposal for the national bonus scheme includes about \$60 million to develop and adopt performance management arrangements, it appears that this is for a particular one-size-fits-all model that would apply nationally. As noted previously, a more appropriate approach would be to allow the principal and teachers in each school to tailor arrangements to their local circumstances.

DRAFT RECOMMENDATION 6.1

The Australian Government should defer the full-scale introduction of its proposed national bonus scheme for teachers (Rewards for Great Teachers), given current uncertainty about how to design an effective bonus system. In the interim, the Government should finance smaller-scale experiments with teacher performance pay, building on recent trials in Victoria and involving control groups of schools and teachers to enable robust ex post evaluation. The Government could also provide further assistance to schools to address current deficiencies in teacher appraisal and feedback.

7 Workforce composition and innovation

Key points

- Many schools have responded to critical staffing pressures with their own innovations in workforce deployment.
- However, there appears to have been less consideration by policymakers about how changes in job design and workforce composition might improve system-wide performance, including to overcome persistent workforce pressures or raise the professional status of teachers and other school workers.
- Instead, policymakers have tended to focus on reducing class sizes, despite mixed evidence about the effectiveness of this approach.
 - Further across-the-board reductions in class sizes are unlikely to be a cost-effective way of improving student outcomes.
 - The ‘right’ class size will vary according to school and student-specific educational circumstances.
- A range of approaches to increase the responsibilities of para-professionals, better define the role of principals, and provide greater flexibility in classroom operation could offer new opportunities to improve student outcomes or free up resources that could be better allocated within the system.
 - But judgements about which of these options would be most appropriate for particular contexts are best left to educational professionals.
- Hence, the Commission has focused on impediments to such workforce innovations being adopted.
 - Weak mechanisms for sharing, trialling and evaluating ideas imply that a coordinated mechanism for disseminating workforce-related research would be useful.
 - Broader school-sector policies and initiatives — including school autonomy, industrial relations arrangements and the National Professional Standards for Teachers — can also influence opportunities for innovation.

Central to ensuring the ongoing good performance of Australia's schools is their responsiveness to changing conditions over time. As outlined in chapter 2, schools have faced (and will continue to face) a broadening cultural and language-background mix of students, growth in the role of technology in and outside the classroom, and shifts in parental and community expectations about what schools can and should do for students. Such factors will have sustained impacts into the future.

On the supply side, the size and profile of the teaching workforce has inevitably changed over time. Looking ahead, challenges in the recruitment and retention of teachers will be compounded by the relative attractiveness of other career opportunities (chapter 4). By extension, those tighter labour market conditions will increase the costs of drawing more (and higher quality) resources into the schools sector. As such, although a policy approach of increasing the numbers of teachers will remain important, policymakers must also have regard to whether workforce resources can be used in better, more cost-effective ways.

One pertinent area in this regard is the overall structure of the schools workforce. Although there has been experimentation at the school level with changes in job design and workforce composition, there appears to have been relatively less consideration at the policy level of how such changes could be harnessed for system-wide improvements. This chapter considers the degree to which structural impediments to innovation exist, and how these might be addressed.

7.1 Why examine workforce structure?

On its surface, the modern classroom looks different from its predecessors of decades past. Many young students may be more comfortable using a computer than pen and paper, while chalk and blackboards are increasingly giving way to interactive 'smart' whiteboards and data projectors. Likewise, the manner in which teachers run their classes has also changed. At the individual level, teachers have an array of pedagogical techniques at their disposal, giving them greater latitude to interact with students in ways better tailored to different learning styles. And sector-wide, the responsibility of teachers to educate students has been supplemented by broader student welfare objectives, as well as by various assessment and reporting requirements.

Individual schools have often adapted to these changing circumstances, sometimes to great effect. But as this section outlines, there is unrealised potential for education authorities (government departments, regulators and Catholic education offices) to proactively identify and facilitate beneficial changes in workforce

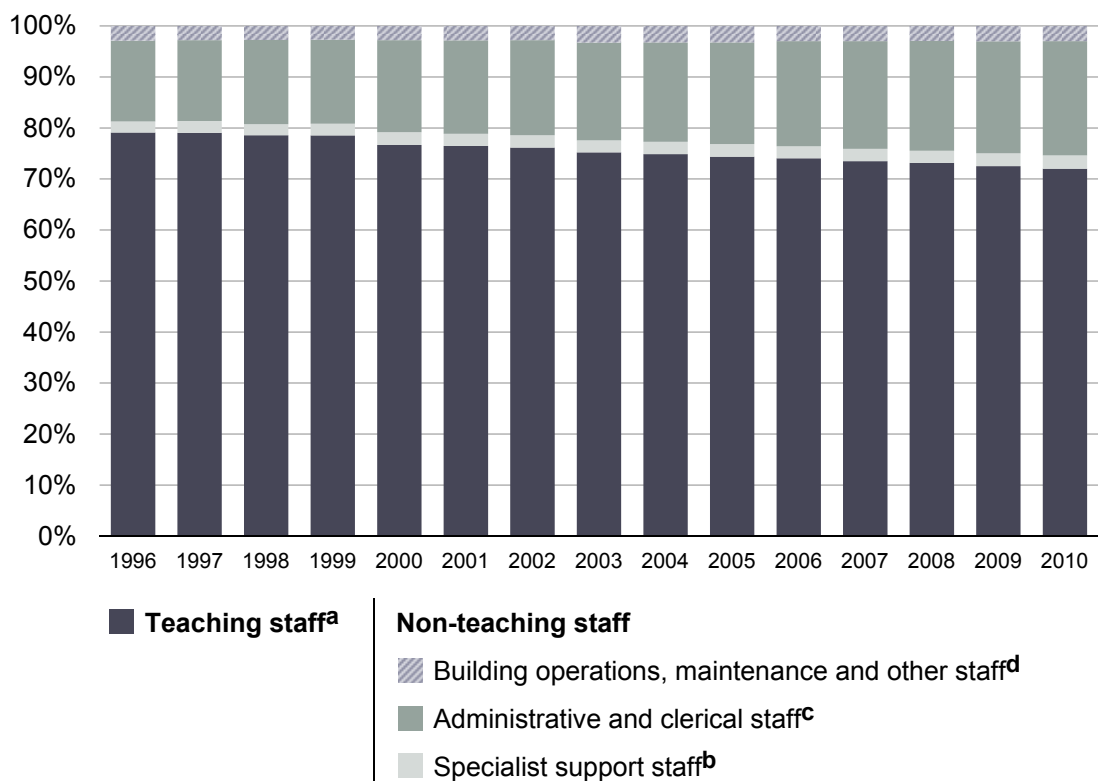
structure. As Tasmania's Department of Education stated, 'job design is an area which has evolved over a number of years without a great deal of strategic intent' (sub. 33, p. 8).

Evidence of changes in workforce structure

At a high level, there have been subtle changes in the overall composition of the schools workforce, with the share of teachers (out of total school employment) declining from 79 per cent in 1996 to 72 per cent in 2010 (figure 7.1). Much of the proportional change in the non-teaching workforce came from staff classed as 'administrative and clerical' (including such roles as teacher aides, library assistants, school administrators and Indigenous support staff), who increased from 16 to 22 per cent of the total schools workforce. This trend was broadly replicated across government and non-government sectors.

Figure 7.1 Schools workforce composition, 1996–2010

Full-time equivalent employment in various job categories as a proportion of total schools workforce (government and non-government sectors)



^a Includes principals, teacher librarians, chaplains and tutors engaged by the school. ^b Includes school counsellors, social workers and career advisers. ^c Includes office staff, teacher aides and assistants. ^d Includes school nurses and canteen staff.

Source: ABS (*Schools, Australia*, Cat. no. 4221.0).

While there is no firm evidence to explain the modest decline in the share of teaching staff in the overall schools workforce, it does not appear that it has been driven by any comprehensive system-wide changes in job design. The National Catholic Education Commission suggested that the ‘increased regulatory and accountability burden imposed by governments’ (sub. 7, p. 5) had contributed to the growth in the non-teaching workforce in that sector. Although anecdotal, this broadly conforms with widespread comments from participants about the growing administrative requirements for schools (and the increased demands these place on teachers). This is likely to be more pronounced in independent and Catholic schools, which in many cases have little or no centralised support, as well as for ‘autonomous’ government schools in those jurisdictions that have devolved responsibilities from central education departments.

In those systems where decision-making powers (particularly regarding employment) are centralised, there will necessarily be limits on how schools can innovate. And even where greater school-level autonomy exists, there may still be other impediments to change (section 7.3).

Despite these factors, schools have not stood still. Teachers have embraced different pedagogical techniques, and schools have experimented with a range of programs and strategies to meet the needs of students, parents and local communities.

Teese (2007) argued that schools in rural and remote areas, and schools serving students predominantly from low socioeconomic backgrounds or who face other types of educational disadvantage, are far more likely to innovate to meet critical needs. For example, in some jurisdictions, non-teacher specialists may be issued a ‘limited authority to teach’ that allows them to run classes where a suitable teacher cannot be attracted to the role (chapter 4). Specialised community workers have been used to enhance the cultural relevance of classes for Indigenous students. Likewise, cultural support officers have been able to help schools manage the needs of migrant students (particularly in the case of refugees). Such appointments can often be effective in helping to address specific issues of disadvantage.

Class size

While schools have adopted innovations at the local level, policymakers have tended to respond to staffing pressures by reducing the number of students per class (box 7.1). Class size reductions have been pursued ostensibly with the objective of improving student outcomes. All else being equal, such reductions also serve to reduce teacher workloads.

Box 7.1 **Class size and student performance**

Research on the impact of class size on educational outcomes is decidedly mixed.

- Much of the contemporary debate is inspired by US research — chiefly the work of Krueger and Hanushek. Krueger (1999) found that students in smaller classes perform better than those in larger classes. By contrast, Hanushek (1999) did not identify across-the-board benefits from smaller average class sizes.
- Data for Australia are poor, but Jensen (2010) concluded that class size reduction was an expensive policy approach, delivering only minor improvements (at best) to student performance. Leigh and Ryan (2011) identified class size reductions as a possible contributor to an observed decline in school productivity.
- Internationally, Woessmann (2007) contended that class size only influenced student outcomes where the quality of the teaching workforce was relatively low. Hattie (2009) emphasised the role of pedagogy — that teachers may need to adapt teaching techniques to achieve any benefits that might be offered by smaller classes.

While there are various interpretations of the quantitative evidence available, one of the few areas of general agreement among educational experts is that changes in class size will affect different types of students in different ways. For instance, while unconvinced of widespread gains for the average student, Hanushek (1999) suggested that smaller class sizes were more likely to be beneficial for early primary school students, students with specific learning difficulties, or students from educationally disadvantaged backgrounds. Data — both Australian and international — are typically too patchy to be able to disaggregate effects on specific groups of students.

Even at the broad level, there may be reasons to suspect the empirical results misstate the effect of reducing average class sizes. As one example, not all studies account for the relationship between class size and teacher quality, and how this indirectly affects student outcomes. Specifically, to reduce class sizes (while still educating the same number of students), more teachers need to be recruited. And, assuming that higher quality teachers are employed first, then — *at any point in time* — each additional teacher that is hired will be of relatively lower quality than the last.

On the other hand, *over time*, class size reductions could have a positive effect on teacher quality. From a teacher's perspective, larger classes represent more tests, projects and essays to mark; more student report cards to write; and more families to communicate with. How much this extra work effort matters to any individual teacher is highly variable. However, holding pay levels constant, a reduction in class size should be expected to increase the overall attractiveness of teaching as a profession — aiding the recruitment and retention of school workers, and likely improving average teacher quality in the process.

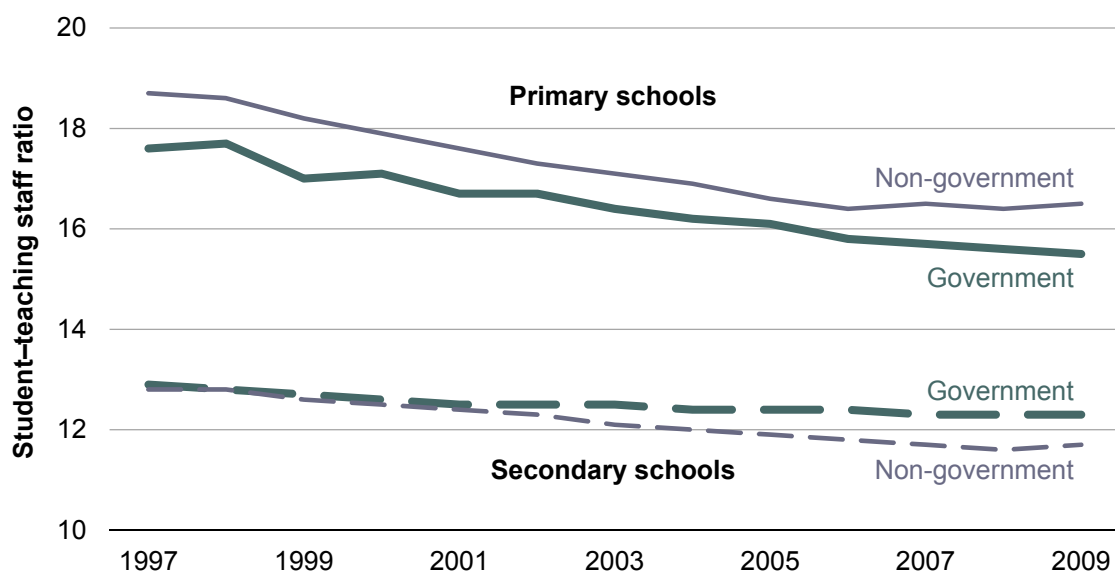
The point to emphasise is that, despite widespread research, the net effect of class size on educational outcomes remains ambiguous. As such, good policy making requires judgement on where changes in class size hold the credible prospect of being beneficial (as well as where they are likely to have limited impact), rather than adopting a 'one-size-fits-all' approach.

According to Leigh and Ryan (2011), average student–teacher ratios in Australia fell by 43 per cent between 1964 and 2003. ABS data on student–teacher ratios suggest that this trend has continued through recent years (figure 7.2).

Although the scale of this reduction has varied across jurisdictions, it is not clear — at least in the most recent period — that the cost of this approach has been matched or exceeded by the benefit of significantly improved educational outcomes. With average class sizes for Australian primary and lower secondary schools now below 24 students (OECD 2011b), the merits of seeking further system-wide reductions become more questionable due to diminishing returns to students (at least relative to the costs).

However, this does not necessarily mean that further changes in class size will be inappropriate under any circumstances. The Commission recognises that there are a range of conditions — including in terms of addressing educational disadvantage and special needs (chapter 9), as well as managing the transition to school for early primary students — where better targeting of resources might usefully involve smaller classes. By the same token, there may be other contexts where larger classes could facilitate the adoption of different approaches with greater benefit —

Figure 7.2 Student–teacher ratios^{a, b}, 1997–2009



^a Student and teaching staff numbers are both calculated on a full-time equivalent basis. Teaching staff include non-classroom teachers, such as principals. ^b Although the terms are sometimes used interchangeably, student–teacher ratios are different from measures of class size. Student–teacher ratios cover all teaching staff within a school, including principals or other full-time qualified teachers with limited teaching loads. This means, in general, student–teacher ratios will be lower than related measures of the average number of students in classes.

Source: ABS (*Schools, Australia*, Cat. no. 4221.0).

including, perhaps, changes in job design and workforce composition (see below). This notion of context dependence was endorsed by many participants, such as the Independent Education Union of Australia, which concluded:

... it is reasonable to say that classes should not generally exceed a certain number of students, and should be smaller towards the earlier years of schooling, but the optimal class size really depends on several factors: student profile, subject content, and physical environment. (sub. 12, p. 7)

Tailored approaches to class size can be relatively harder to accommodate within a highly centralised system of education administration. For example, as chapter 11 notes, industrial agreements may constrain adjustments at the school level by establishing system-wide targets for class size. In the Commission's view, it is preferable for judgements about the 'right' size for a particular class to be made at the school level (with appropriate reference to system-wide requirements, including resourcing constraints).

7.2 Job design and workforce composition

It is widely acknowledged that the quality of the teaching workforce — and, as a subset of this, the calibre of school leaders — is paramount for good student outcomes (chapter 3). Likewise, the role of parents in supporting educational performance is well known.

Less frequently recognised is the contribution made by para-professionals, specialists and other non-teaching staff — the quality and mix of whom are also important to a well-functioning school system. In many cases, non-teaching staff have been central to innovations in workforce structure, and will likely continue to be so in the future.

Whether teacher, principal, other school worker or parent, the roles of all members of school communities (and the relationships between them) are relevant to issues of job design and workforce composition. As this section discusses:

- some workforce innovations might improve student performance, respond to changing student needs, or release resources that can be better deployed elsewhere in the system
- new approaches in job design and workforce composition may help policymakers to overcome long-term pressures within the system (such as funding constraints, and current and prospective teacher shortages), in turn improving workforce planning capacity in both the government and non-government school sectors.

The role of school leaders

Shifts in some jurisdictions towards greater autonomy for government schools are a significant factor in the evolution of school leaders' roles. The traditional educational-leadership function of principals is increasingly being supplemented by managerial duties — decision-making over school finances and staffing being among the more challenging aspects. Even in relatively centralised school systems, the consolidation of schools and broadening of curriculums has meant that a myriad of specialised leadership positions have often been established.

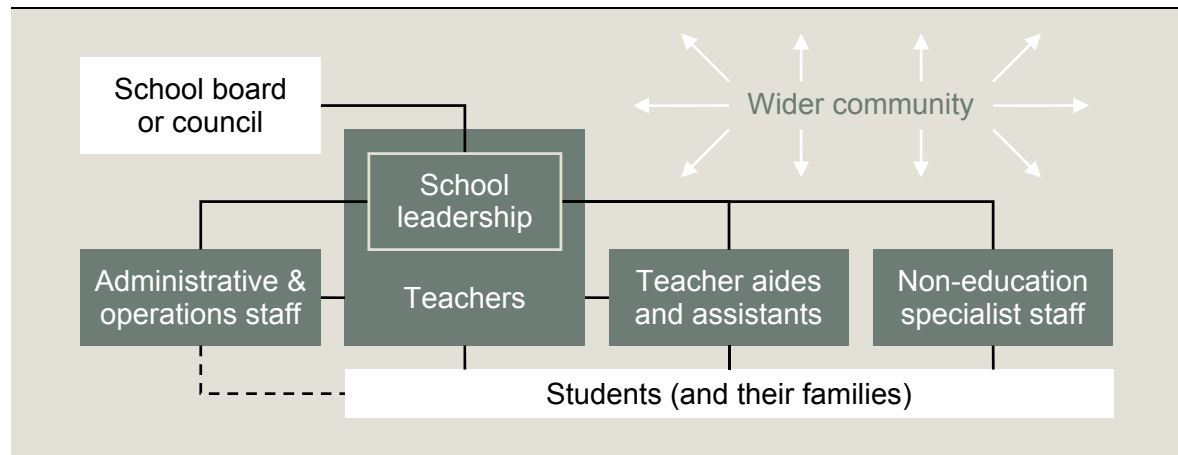
A variety of aspects of school leadership (and particularly the role of leaders in an environment of autonomy) are canvassed in chapter 8. But to summarise, the Commission considers that there is scope for further refinements in the composition of the leadership workforce — including in the interaction with non-teachers, such as finance managers and bursars — which may bolster school performance.

The role of para-professionals and specialist support staff

Teachers' interactions with non-teaching workers (and potential workers) are essential in any consideration of workforce structure. This is illustrated in figure 7.3, which depicts a common model for organising relationships between different components of the schools workforce.

- Teacher aides and assistants provide direct support to teachers and students in a range of contexts, such as integration aides for students with a disability, Indigenous and cultural support officers, non-teacher library assistants and science laboratory technicians.
- Although in many cases their interactions with students are more limited, clerical staff in school offices, building maintenance workers, canteen operators and others all provide valuable support in school administration and operation, in turn contributing to the overall culture of their schools.
- To facilitate students' learning (and in some cases to direct help to their families), specialist support in non-educational domains is required. For example, schools benefit from the services of health professionals such as school nurses and child psychologists, as well as counsellors and student welfare coordinators (who may at times also be teachers).
- Additionally, while not explicitly part of the schools workforce, the contributions of the wider community — including parent volunteers, former students and local businesses — are important for schools to be able to deliver their services. (Among other things, community figures can play a valuable role in school governance, such as by serving on school boards or councils.)

Figure 7.3 **Schools workforce structure: a stylised model^a**



^a These categories are not intended to directly correspond with the ABS terminology noted in figure 7.1.

Recognising the increasing expectations placed on the school system, non-teaching professionals and para-professionals have progressively been used to assume responsibilities that were once the preserve of teachers. Proposals for how non-teaching staff might be better deployed focus largely on facilitating role specialisation (for teachers and non-teachers alike). Study participants have offered many suggestions to this effect including:

- more administrative support for teachers, particularly in areas such as research capacity and records management, and to handle accreditation and registration requirements (Independent Education Union of Australia, sub. 12; ACT Council of Parents and Citizens Associations, sub. 17)
- greater career progression and skills development for teacher aides, with different paraprofessionals able to concentrate on specific areas of student need (Catholic Education Office — Diocese of Toowoomba, sub. 11; Department of Education — WA, sub. 45)
- improved training of teachers on how to best use teacher aides (Independent Education Union of Australia, sub. 12)
- improved training for support staff to assist teachers in dealing with specific pressures, including student behavioural issues and technology (Department of Education — WA, sub. 45)
- using graduates with discipline-relevant qualifications (but without teaching qualifications) to provide specialist support to students who are underperforming or, alternatively, *overperforming* for their level
- expanding the involvement of health workers and counsellors in schools, particularly to strengthen early detection and support mechanisms for students with mental illness (Queensland Catholic Education Commission, sub. 20)

-
- appointing ‘parent liaison officers’ to improve the quality of communications between schools and families (Australian Parents Council, sub. 19)
 - enhancing the role of information and communications technology systems managers within schools to better identify opportunities for technology use in the classroom, and to provide advice to teachers on emerging trends that may relate to student educational outcomes and welfare (such as ‘cyber bullying’)
 - better use of in-school careers advisers to foster links between schools and employers, and to improve the ‘job readiness’ of students looking to enter the workforce.

Of course, without additional resources, transferring responsibilities from teachers to other school workers will necessarily increase the workload of the latter. The Community Public Sector Union/Civil Service Association of Western Australia (sub. 16) argued that a variety of types of school support staff already face ‘excessive’ workload pressures. This trend may be compounded by a reduction in community volunteer support, requiring schools to reassign some duties to paid positions (Independent Schools Council of Australia, sub. 18). And, as with the teaching workforce, attracting support staff into hard-to-staff schools can be very challenging — particularly in remote areas. (One option suggested by the WA Department of Education, sub. 45, would be for governments to provide support for schools to hire staff from their local communities. Such assistance could be targeted in the form of structured ‘up-skilling’ programs.)

Additionally, caution is justified about how such changes would affect teachers. For example, the Catholic Education Commission of Victoria noted that ‘there remain questions about what work of teachers could realistically be transferred, and whether the amount of work so transferred would have a significant impact upon teachers’ workloads’ (sub. 13, p. 11).

While the precise benefits of individual changes in job design and workforce composition are unclear (especially in the absence of trials), it is certainly conceivable that such innovation could have a positive effect on student outcomes. This is especially the case if changes facilitated greater role specialisation within the workforce and enhanced the capacity for schools to deliver more personalised support to individual students and their families. Similarly, workforce innovations have the potential to assist in those areas facing a shortage of qualified teachers (chapter 4). And greater use of para-professionals could also free up teachers for professional development, performance appraisal and the mentoring of new staff — all of which would be expected to have a positive effect on teacher quality.

The role of teachers

Consistent with the view that ‘the traditional solo teacher model requires reconsideration given the demands placed upon modern teachers’ (WA Department of Education, sub. 45, p. 12), many schools have already trialled or fully implemented changes in how their classrooms operate.

Many participants to this study provided ideas about the role of teachers, including how their work within the classroom has changed and might change in the future.

- The Catholic Education Commission of Victoria (sub. 13) observed that the broadening of the school curriculum has resulted in the establishment of subject-specialist positions within primary schools — for instance, arts, music and foreign language teachers.
- Subject specialisation in primary schools has likewise been facilitated by running larger classes with two (or more) teachers. For instance, such an approach might be applied in composite or multi-age classes in primary schools, creating teams of teachers who individually complement each other’s relative strengths in different aspects of the curriculum.
- Job-sharing arrangements could similarly encourage specialisation, with part-time workers being appointed to complement each other’s skill sets. In regard to school leaders, the SA Department of Education and Children’s Services (sub. 35) noted that greater job-sharing could help maintain the involvement of teachers who have become parents (and might otherwise leave the profession entirely to raise their children), or are approaching retirement (and could be tempted to stay in the workforce longer if they were not required to work on a full-time basis).
- Multi-teacher classes might also be helpful in the context of new teachers entering the profession, as an adjunct to staff mentoring programs (Catholic Education Office — Diocese of Toowoomba, sub. 11).
- A broader range of teaching styles could be facilitated through greater diversity in class sizes, ranging from focused small-group tutorials to large lecture-style classes (particularly in secondary schools).
- Schools might allow for differentiated roles and levels of responsibility among their teachers. For instance, some teachers could be given greater responsibilities over issues such as curriculum design and implementation, allowing other teachers to focus more on the quality of their interaction with students.

Facilitating innovation

The usefulness of different options for job design and workforce composition will generally be context dependent. Their efficacy within any school environment is likely to depend on the quality of school leadership, the needs of students, the mix of existing staff, and the availability of resources to support new initiatives. To this end, judgements about which measures would be the most worthwhile are best made by practitioners at the forefront of education delivery, in conjunction with education authorities who can provide the necessary policy and funding support.

In this context, the Commission's focus is on removing potential system-wide impediments to workforce innovation. Accordingly, the next section considers how barriers to innovation might be reduced, and how changes in institutional settings might support schools in adjusting job design and workforce composition to better meet the needs of their staff and the students, parents and local communities they serve.

7.3 Impediments to workforce innovation

There are several factors that may limit changes in job design and workforce composition in the school sector. The costs of new approaches can often be clear (and sometimes significant) up front, while the prospective benefits are less certain and generally spread over time. Moreover, given the long-term effect that education has on students (and the potential difficulty in offsetting any negative impacts) school leaders, policymakers, parents and the community may be understandably cautious about changing a system that — at the aggregate level — is working reasonably well.

Such constraints on innovation are evident in virtually any environment, and do not (of themselves) represent market or policy failures requiring correction. Rather, they are a valid part of the decision-making process about whether to change existing practice. That said, these can be exacerbated by other factors, such as poor availability of information and institutional rigidities, which are of legitimate policy concern.

Managing innovation at the school level

In any context, successful innovation is dependent on affected parties adapting to new circumstances. Without broad agreement amongst stakeholders about the merit of reform, successful implementation can be very difficult.

For those who have become accustomed to particular processes and ways of working, learning how to adjust can be difficult. In the case of the schools workforce, specific factors are likely to exacerbate the challenge of handling change. For instance, longer-serving workers who are familiar with one set of techniques may be less comfortable with adopting new technologies (and teaching practices associated with them). Such problems may be compounded by the trend of a generally ageing workforce (chapter 2). Meanwhile, younger students' familiarity with those technologies will tend to foster the expectation that these should be integrated into the classroom experience.

At times, the views among staff and parents about the educational impact of a proposed change can be highly polarised. The degree of any aversion to change can vary across schools depending on their individual circumstances. As such, resistance can be difficult to target from a (system-wide) policy perspective. However, workforce and community concerns can be ameliorated through competent management of any transition, and by employing confidence-building measures to address concerns. These include:

- investing in training and professional development to promote the requisite skills, and boost the capacity of the workforce to change
- reviewing and sharing information on new workforce practices, including from other relevant industries and overseas
- using limited trials and pilot studies to test innovations before contemplating wider adoption
- maintaining an effective evaluation regime and disseminating the results of evaluations as appropriate
- establishing processes to amend or abandon changes in job design or workforce composition that fail to achieve desired outcomes.

Training and development, while important, can only succeed if suitable professional development and mentoring programs are available (and if workers productively engage with the opportunities offered), and if a school's culture encourages reflection and innovation.

Significantly, changes have a greater prospect of success where they have a sound basis, and are well supported by school leaders, staff, parents, students and other relevant members of the community. Communication is the key.

Evaluation and dissemination of results

A good evidence base is critical for broader policy formulation. As indicated above, good information can help build support for change. More broadly, there is little capacity to identify the most promising avenues for reform without reliable and accessible information on ‘what works’.

The range of different school systems, both by sector (government, Catholic systemic and independent) and by jurisdiction (within Australia and overseas), means that there is extensive scope for different workforce innovations to be applied. Less evident is the extent to which the lessons learned from approaches in one system are shared with (or even noted by) other systems.

Some study participants (for example, Catholic Education Office — Diocese of Toowoomba, sub. 11) indicated that information on workforce innovation is typically shared between employers, across professional organisations and through education unions. This can often be useful, particularly where high levels of trust between parties can help provide encouragement for change.

That said, the degree to which ideas are spread depends on the quality of the relationship between different departments, administrations or school leaders. Where connections are weak, good ideas can be slow to spread. Also, information sharing through informal ‘networks’ of education professionals may not always prevent duplication of effort, a particular concern if one system pursues an approach that another system had previously discovered was less than fruitful.

In addition to ‘on the ground’ experimentation, there is a relatively rich research base regarding school education. Bodies such as the Australian Council for Educational Research and university education faculties are involved in a range of education research fields (such as pedagogy and education leadership), which can foster and inform workforce innovation. And as a complement to this, many educational consultants advise on pilot studies and program design.

However, without coordination (and particularly given the range of other issues commanding the attention of education authorities and school leaders), such information is unlikely to consistently filter through to the people who could make a practical difference with it.

Taken together, although there is much useful information already available, policymakers could help disseminate that information more effectively — and in so doing, foster improvements in job design and workforce composition.

Improving the information flow

The Commission has considered various options that could take better advantage of the existing ideas and information about workforce innovation.

- A direct mechanism would be to establish a dedicated institutional structure for workforce innovation. Such a body could actively conduct and commission research about the schools workforce, and could also provide a means for trialling and evaluating different workforce innovations.
- Similarly, an existing educational policy body could be tasked with disseminating and evaluating the results of schools workforce research and pilot studies.
- The most minimal option to encourage improved flow of information would be to establish a ‘clearing house’ online database. A repository of this kind would provide schools, government departments, system administrators and researchers with a central destination to discover and share information on new approaches and ideas on workforce innovation.

Faced with a similar issue in its 2005 study into the health workforce, the Commission advocated the first option, recommending the establishment of a health workforce improvement agency — since implemented as Health Workforce Australia. Principals Australia (sub. 37) identified this approach as having merit for the schools sector. (As discussed in chapter 8, Principals Australia has also called for the profession to take responsibility for developing its professional standards, rather than these being promulgated, as now, by the Australian Institute for Teaching and School Leadership (AITSL).)

Insofar as the schools sector has a credible institution in AITSL for promoting professional standards and (more generally) informing workforce best practice, the creation of a dedicated workforce innovation agency for the schools sector may only serve to duplicate some of the functions already being performed. As such, and given the broader context of a policy environment that has seen many recent changes (with still more in prospect), it is the Commission’s judgement that the costs of creating a new agency are likely to outweigh the benefits.

AITSL has already established processes for sharing ideas and resources on school leadership development. (Further details on AITSL’s School Leadership Development Strategies Clearinghouse are contained in chapter 8.) This particular resource could be extended to provide information on innovation across the workforce more broadly. Indeed, some participants suggested that they saw AITSL moving towards this sort of role (for example, Catholic Education Office — Diocese of Toowoomba, sub. 11). Given that the workforce innovations of many

schools are responses to local needs, a particular emphasis should be placed on collating different approaches and experiences at the school level.

By design, a clearing-house model would rely very heavily on the willingness of individuals and organisations to engage with it. As such, there remains a risk that many good ideas might still fail to rise to the surface and, indeed, that results from less-successful innovations might not be shared at all.

However, better dissemination may be encouraged if there is some mechanism to allow schools and policymakers to compare their results, and in turn identify whether there might still be further gains that could be achieved through alternative approaches. Such evaluation need not be particularly formal — particularly as burdensome processes will tend to discourage participation — but would offer a broadly like-for-like basis on which the quality and applicability of available information could be assessed.

Hence, any dissemination role assigned to AITSL should be supplemented by an evaluation function. Additional funding may be warranted to develop AITSL's capacity in this area.

DRAFT RECOMMENDATION 7.1

The Australian Institute for Teaching and School Leadership (AITSL) should expand its online School Leadership Development Strategies Clearinghouse to promote the dissemination of research — including the outcomes of pilot studies and school-level trials — relating to schools workforce composition and job design. Such a resource should draw together experiences across all school sectors and jurisdictions, including from overseas.

In addition, AITSL should establish a mechanism for evaluating such research to assist schools and education policymakers in identifying the most promising avenues for workforce innovations.

Supporting regulatory and policy changes

While good management can overcome many localised hindrances to innovation, bureaucratic impediments are likely to prove more intractable for individual schools (Cuttance 2001). There are many interactions between workforce innovation and other institutional aspects of school education policy. Such policy areas, which can raise the costs of innovation or preclude innovation outright, include:

- centralised decision-making in some jurisdictions (chapter 8), such that schools have little authority over how they can use their resources, which can complicate

efforts for school-level experimentation

- industrial relations arrangements (chapter 11), which can limit the capacity to trial new workforce initiatives
- teacher registration requirements based on professional standards (chapter 5), which — if too narrowly defined or applied — might preclude opportunities for changes in job design and workforce composition.

As indicated, these policy considerations are discussed in more detail elsewhere in the report. However, a general principle for education authorities is that maintaining sufficient flexibility in different policy settings will underpin the capacity of schools to remain responsive to changing workforce and community needs.

8 Leadership and school autonomy

Key points

- Strengthening leadership at the school level could improve student outcomes by promoting quality teaching within schools, improving the responsiveness of schools to the needs of students and the local community, and enabling better management of resources.
- School sectors and jurisdictions are pursuing various approaches to improve the range and depth of school leaders' skills. Measures that are likely to enhance school leadership include:
 - investment in soundly-based training and professional development for school leaders
 - robust protocols for evaluating school leaders' performance, drawing on external oversight by relevant education authorities and school boards and councils
 - improving management capacity by strengthening the role of non-teaching administrative staff.
- A further critical consideration is the extent to which the centralised control of schools limits the scope for principals and other school leaders to exercise leadership. The significance of this constraint currently varies between jurisdictions and sectors, but the trend is toward schools having greater autonomy:
 - Non-government schools, and independent schools in particular, have traditionally enjoyed greater autonomy than most government schools.
 - In the public sector, Victorian schools typically have the most autonomy; Western Australia is progressively implementing an Independent Public Schools program; and a general move to autonomy has been foreshadowed in New South Wales, which currently has the most centralised system.
 - The Australian Government has announced a new initiative — Empowering Local Schools — to encourage greater school autonomy in all jurisdictions and sectors.
- The greater school autonomy being facilitated by recent and foreshadowed policies is welcome, provided it continues to be implemented strategically, taking account of each school's characteristics; and schools have the necessary leadership skills and governance arrangements. There should also be support from central agencies on matters such as training, teacher standards, and curriculum.

Through their direction and guidance, principals and other school leaders influence the overall ethos of their school community, the quality of education provided and, in turn, the performance of students. As such, efforts to improve school leadership are likely to be intrinsically beneficial.

The importance of school leaders is heightened where a greater range of responsibilities are exercised at the school level — as is the case for independent schools and those government and Catholic schools that operate autonomously within their respective systems (detailed in section 8.3). Given a trend towards self-management of schools, consideration should be given to what powers can sensibly be devolved — not solely based on the merits of differing degrees of autonomy in their own right, but also on the capacity of school leaders (and their schools) to assume those additional responsibilities.

In short, the scope for school leaders to influence outcomes will be relatively low if they have few leadership responsibilities to exercise. And just as significantly, without the right leadership skills in place, the potential benefits of school autonomy are considerably less likely to be realised.

8.1 The role of school leaders

The role of principals, assistant principals and other executive-level staff members can vary considerably, depending on the degree of decision making that is devolved to them, which itself will depend on the jurisdiction and sector (government, Catholic or independent) in which they operate (section 8.3). Providing a snapshot of the range of functions and responsibilities of primary school leaders (which are relevant to secondary school leaders as well), the Australian Primary Principals Association suggested that principals require:

- skills to ‘engage with stakeholders — school governing body and parents, teachers and administrative staff, system administrators and jurisdictions, and, most importantly, students’
- ‘a practical knowledge of governance structures’ — both in terms of the legal framework, and the relationship with external agencies
- ‘well-developed and future-focused decision-making and management skills’ that can ‘lead the community’
- decision-making ability ‘in regard to the school’s finances, physical environment, facilities and staffing levels’

-
- ‘the insight to build an effective team in line with sound employment practices’ and ‘the capacity to consult and negotiate in a collaborative framework’
 - ‘the ability to supervise and mentor staff’, requiring ‘a thorough knowledge of curriculum and pedagogy together with the experience to be actively involved in teacher professional development’ (sub. 41, p. 5).

Empirical literature stresses the importance of school leaders for good educational outcomes. Leithwood et al. (2004) suggested that approximately one quarter of total school effects on student outcomes can be attributed (directly and indirectly) to school leadership. A meta-analysis by Hattie (2009) found that the most significant impacts of leadership come from its influence on teachers’ professional development and performance appraisal. He also found a significant benefit from leaders’ resourcing decisions and organisational goal setting.

Professional standards

A desire to reinforce school leadership quality has motivated the development of a National Professional Standard for Principals by the Australian Institute for Teaching and School Leadership (AITSL), which has been endorsed by all states and territories (box 8.1). The standard provides high-level guidance on ‘what principals are expected to know, understand and do to achieve their work’ (AITSL, sub. 39, p. 11).

The standard is unlikely on its own to underwrite the quality of school leaders. But it might provide a consistent benchmark across the sector, and be used as a foundation for devising programs to enhance school leadership. AITSL stressed the potential use of the standard in improving professional development opportunities for current and aspiring school leaders (sub. 39). Additionally, the standard could feed into performance appraisal regimes for school leaders (although an evaluation report for an early pilot study of the standard indicates that this is not its intended purpose — see Dinham 2011b).

Engagement with the profession

How beneficial the standard is will necessarily hinge on its application. As AITSL acknowledged, this will in part be driven by how education authorities and school boards and councils choose to adopt the requirements and practices contained within the standard. But it will also depend on whether principals themselves accept the merits of such an approach.

Box 8.1 **National Professional Standard for Principals**

The National Professional Standard for Principals was signed off by the Ministerial Council for Education, Early Childhood Development and Youth Affairs in July 2011. As with the National Professional Standards for Teachers (chapter 5), the standard for principals is in an embryonic phase, with implementation plans still being developed. Notably, and in contrast to the standards for teachers, there is no separate registration process for school leaders to which the National Professional Standard for Principals could be linked.

At the broad level though, the standard appears to encapsulate some common-sense notions. These are covered in three ‘leadership requirements’, which are given effect by five ‘key professional practices’.

Leadership requirements

- *Vision and values:* Principals provide educational, professional and moral guidance, which are in turn imbued in the ethos of the schools they lead.
- *Knowledge and understanding:* Principals should be aware of relevant and contemporary education sector research, as well as applicable laws and policies, and know how these should be applied in the school environment.
- *Personal qualities and interpersonal skills:* Principals must work with others, adapting to different situations as necessary. They should resolve problems, build trust and provide a positive learning atmosphere for staff and students.

Professional practices

- *Leading teaching and learning:* Principals must promote effective teaching methods, and implement a curriculum that meets students’ needs. Underpinning this is quality assessment of student learning and teacher performance.
- *Developing self and others:* Principals should appraise their own skills and take responsibility for their own professional development. They should encourage the professional development of their staff, and identify and guide the development of prospective school leaders.
- *Leading improvement, innovation and change:* Principals are integral to driving change within their schools. They should base proposed improvements within their schools on evidence, and ensure effective monitoring and evaluation of innovations.
- *Leading the management of the school:* Principals should ensure that available resources are deployed efficiently within their schools. Accountability is to be achieved through collaboration with school boards, parent groups and others.
- *Engaging and working with the community:* Principals will embrace diversity within their school communities, creating a tolerant, inclusive environment that accounts for the holistic (that is, not purely educational) needs of their students.

Source: AITSL (2011a).

One issue in this regard is whether principals feel they have been sufficiently involved in the framing of the standard. AITSL noted that the standard was ‘developed through active consultation and tested by the profession’ (sub. 39, p. 10). But Principals Australia (sub. 37) reported that only 25 per cent of respondents to a survey of its membership believed that there had been appropriate engagement in relation to the standard’s development.

Principals Australia further contended that a key problem associated with the standard is the use of AITSL (an Australian Government owned entity, rather than an industry body) to promulgate it. Instead, it suggested a ‘profession-owned approach’ (sub. 37, p. 4) — that is, the profession itself be tasked with refining and adopting the standard — with AITSL to assume purely a monitoring function.

In general terms, there is a strong case for principals to be actively involved in the development and implementation of any professional standards for their profession. (Indeed, given that the National Professional Standard for Principals is the first of its kind in Australia, such participation is all the more important.) And to the extent that principals feel that they have not been engaged in the process, there would be benefit in AITSL considering the quality of its relationship with the profession.

Nevertheless, at this time, the Commission considers that a wholesale change in direction would be precipitate, and that incremental adjustment to refine the process already in train is likely to be more appropriate (if changes are required). This would allow the standard to be bedded down and properly evaluated. Should material concerns about the standard and its implementation have become apparent at that juncture, then further consideration would be warranted about options for improvement.

8.2 Underpinning leadership quality

Training and professional development

Leadership quality will depend highly on the skills of those in leadership positions. In part, this will be driven by innate abilities, which are refined over time through learning and practice. Indeed, the diverse paths for school leaders’ career progression (which are in many regards more developed than those available to strictly classroom teachers) provide considerable opportunities for ‘on-the-job’ learning.

But the skills required of school leaders may not always come naturally to teachers, whose training is (appropriately) focused on operating within schools rather than

running them. As teachers are not required to undertake specialised graduate or postgraduate qualifications to assume school leadership positions, strengthening the skills base in this area is chiefly the role of professional development courses. Hence, quality training and professional development opportunities need to be available. And to get the best value from such programs, education authorities and existing leaders must have effective mechanisms in place for identifying the next generation of ‘talent’.

The schools sector appears to have many processes for developing the skills of school leaders, as well as for identifying and nurturing prospective leaders.

- In the case of government schools, state and territory education departments have developed a range of training and development programs to foster school leadership. In support of these, some jurisdictions have established specialist bodies, either on their own (such as Victoria’s Bastow Institute of Educational Leadership) or jointly with training providers (for example, the Northern Territory’s Centre for School Leadership, Learning and Development at Charles Darwin University).
- Catholic education authorities also run programs for current and aspiring leaders in their own systems. For example, the Catholic Education Office of Melbourne has a leadership standards ‘framework’, which guides aspiring teachers through leadership and principal ranks (and, eventually into mentoring roles), and will open a Catholic Leadership Centre in 2012 (Catholic Education Commission of Victoria, sub. 13).
- State and territory associations of independent schools provide a range of support services to their members in relation to professional development — including, in at least New South Wales and Queensland, dedicated leadership centres (Independent Schools Council of Australia, sub. 18).
- Across all sectors, AITSL offers a professional development program, ‘Leading Australia’s Schools’. The program, which is managed in conjunction with the Hay Group and the University of Melbourne, currently provides support and training to 80 principals each year.

As with professional development opportunities for the wider schools workforce (chapter 5), there is a mixed scorecard across jurisdictions and sectors. Australia’s education authorities tend to focus on pre-service and in-service training opportunities for school leaders, but there are also alternative approaches overseas that might provide lessons for policymakers and schools here (box 8.2).

Box 8.2 International experiences

Other countries adopt a mix of approaches to professional development for new and experienced principals, including both pre- and in-service training, as well as formal induction processes for new appointments (see table). At whatever stage they are offered (or mandated), there is significant diversity in professional development opportunities across countries, with programs ranging from short courses to post-graduate qualifications, and the content of courses depending on (among other things) the level of autonomy within school systems.

International school leadership development approaches, 2006-07^a

Training type	Australia	Austria	Belgium	Chile	Denmark	England	Finland	France	Hungary	Ireland	Israel	Netherlands	New Zealand	Norway	Nth Ireland	Portugal	Scotland	Slovenia	Spain	South Korea	Sweden
Pre-service	■	■	■	■	■	■	■		■	■	■	■	■	■	■	■		■	■		■
Induction		■			■	■	■	■		■	■		■		■		■	■			■
In-service	■		■			■	■	■	■		■				■		■	■	■	■	

^a Government schools only.

Source: Pont, Nusche and Moorman (2008, p. 109).

Specific examples from overseas

- Teachers in **Finland** are required to obtain a Master's degree in order to teach. However, professional development programs for principals are far more variable, with training requirements (if any) set at the municipal level. Various universities have established post-graduate courses in educational leadership, though there are no national standards to govern these.
- In **England**, new school leaders are required to obtain a National Professional Qualification for Headship through a National College for School Leadership. The qualification is granted after completion of a 4–12 month program, which includes attendance at conferences and seminars, one-to-one interaction with a mentor, peer learning opportunities and practicum (NCSL 2011a).
- Education policy varies between jurisdictions within the **United States**, but most states require principals to be licensed. These licenses are generally granted on the basis of completing specific school leadership courses, set against professional standards (which, while cross-jurisdictional, are interpreted and implemented by the states according to their needs).
- In **New Zealand**, which has a highly devolved school system, professional development for school leaders tends to be organised at the school level. The central government provides some overarching assistance — including by funding an 18-month induction program for principals — but does not mandate any courses.

Sources: Pont, Nusche and Moorman (2008), Ingvarson et al. (2006).

Less formally, mentors and fellow principals, as well as senior managers and liaison officers in education authorities, all help to enhance ‘on-the-job’ training and skills development. The support provided by professional networks of school leaders may be further strengthened by ‘Palnet’, an online resource led by Principals Australia and funded by the Australian Government. Palnet, which was launched in October 2011, allows current and prospective school leaders to access and share resources to support their professional development (Palnet 2011).

Another encouraging development for informing best practice in leadership training is the establishment of a school leadership ‘clearing house’ by AITSL, which provides an online gateway for disseminating research on professional development for leaders. The clearing house also offers details on training programs, and includes opportunities for school leaders to interact directly with one another through the website.

The clearing house is still relatively new, and its impact is difficult to assess. In particular, it is not clear how widely known or used the clearing house is within the profession. At this stage, it would be premature to reach any conclusions about its efficacy. However, one weakness may be the absence of any mechanism to assess the quality of research and results being shared through the site. Consistent with recommendation 7.1 (relating to AITSL assuming a role in spreading research and pilot study results on workforce innovation), the clearing house could be expanded to include an evaluation function. Indeed, the school leadership clearing house could be incorporated into the broader workforce research role.

Further scope for improvement?

Few participants commented on the quality of professional development available to school leaders (although, as noted above, education authorities in all sectors stressed its importance). However, some did suggest changes to bolster the quality of training opportunities.

- Principals Australia (sub. 37) advocated a more regimented approach to school leadership training based on the mandatory National Professional Qualification for Headship in England (as discussed in box 8.2).
- The Australian Primary Principals Association (sub. 41) supported a system of ‘authentic profession-led accreditation’ for professional development programs.

The Commission sees both mandatory qualification and accreditation routes as being problematic at this stage. In terms of prospective outcomes, at one extreme there is a risk of professional development converging on a rigid template of what a school leader is — despite tremendous variation in the roles and responsibilities

exercised. (Pont, Nusche and Moorman 2008 note criticisms of England's mandatory qualification along these lines.) At the other extreme, if training programs seek to reflect the full diversity of the profession, neither qualification nor accreditation will provide sufficient guidance on what skills leaders should focus on. And the middle ground is unlikely to look substantially different from what is currently offered, except with an additional layer of attention and oversight (and its attendant costs). Additionally, depending on their configuration, mandating school leadership qualifications may hinder efforts to fill principal class vacancies — a reported experience of Scotland's professional qualification, which has some parallels with its English equivalent (O'Brien 2011).

The emphasis instead should be on enabling school leaders to pursue professional development opportunities that are relevant to their needs. This requires education authorities to provide appropriate support for such programs — both in terms of direct financial contributions to the costs of such programs, as well as by ensuring sufficient staffing resources are available to cover for those participating in training opportunities. It also relies on leaders, and their supervisors and mentors, being able to identify the professional development programs that will be of greatest value. The aforementioned school leadership clearing house provides one venue for allowing participants to share information about which training opportunities are the most relevant to their needs.

Performance management

As discussed in chapter 6, principals should be accountable for the operation of, and reporting on, performance-management systems for teachers. In particular, principals should have responsibility for ensuring that individual appraisals are undertaken, with responsibility possibly delegated to a senior teacher, as is currently the common practice in Australia.

As with teachers more generally, the performance of principals and other leaders should likewise be subject to regular appraisal. Such requirements are commonplace across all school sectors. For example, in Victoria, the Guidelines for Principal Class Performance and Development provides a framework for evaluating school performance and leadership effectiveness. Similarly, the Catholic Education Commission of Victoria has introduced a Performance Management Strategy that explicitly incorporates performance appraisal. And while independent schools, because of their autonomy, handle their own performance management processes, state and territory associations of independent schools can provide advice on how best to structure such processes.

Having a performance management system is necessary, but is not a sufficient condition for ensuring high quality school leadership. Indeed, unless performance management systems are themselves of high quality — including effective mechanisms to address instances of underperformance — they will do little to underpin good student outcomes.

Contract-based employment

As one institutional mechanism to facilitate performance management, many principals are employed on individual contracts rather than through awards or enterprise agreements. This is particularly the case in the non-government sector (although some Catholic principals are employed under enterprise agreements). And although most government school principals remain employed under system-wide industrial arrangements, some jurisdictions have moved to contract-based employment — for example, Victoria (box 8.3) and the Northern Territory.

Defined-period, contract-based employment for principals offers some advantages.

- Awards and enterprise agreements are not drafted chiefly with principals in mind. The negotiation of individual contracts can deliver better targeted, more responsive arrangements.
- The time-limited nature of contracts, often with built-in evaluation requirements, serves to focus the attention of both employer and employee on the expected outcomes — including the changing needs of a given school community over time.
- Associated with the above, the explicit specification of the key results a principal is expected to achieve can facilitate effective performance management and appraisals.
- Letting contracts expire is a (notionally) easier option for education departments (as employers) to manage unsatisfactory performance by principals. (Although the principal may still be guaranteed employment within the system in a lower-ranked position.)

However, contract-based employment of principals is not without its drawbacks either.

- The additional uncertainty introduced by time-limited appointments can dissuade some applicants — particularly if the specified time is short.
- Related to this, greater uncertainty in employment conditions may be expected to lead to principals demanding higher pay as compensation. For governments

facing competing demands on public funds (including other aspects of education resourcing), this is a tradeoff that requires careful consideration.

- Also, the process of renewal and reapplication can be a time-consuming process. In cases where principals are widely agreed to be performing well, forcing them to reapply for their jobs can divert resources away from more productive uses.
- Succession planning within schools may be undermined if there is uncertainty about whether an existing principal will be reappointed to a post or replaced by a new candidate.

Box 8.3 The Victorian principal contracting model

Victoria employs principals on (what are typically) five-year contracts, with the job role of each principal specifically tailored to the needs and expectations of the school community he or she is to lead.

Underpinning this approach is a system of ongoing evaluation. Principals' contracts can only be renewed once. If a principal wants to stay at a school at the end of his or her second term, the position must be openly advertised — that is, the principal must stand against other applicants to compete for the job. Where a principal's contract expires without renewal or a new appointment, the standard contract provides for the employee to be retained by the department as an assistant principal or lead teacher.

Roles and responsibilities

While the precise specification of these may vary from contract to contract, a standard set of accountabilities for Victorian school principals includes:

- ensuring delivery of a comprehensive, high quality education program to students
- implementing the school council's decisions as an executive officer of the council
- establishing and managing financial systems
- representing the education department in the school and the local community
- contributing to system-wide activities, including policy, planning and development
- effectively managing and integrating the resources available to the school
- consulting with staff, students and the community about school policies, programs and operations
- reporting to the department and school community on school achievements
- complying with regulatory, legislative and departmental requirements.

Source: DEECD (2010b).

In fact, contracts are not of themselves an intrinsically good (or bad) approach to hiring principals. They are simply a tool available to employers that may be

appropriate in some contexts, but not in others. For instance, impediments to identifying and addressing underperformance within a system or school's prevailing award or enterprise agreement might provide impetus for contract-based employment. But if rigidities in the industrial relations regime could be directly addressed (chapter 11), then some of the benefits of contracts would fall away.

Moreover, the success of any contract system will depend on good implementation. For example, if application processes for principal positions lack rigour, or if renewal is seen as an automatic process, then contracts will do little to assure leadership quality. Again, the central factor is how effectively performance is evaluated, with the onus being on employers to communicate their expectations of school leaders, and to monitor and transparently assess these.

Hence, in the Commission's view, the primary focus of policy should be to address the underlying factors that encourage the use, and enhance the benefits, of contracts. Crucially, these factors are just as relevant to promoting good outcomes from the tenured workforce as those in contract-based employment.

Administrative and managerial expertise

Many participants stressed the importance of the 'educational leadership' function of principals (for example, Catholic Education Office — Diocese of Toowoomba, sub. 11; Queensland Catholic Education Commission, sub. 20; Australian Education Union, sub. 28; Department of Education — Tasmania, sub. 33; Department of Education and Children's Services — South Australia, sub. 35; Principals Australia, sub. 37; AITSL, sub. 39). But some were less supportive of the managerial role many principals now assume. For example, Deakin University's School of Education cautioned 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. (sub. 24, p. 29)

The administrative requirements of principals may be relevant to recruitment and retention issues for teachers more broadly. For example, a Victorian Government report stressed the tension between 'the type of person who is generally available for appointment to principal positions and the demands of the job' (DET 2004, p. 22), with teachers entering the profession due to an interest in helping children to learn, but having to assume a management role as they became principals.

On the other hand, it is possible that some candidates might be attracted to school leadership by the challenges involved in management roles. Many principals surveyed by Educational Transformations (2007, p. 101) welcomed the opportunity

to shape their schools to meet community needs and suggested that greater decision-making scope provided — among other things — ‘freedom to take risks’.

The net effect of these factors is unclear: some teachers might be dissuaded from applying for leadership roles because of the additional responsibilities, while other candidates enter the field specifically because they are attracted by those responsibilities. As such, the changing demands on principals are not a problem *per se*. The concern instead is whether applicants have the necessary managerial skills to perform the additional duties expected of them.

In part, the development of such skills requires good training opportunities to be available to principals. But concerns about principals’ managerial capabilities might also be addressed through more effective use of administrative staff in schools. The contributions of bursars and accounting specialists are integral to schools with responsibilities for their own finances. In fact, recognising the importance of such roles, the Community Public Sector Union/Civil Service Association of Western Australia suggested that senior school administrative staff be ‘recognised as an integral part of the leadership team in schools’ (sub. 16, p. 5).

As with the broader schools workforce (chapter 7), the different demands placed on school leaders may merit greater specialisation in their roles. This has, in part, already been realised through the diversification of school leadership roles to target specific subjects, year levels, school programs and student needs. But recognising the challenges associated with administration and management, further gains may be achieved through specialisation by leadership function, and looking beyond qualified teachers for some leadership roles.

Non-teacher appointments to school leadership positions have some precedents overseas. For example, the Netherlands has a specific program for attracting business leaders to become school principals. Sweden also employs some psychologists, military officers and former corporate executives as school leaders — though candidates are required to have ‘pedagogical insight’ (Pont, Nusche and Moorman 2008). English authorities are likewise allowing non-teachers to complete an accelerated program for the National Professional Qualification for Headship (NCSL 2011b). Evaluations of these initiatives have been patchy — although at least in the case of the Netherlands, early evaluations pointed to promising outcomes, including an apparent increase in support from school boards for non-teacher principal appointments (SBO 2005).

Given the identified importance of educational leadership — and related to this, the need for leaders to have the confidence of school workers and communities — it is likely that teachers will remain the best-suited candidates for principal positions in

the vast majority of cases. But for those occasions where a non-teaching candidate could make a useful contribution in a school leadership position, the regulatory environment (including industrial agreements and teacher registration requirements) should not unduly impede such appointments.

8.3 School autonomy

The scope for principals and other school leaders to exercise leadership will tend to be constrained by the centralised control of school-level decision making. This can in turn make schools less responsive to the diversity of student needs and the expectations of their local community.

The extent of school autonomy varies between jurisdictions and sectors. In a 2009 survey for the Program for International Student Assessment (PISA), school principals revealed that:

- with respect to allocating resources, the level of school autonomy is greatest in Victoria and the Northern Territory; lowest in New South Wales; and around the ‘middle of the pack’ in most other Australian jurisdictions
- with respect to curricula and assessment, the level of autonomy is much higher in Victoria, followed by Queensland and South Australia; with a lower degree of autonomy in the remaining states and territories
- both of the above types of autonomy are greatest in independent schools, followed by catholic and then government schools (Thomson et al. 2011).

More recent evidence for government schools comes from studies commissioned for the Review of Funding for Schooling and the Ministerial Council for Education, Early Childhood Development and Youth Affairs (Deloitte Access Economics 2011; Keating et al. 2011). With respect to school staffing, the studies reported that:

- responsibility for staff appointments lies at the school level in Victoria, except for some leadership positions (box 8.4). In other jurisdictions, staff appointments are typically centralised
- configuration of staffing is undertaken at a central level in New South Wales and the Northern Territory. In Queensland, configuration of teaching staff is a regional responsibility, based on central allocations. In other jurisdictions, responsibility for staff configuration is typically at the school level
- staff payments are typically centralised in all jurisdictions.

Box 8.4 **Autonomy in the Victorian government-school system**

Government schools in Victoria tend to have greater autonomy than in other jurisdictions. They are usually governed by school councils that are accountable to the education Minister. School councils comprise elected parents (must be more than one-third of members), education department representatives (including principal and other teachers, no more than one-third of members), and sometimes community members.

The responsibilities of a school council include establishing the broad direction and vision for the school, developing and updating school policies, and overseeing the use of school resources. The school principal is executive officer of the council, meaning that he or she is responsible for providing advice to the council and implementing its decisions. The following table summarises how responsibilities for particular issues are divided between a principal and school council.

<i>Issue</i>	<i>Principal</i>	<i>School council</i>
Finances	Develop and implement a budget to manage the school's resources, given expected revenue from education department, other government sources, and locally-raised funds. Prepare financial reports.	Assist development of the budget. Approve the budget. Monitor revenue and expenditure against the budget and, where needed, take actions to address issues that arise.
Staffing	Hire staff and manage their deployment, subject to school budget and human-resource policies of education department. Identify excess and underperforming staff. Manage them according to the policies of education department. Where appropriate, recommend the retrenchment of excess and underperforming staff to the Secretary of education department.	Recommend who to appoint as principal to the Secretary of education department. Approve employment of certain staff, such as casual replacement teachers and canteen staff.
Facilities	Arrange the completion of minor works and routine maintenance. Participate in the development of major capital-works proposals.	Allocate contract for school cleaning. Enter contracts for building and grounds improvements.

The Department of Education and Early Childhood Development sets, and/or provides guidance on, the framework within which schools operate. This includes a school's state-funded budget (based on characteristics of the student population), the classification structure and associated salary rates for teachers, other human-resource policies (such as for managing underperforming staff), curriculum guidelines, and requirements for managing finances and organising school councils. The Department also assists with the selection of principals and monitors school outcomes. Regional offices of the Department play an important role in advising schools on a wide range of issues, including school management, curriculum and learning, workforce planning, leadership, professional development and student wellbeing.

Source: DEECD (Victoria) (2009b, 2011b, 2011c).

Study participants confirmed that non-government schools typically have greater autonomy than in the government sector. The Independent Schools Council of Australia (sub. 18) noted that day-to-day responsibilities for education programs and staffing are delegated to the management team in many independent schools, while longer-term planning and supervision is the responsibility of school boards.

The extent of autonomy in catholic schools can vary according to whether they provide primary or secondary education, are in a particular diocese, and whether they are owned by a religious order or a parish or group of parishes (Catholic Education Commission of Victoria, sub. 13). However, principals in catholic schools typically have responsibility for staffing, often within a framework that is moderated at a diocesan or district level (National Catholic Education Commission, sub. 7).

Recent initiatives to increase autonomy in the public sector

Several jurisdictions are in the process of exploring and/or introducing greater autonomy for their government schools. For example, South Australia is in the midst of transitioning to a more devolved funding model, with schools being granted greater autonomy over the use of allocated resources (Deloitte Access Economics 2011). The reforms will include ‘appropriate authorities to devolve relevant employment responsibilities to principals, directors and other education leaders’ (SA Department of Education and Children’s Services, sub. 35, p. 8).

In Western Australia, the state government has been rolling out its Independent Public School program since 2009. This offers greater autonomy to schools that successfully apply for it (box 8.5). The Community and Public Sector Union/Civil Service Association (sub. 16) praised the greater scope that the Independent Public School program gives schools to employ support staff, but was concerned that greater autonomy could also add to the workload of such staff and would not be recognised until an independent review scheduled for 2013. The WA Government (sub. 45) reported that participating schools had employed finance and human-resource assistants, maintenance support, and administrative assistants to free up teachers and leaders from administrative tasks. It also noted that some schools had hired teachers with specialist skills. The WA Government further noted that principals of Independent Public Schools reported in a recent survey that their workforces had become more motivated and are taking greater responsibility for student outcomes.

Box 8.5 WA Independent Public School program

The Independent Public School program gives WA government schools the option to obtain greater autonomy on a range of matters. The program commenced in 2009 and involved 98 schools in 2011. A further 109 schools are due to participate by 2013. There are currently around 800 government schools in Western Australia.

Individual schools, or a cluster of schools, can nominate to participate in the program. There has to be a written nomination from the school principal(s) that is supported by the school council(s). This has to demonstrate that the school (or cluster of schools) has capacity to assume greater responsibility for its own affairs; the level of local support, including staff support; and potential benefits to students and the broader school community. An independent selection panel recommends schools to the Director General of the WA Department of Education.

Once identified as an Independent Public School, a school determines when, if and how to exercise autonomy on a range of allowable matters (termed 'flexibilities'). With respect to finances, the school is able to manage its affairs through a one-line budget. This can include authority to manage utilities (electricity, water, gas and waste management) and faults (breakdowns and repairs), determine accounting and financial procedures and practices within broad guidelines, and establish a wider range of reserve accounts (such as salary, and buildings and facilities). Principals are also able to award contracts and dispose of assets valued up to \$150 000, and exercise or decline contract extensions and approve price variations of up to \$150 000.

With respect to staffing, a school can select and appoint all staff, determine its staffing profile within the one-line budget, and exempt itself from centrally-managed systems for staff transfers and placement of redeployees.

Regarding buildings and facilities, schools can contract and manage contracts using funds in their one-line budget for property services (such as window cleaning and mowing) and routine maintenance (such as for fire extinguishers and electrical testing). They can also have the authority to submit requests directly to central office for capital works.

All Independent Public Schools must negotiate a Delivery and Performance Agreement which is signed by the principal, chair of the school board, and Director General of the WA Department of Education. This identifies the resources the school will receive; support that will be provided; programs it will be contracted to deliver; how student achievement will be monitored; and the performance and accountability of the school over the life of the agreement (three to five years).

Each Independent Public School has an independent review in the final year of its Delivery and Performance Agreement, with the report made public. The school also has to produce an annual report and business and strategic plans, which are co-signed by the school council.

Source: Department of Education (WA) (2011a, 2011b); WA Government (sub. 45).

While New South Wales currently has the most centralised arrangements, it has been trialling autonomy for some of its government schools. The Increased School-Based Decision-Making Pilot commenced in January 2010; involves 47 schools; gives participating schools partial autonomy over recruitment, staffing mix and budget; and has been partially funded under the National Partnership Agreement on Improving Teacher Quality (Australian Government 2011b). In some cases, schools participating in the trial are doing so as a group, sharing financial and staff resources, including staff-mix variations (NSW Smarter Schools National Partnerships 2010).

The NSW Government recently released a review of the pilot's progress up until October 2011 (ARTD Consultants 2011). This was largely based on a survey of principals in participating schools, all of whom reported that the pilot had led to concrete improvements. However, the review also concluded that there are significant cultural and organisational challenges to implementing greater school autonomy in New South Wales. This included concerns among the Teachers Federation and some principals, a highly regulated staffing system, complex budget systems, and the likely difficulty of initiating change in a large system.

The NSW pilot was originally intended to be completed by the end of 2011. Following the state election in March 2011, the newly-elected NSW Government stated that it was committed to a general move to greater autonomy for government schools (Piccoli 2011; DEC (NSW) 2011a). It began consultations on this commitment in September 2011, with a view to delivering a framework for the next steps by February 2012 (DEC (NSW) 2011b).

Where next on school autonomy?

A new Commonwealth initiative — titled Empowering Local Schools — will provide an incentive for government and non-government schools in all jurisdictions to move further down the autonomy path (box 8.6). This initiative will allow approaches to be tailored to the circumstances of individual schools, autonomy to be phased in gradually, and require participating schools to participate in an *ex post* evaluation. It appears that there will be a significant amount of associated processes, including the negotiation of a new national partnership agreement, bilateral implementation plans with states and territories, funding agreements with non-government education authorities, and an application process for individual schools to obtain funding.

Box 8.6 Empowering Local Schools initiative

Empowering Local Schools is an initiative of the Australian Government that aims to facilitate greater autonomy for government and non-government schools. State and territory governments have agreed to participate in the initiative, subject to the successful negotiation of a national partnership agreement and bilateral implementation plans with the Commonwealth, and funding agreements with non-government education authorities.

The Australian Government has committed \$69 million to fund the first four years of the initiative, with the first phase involving 1000 schools in the public and private sectors over 2012 and 2013. This represents just over 10 per cent of all schools in Australia. One-third of the schools will be in regional areas. The initiative is expected to be rolled out nationally from 2015. The total budget for the initiative, including phase one, is \$484 million over seven years.

The focus of phase one of the initiative will primarily be on strengthening local-school decision making in the areas of workforce, governance, funding and infrastructure. Participating schools will receive funding to help them manage the transition to greater autonomy. The specific actions that each school takes will be determined by the school and their education authority through an application process, and will be based on the school's size and current level of independence. The participating schools will be required to take part in an evaluation study.

Source: DEEWR (2011b, sub. 42); Garrett (2011); MCEECDYA (2011b).

The shift to greater school autonomy should generally be seen as a positive development in the sense that it removes an impediment to principals and other school leaders exercising leadership. This can potentially lead to improved outcomes, given that school leaders tend to be better informed than central agencies about the circumstances of their school, such as the specific needs of its student population.

However, greater autonomy should not be viewed as a panacea that will necessarily be beneficial in all circumstances. Nor should it be seen as always undesirable. The Australian Education Union (sub. 28) argued that greater school autonomy does little to improve student outcomes and exacerbates educational disadvantage. While this is a possibility if autonomy is granted to disadvantaged schools with limited leadership skills and resources, the fact that many independent and catholic schools are able to operate successfully under varying degrees of autonomy indicates that the issue is more complex.

This is confirmed by past studies of school autonomy, which have found mixed impacts (for example, research cited by the Australian Education Union, sub. 28; DEEWR, sub. 42; Educational Transformations 2007; OECD 2010b; Thomson et

al. 2011). This reflects the fact that autonomy is a broad concept, with its impact dependent on what is delegated, the school's capacity to take on the task, and how autonomy is administered.

Thus, rather than a one-size-fits-all approach, tasks should continue to be delegated selectively, taking account of each school's capacity to self-manage its affairs. Schools with highly-effective leadership are more likely to benefit from taking on greater responsibility for managing budgets, as well as hiring staff and allocating them to specific roles. That said, autonomy over particular tasks can be particularly challenging for leaders in small schools and those characterised by significant disadvantage and limited resources.

One variation to the model is for autonomy to apply to a cluster of schools so that they can share resources and leadership. This is an option under the WA Government's Independent Public School Program and the NSW Government's Increased School-Based Decision-Making Pilot. Some tasks — such as large-scale capital works and back-office functions like payroll administration — may be more efficiently handled at a central level for most schools. However, this depends on the efficiency of central agencies, as demonstrated by the differing costs they incurred under the Building the Education Revolution program (BERIT 2011).

The capacity of a school to take on greater autonomy is clearly linked to the leadership skills of its principal and other school leaders. Hence, recruitment processes, training and performance appraisals for school leaders are important, as noted earlier in this chapter. The National Professional Standard for Principals could prove to be useful in this regard. AITSL (sub. 39) noted that principals will need to have the capability to use their greater independence in decision making effectively. In the case of independent schools, the Association of Heads of Independent Schools of Australia (sub. 2; AHISA 2011) has developed a model of autonomous school principalship.

Another critical factor is the quality of governance at the local level. Educational Transformations (2007, p. 7) noted that 'government schools have a connection with parents-and-friends associations and the like, [but] there are few instances where there are governing bodies such as school councils or school boards, with significant authority and responsibility of the kind exercised by counterparts in independent schools and to a lesser degree, catholic schools'. However, the autonomy models for Victorian and WA government schools do have specified responsibilities for school councils (box 8.4 and 8.5).

Maintaining high quality membership of school councils is important. The Independent Schools Council of Australia noted that the 'two biggest challenges

currently being faced by [independent] schools are achieving the right skills mix on the governing body and the succession plans for principal and chair' (sub. 18, p. 18). As government school systems move towards greater autonomy, such concerns could also become more pronounced in the public sector.

The quality of those serving on school boards and councils may need to be reinforced. Many systems already offer professional development opportunities for board and council members. For example, as part of its Independent Public Schools program, the WA Government runs regular training seminars for school board members. There is likely to be merit in facilitating awareness of, and participation in, these programs.

The benefits arising from greater autonomy will also depend on how it is administered by central agencies. For example, central agencies may impose a greater compliance burden on autonomous schools, which can reduce the benefits (Catholic Education Office (Diocese of Toowoomba), sub. 11). Indeed, greater autonomy may need to be accompanied by system-wide reforms, such as relaxing restrictions on teacher remuneration, class sizes and job mix.

DRAFT RECOMMENDATION 8.1

State and territory governments should complement initiatives to provide greater autonomy to individual schools with measures that give schools the necessary leadership skills, resources and school-level governance arrangements. There should also be support from central agencies on matters such as training, teacher standards and curriculum.

9 Reducing educational disadvantage

Key points

- Students' individual, economic and social circumstances can impede them from achieving their educational potential. The schools workforce has an important role in reducing the adverse effects of these factors on student outcomes.
- Educational disadvantage is more likely to be experienced by students from low socioeconomic backgrounds, students in rural and remote locations, Indigenous students, and students with disabilities or other special needs. Some groups, especially Indigenous students, face multiple sources of disadvantage.
- Schools with higher proportions of disadvantaged students have greater difficulty attracting sufficient quality staff; facilitating professional development; and engaging parents in their children's schooling.
- Addressing educational disadvantage requires that teachers are able to respond to students' individual needs, recognise and act on underperformance, and maintain high aspirations for all regardless of their background.
- Many current policies aim to reduce educational disadvantage. Yet despite a long history of policy attempts, outcomes for disadvantaged groups — especially Indigenous students — remain well below the rest of the student population. This reinforces the need for this goal to be a high priority for schools workforce policy.
- General strategies to improve the effectiveness of the schools workforce and address shortages are important, but specific initiatives are also required. A number of such initiatives are being undertaken through the COAG reform agenda.
- However, a lack of rigorous and transparent evaluation makes it difficult to determine what combination of possible schools workforce and other initiatives would be the most effective in better addressing educational disadvantage. A comprehensive assessment of all possible approaches is therefore required.
- Some of the more promising initiatives include:
 - explicit remuneration differentials for teachers in hard-to-staff schools
 - 'grow your own' programs to assist people from disadvantaged backgrounds and locations to enter the teaching profession
 - greater use of interactive communication technology where face-to-face teaching opportunities are limited
 - training strategies to enhance teachers' ability to cater for the particular learning needs of disadvantaged students.

9.1 Aiming for equality of educational opportunity

What is meant by equality of educational opportunity?

As discussed in chapter 3, the Commission has interpreted equity in educational outcomes to mean that all students should have equal opportunity to realise their educational potential, irrespective of their individual, economic or social circumstances.

While each student's performance is influenced by both school and non-school factors, comparisons of student outcomes bring to light particular non-school factors that can impede students from performing to the best of their ability. In particular, these comparisons point towards the potentially adverse impact of low socioeconomic status (SES), remoteness of location and Indigenous status, and some reasons for this are discussed in the next section. There are also students who require additional support to be capable of engaging in the same educational experience as other students. This consideration applies to students with disabilities, some students from non-English-speaking backgrounds, students from cultural backgrounds of minority populations, and students who have disengaged from education or are identified as being at risk of doing so. It is important to note, however, that not all students with these characteristics are low achievers. For example, on the whole, students from non-English-speaking backgrounds perform equally as well as, or better than, the average student population in some subjects (SCRGSP 2010). However, each of these characteristics generally place students at a greater risk of achieving less than their best.

Aiming for equality of educational opportunity addresses a need to ensure that all students — at any level of ability — can achieve their potential. This includes gifted and talented students, whose needs can sometimes be overlooked or overridden by the demands of other students (RFS 2010). Essentially, students of any level of ability can encounter educational disadvantage. While this chapter focuses on students who are at greatest risk of educational disadvantage, many of the policy initiatives considered here can apply to giving each and every student the opportunity to perform to the best of their ability.

What is the extent of educational disadvantage in Australia?

Clear disparities in educational outcomes between different student groups provide some indication of the extent of educational disadvantage in Australia¹:

- Among students from **low-SES backgrounds**, around 25 per cent do not reach proficient levels of reading, mathematics or scientific literacy at age 15 (compared with 5 per cent from high-SES backgrounds). Around 40 per cent do not reach year 12 or attain equivalent vocational qualifications (compared with 20 per cent from high SES backgrounds),
- Among students in **rural and remote areas**, between 30 to 35 per cent do not reach proficient levels of reading or mathematical literacy at age 15 (in comparison to 15 to 20 per cent in provincial and metropolitan areas). Between 50 to 65 per cent do not complete year 12 or attain equivalent vocational qualifications (in comparison to no more than 40 per cent in metropolitan and provincial areas).
- Among **Indigenous students**, around 40 per cent do not meet proficient levels of reading or mathematical literacy at age 15 (in contrast to 15 to 20 per cent of non-Indigenous students). Around 35 per cent are not proficient in scientific literacy (in contrast to 8 per cent of non-Indigenous students). Over half do not complete year 12 or attain equivalent qualifications (compared with 20 per cent of non-Indigenous students).
- Among students from **non-English-speaking backgrounds**, around 20 per cent are not proficient in reading or scientific literacy at age 15 (in comparison to 12 per cent of students who speak English at home). Students from non-English-speaking backgrounds, however, tend to outperform other students in some mathematical literacy.

The National Assessment Program – Literacy and Numeracy (NAPLAN) results show similar patterns between these comparative students groups. The vast majority of students with these characteristics attend government schools (SCRGSP 2010).

Some indication of the proportion of Australian students who are potentially affected by educational disadvantage is reflected in the composition of the student population:

- Around 13 per cent of Australian students attend a school that has been classified as disadvantaged under the COAG National Partnership on Low SES Communities.

¹ Sourced from ABS 2010c; SCRGSP 2010; Thomson et al. 2011. Student outcomes refer to PISA 2009 results.

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- Around 2 per cent of all students in Australia attend a school in a remote or very remote location. This proportion stands at 45 per cent in the Northern Territory (SCRGSP 2010).
 - Around 5 per cent of students in Australia identify as Indigenous. While most are located in New South Wales or Queensland, the Northern Territory has the largest share with around 40 per cent of all students identifying as Indigenous (ABS 2010c).
 - Students with disabilities constitute nearly 5 per cent of the Australian student population (SCRGSP 2010).
 - Around 20 per cent of Australian students come from language backgrounds other than English (SCRGSP 2010).

Many students have more than one of these characteristics and therefore can experience multiple sources of disadvantage. For example, about 25 per cent of the Indigenous population live in remote or very remote locations (compared to less than 2 per cent for the non-Indigenous population); around half of all Indigenous people living in remote or very remote locations speak a language other than English at home; and 45 per cent of Australia's total Indigenous population belong to the lowest income quintile (ABS 2006).

Analysis of student outcomes internationally provides another benchmark to assess the degree of educational inequality in Australia's school system (see box 9.1).

Box 9.1 Australia's educational inequality by international standards

Based on reading literacy results in the Programme for International Student Assessment (PISA) in 2009, the share of variation in Australian student results that can be explained by their socioeconomic status (SES) is on par with most other OECD countries. By this measure, Australia has improved upon its international standing in 2000, when this share exceeded the OECD average. Yet, Australia remains behind other, high-performing countries where SES level has less impact on student outcomes.

Several other aspects of the analysis also suggest that Australia performs less favourably in terms of educational equality. First, although Australian students at every SES level generally perform better than other OECD students of the same SES level, the performance gap between Australia's low-SES and high-SES students is wider.

Second, differences in students' SES levels help to explain differences in student performance both 'within' and 'between' schools. This is apparent in all OECD countries, but the 'between-school' effect is especially evident in Australia.

Third, and related to the second point, individual student's performance is found to be more strongly linked to the average SES level of all students at their school, rather than their own SES level. Again, while this effect is observed in most other OECD countries, it is particularly strong in Australia.

In part, the impact of a school's average SES profile on student performance can be attributed to the 'peer effect', whereby students from high-SES backgrounds enhance other students' performance, while those from low-SES backgrounds can detract from it. This could be the case if students from high-SES backgrounds are more likely to demonstrate a positive attitude towards school and appropriate classroom behaviour (as influenced by their parents and community characteristics), and this rubs off on their classmates.

However, the links between students' SES background and performance — reflected in all of these findings — could also be explained by the characteristics of the school and its workforce. Schools with higher-SES profiles generally have less difficulty filling vacancies for teaching positions and generally attract better quality teachers than lower-SES schools. This can lift the performance of all students, regardless of their individual background. Insofar as staffing arrangements and teacher quality vary between schools of different SES levels, equality of educational opportunity could be compromised.

While acknowledging that inherent differences between countries (such as the geographic dispersion of the population) can affect education delivery, these comparisons suggest that Australian schools, in aggregate, perform somewhat less favourably than many other OECD countries according to some measures of inequality.

Source: Thomson et al. (2011).

There are also several issues concerning the measurement of students' SES level (see box 9.2).

Box 9.2 Measuring socioeconomic status

In devising strategies to address educational disadvantage, methods of defining and measuring students' socioeconomic status (SES) are important considerations.

There is some concern that current methods for identifying low-SES students — for the purpose of allocating funding — are too closely aligned to the profile of households in the school's location rather than the individual students enrolled at the school. This concern was raised in the Review of Funding for Schooling (RFS 2010), which is currently considering proposals to redesign funding allocation mechanisms. However, in considering trying to align funding more closely to individual students' needs, some practical matters need to be taken into account, such as the impediments to accessing students' individualised data.

When examining the effect of SES status on student outcomes, it is possible that using data based on the SES status of the individual (rather than the school's location) could show that educational inequality in Australia is greater than otherwise estimated. At the same time, however, area-based data can still be useful for capturing the community-wide characteristics that can influence student performance.

How do students' backgrounds contribute to educational disadvantage?

The ways in which a student's individual, economic and social characteristics can impede them from achieving their potential have been the subject of intensive research. Compared with their counterpart student groups²:

- Students from low-SES backgrounds — who can already be at a financial disadvantage in affording an education — also tend to experience lower levels of parental educational attainment, higher levels of parental unemployment and a higher prevalence of dysfunctional societal behaviour in their local community. They also often live in more deprived communities with fewer resources. Such factors can make it difficult for students to attend school, reduce parents' capacity to assist their children with schooling, and weaken students' attitudes towards schooling and expectations of themselves.

² See Ainley and McKenzie 2007; Berthelsen and Walker 2008; Boese and Scutella 2006; Considine and Watson 2003; Cresswell and Underwood 2004; Helme, Polesel, Teese, Nicholas and Walstab 2005; Le and Miller 2002; Teese and Lamb 2009; Thomson and De Bortoli 2007.

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- Students in rural and remote areas are likely to face barriers to accessing educational resources and have fewer of the complementary resources and support services that are available in rest of the community.
 - Some students from non-English-speaking backgrounds are more likely to face cultural and linguistic challenges, and their parents might be less capable of offering assistance with their schooling compared with English-speaking parents.
 - Indigenous students are also more likely to have different cultural customs and experience linguistic challenges, particularly since many Indigenous families do not speak Standard Australian English at home. Furthermore, Indigenous children are considerably more likely than non-Indigenous children to be living in overcrowded conditions and acquire hearing impairments — both factors that can impede their learning (SCRGSP 2011a). Given that proportionally more Indigenous students live in low-SES and/or rural and remote locations (relative to non-Indigenous students), they are also at greater risk of encountering many of the challenges described above.

In sum, these background factors have a potentially detrimental impact because they mean that ‘children are unequally prepared and supported to manage the cognitive and the cultural demands of school’ (Teese and Lamb 2009, pp. 9–10).

To give some indication of the impact of background characteristics on student outcomes, socioeconomic status was found to explain between 12 to 14 per cent of variation in Australian students’ scores in reading, mathematical and scientific literacy in the Programme for International Student Assessment (PISA) tests (OECD 2011b). In a meta-analysis of all the possible factors influencing student outcomes, home environment, socioeconomic status and parental involvement were found to be among the most important (Hattie 2009).

The impact of these factors on students’ attendance rates, in particular, is a critical consideration. Although students’ attendance can be influenced by a range of factors (including the quality of their school and school workforce), comparisons between different student groups suggest that their background characteristics can also have a bearing. As a case in point, attendance rates for Indigenous students are significantly lower than non-Indigenous students. In the Northern Territory, attendance rates for Indigenous students average 70 per cent, compared to 90 per cent for non-Indigenous students, and are even lower in some individual schools (SCRGPS 2011a).

Additionally, students’ backgrounds can affect their educational experiences by having some bearing on the way their school, and its workforce, operates. For

instance, the quality of resources and staff allocated to particular schools can depend on the socioeconomic, demographic or geographic profile of the schools.

All of these considerations point to an important role for schools workforce policy, in conjunction with other educational policies, in providing all students with equal educational opportunities.

What is the schools workforce's role in addressing educational disadvantage?

The goal of enabling every student to perform to the best of their ability means that, ideally, the schools workforce will take into account — and help to mitigate — the potentially adverse effects of students' background characteristics on their educational performance. Given the varied and complex ways in which these factors can influence students' educational experiences, schools workforce policy is just one part of wider suite of responses needed to address educational disadvantage. Nonetheless, it is a vital part.

For the schools workforce to be capable of giving all students an equal opportunity to achieve their educational potential, certain skills and attributes are likely to be helpful. Fundamental to these is the capacity to recognise that each student has a different mix of personal, household and community characteristics, and to identify how these factors might impede them from achieving their best. This is particularly important early on in a student's schooling experience, before any possible learning problems become entrenched (Masters 2007).

The provision of appropriate learning opportunities for disadvantaged students could then require some different pedagogical and classroom management practices. In particular, the school workforce can have a role in compensating for the lack of support and encouragement that students might otherwise receive from home:

Disadvantaged students may need better-than-average experiences to be able to perform at high level and overcome their difficulties. If schools are going to be a catalyst for social mobility, they may need to provide disadvantage students with higher quality experiences and work hard to improve the students' motivation and confidence. (OECD 2011a, p. 82)

As highlighted by study participants and researchers (for example, Allard and Santoro 2004; Catholic Education Commission of Victoria, sub. 13; CPSU/SPSF Group, sub. 6; United Care Children, Young People and Families, sub. 8), desirable skills for school workers attending to the learning needs of disadvantaged students would include the capacity to:

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- encourage appropriate classroom behaviour among students
 - address the needs of children with a physical or intellectual disability
 - understand differences in the cultural and linguistic practices of different groups, including the Indigenous population
 - meet the needs of gifted and talented students by, for example, recognising the scope for acceleration and modifications to curriculum
 - strengthen parental engagement in children's education
 - build links with other services within community
 - foster a school culture which embraces diversity within the student population.

While it might not be possible for every teacher to possess all of these skills, a school's combination of staff members can develop this capacity collectively.

In addition to specific skills, certain personal attributes are likely to enhance the capacity of school workers to attend to the needs of disadvantaged students, as noted by study participants. Whether intrinsic or acquired, these include:

- a willingness and desire to 'make a difference'
- resilience to take on a more challenging working environment
- a long-term commitment to assisting disadvantaged students.

The desirability of these sorts of attributes are usually explicitly acknowledged by education authorities and school operators when recruiting for rural, remote or Indigenous communities, in particular.

As well as the need to have teachers and principals with these skills and attributes, specialist and support staff — such as teacher aides, remedial teaching staff, school counsellors, guidance officers, chaplains, welfare support officers and cultural liaison officers — play an important complementary role. For example, literacy or linguistic specialists and cultural liaison officers can assist with teaching students from a non-English speaking backgrounds; teacher aides or teacher assistants can help students with disabilities perform practical tasks; students from low-SES communities can benefit from support staff to help them stay engaged in education or make a transition to work; and students moving from rural or remote locations to metropolitan centres (as often occurs in later years of schooling) can benefit from having transitional support staff (ACT Council of Parents and Citizens Associations Incorporated, sub. 17; CPSU/SPSF Group, sub. 6).

However, perhaps the most important attribute for all types of school workers who are catering to the needs of disadvantaged students — as emphasised by many study

participants — is the practice of maintaining high aspirations for their students. Accommodating the learning needs of disadvantaged students does not mean that teachers, school leaders and other school staff should lower their expectations of what these students can achieve.

Identifying these skills and attributes matters insofar as policy initiatives can attempt to foster these traits within the schools workforce or attract workers with them. Given the research and comments by study participants that the needs of educationally disadvantaged students are not being met by the mainstream schooling system (Burnett Youth Learning Centre, sub. 4; Teese and Lamb 2009), current arrangements for training, recruitment and deployment may not be generating a workforce sufficiently equipped with these skills and attributes.

9.2 Challenges and policy responses

Challenges for the schools workforce in reducing educational disadvantage

Some common, and often longstanding, challenges continue to confront the schools workforce in attempting to better address the needs of disadvantaged students. While many of these challenges are encountered by schools more widely, they tend to be more pronounced in schools with disadvantaged students.

Staff recruitment and retention

As discussed in chapter 4, many schools with disadvantaged students report persistent difficulties attracting and retaining sufficient staff with appropriate skills and attributes. This applies not only to general teaching staff, but also school leaders, and specialist and non-teaching support staff, including special education and English as a second language (ESL) teachers. In the case of some disadvantaged students, staffing shortages are exacerbated by the need for high teacher-student ratios. Students with disabilities are a case in point (Burnett Youth Learning Centre, sub. 8).

Exact figures indicating the extent of teacher shortages in disadvantaged schools are difficult to source. Available survey data shows that recruiting suitably qualified teachers — especially secondary and relief teachers — is more difficult in rural and remote schools than in urban schools, to the extent that some rural schools are unable to offer English or science courses due to teacher shortages (Australian Secondary Principals Association (ASPA) 2006; McKenzie, Kos, Walker and Hong

2008). Special needs schools also report ongoing difficulties recruiting suitably qualified staff (National Disability Services, sub.21). The extent of these recruitment and retention difficulties is reflected in their perennial nature. How to best alleviate teacher shortages in rural and remote locations, in particular, has been an issue confronting policymakers for many years.

In part, difficulties recruiting and retaining staff in schools with disadvantaged students can be attributed to the challenging work conditions. Schools in low-SES areas report higher rates of student truancy and disorderly classroom behaviour. Studies show that teachers in schools with low retention rates (as typifies many low-SES schools) are more likely to encounter verbal abuse from students, have difficulty managing their classes, and spend time concerned with students' personal problems (Helme, Polesel, Teese, Nicholas and Walstab 2005). Some children who live in impoverished conditions are at risk of turning up to school without essential needs, such as nutrition, health and hygiene, being met. Staff in remote and rural locations face the impediments of remoteness and isolation, such as limited access to everyday goods and services and support networks. The Commission heard first-hand from school teachers and principals who encounter these challenges.

Also contributing to recruitment difficulties, as noted by study participants, is a general preference among some teachers to return to the type of school and geographic locality where they themselves were educated. This 'localisation effect' imposes recruitment challenges for schools in low-SES, rural and remote, and Indigenous communities, because their students are less likely to attain tertiary qualifications. This leaves the school system with a disproportionately smaller pool of teachers who are from disadvantaged communities and who might, therefore, be more likely to prefer working in these locations.

The effects of these recruitment challenges are magnified by shortages of some types of key support staff more commonly needed for disadvantaged students. Among some common examples, shortages of ESL teachers have repercussions for Indigenous students, while an undersupply of school counsellors or guidance officers can mean that students requiring assistance face long waiting times for their welfare issues to be addressed (Uniting Care Children, Young People and Families, sub. 8). Although a number of universities offer teacher education courses specialising in special needs students, these courses are resource-intensive and generally appear to attract relatively few enrolments.

As discussed in chapter 4, recruitment and retention difficulties have repercussions for the quality of education delivered. Shortages can intensify the workload placed on existing staff and lead to 'out-of-field' teaching, while high turnover can discourage investment in teachers' professional development and create unstable

learning environments for students (Lamb and Teese 2005). Given the higher instance of recruitment and retention difficulties in disadvantaged schools, such effects might be expected to be greater in these schools, therein exacerbating educational inequality.

Further, the schools workforce is not demographically representative of Australia's Indigenous population. This matters for educational equality, as Indigenous staff can help adjust teaching methods and curriculum content to be culturally suitable, their presence can make Indigenous students feel less intimidated by the school environment, and they can provide positive role models by exemplifying the gains of attaining an education and making a difference to their community. The Staff in Australia's Schools (SiAS) survey reported that less than 2 per cent of school teachers and leaders identify as being Indigenous in origin (McKenzie, Kos, Walker and Huong 2008), although a regional or sectoral breakdown would help to distinguish whether these staff are being assigned to Indigenous students.

On top of staff shortages — and partly due to these recruitment challenges — staff in disadvantaged schools tend to have less experience than those in other schools. Research commissioned by the Australian Primary Principals Association (APPA) found that the average cost of teachers in high-SES schools considerably exceeded that of teachers in low-SES schools, partly reflective of differences in their experience (sub. 41). Given the value of experience for teacher quality, this differential has implications for educational equality, as it suggests that the highest quality teachers are generally not being placed in schools where they are needed the most (Centre for Research in Educational Futures and Innovation, sub. 24). The APPA have argued that 'if low SES students are to achieve their potential, that trend must be reversed' (sub. 41, p. 10).

Logistical impediments

Several logistical impediments arise for many schools with disadvantaged students, affecting their efficiency of operation, the effectiveness of their workforce, and their funding needs. Such constraints obviously apply to rural and remote schools where geographical isolation and low population density make the delivery of education more costly per student, where access to resources (including opportunities for professional development) is limited, and where there are generally fewer amenities in the community to supplement students' learning needs (Independent Education Union of Australia, sub. 8; National Catholic Education Commission, sub. 7).

Schools in some rural and remote areas also report logistical difficulties in providing quality housing for staff, where this is part of the education authorities' or school operators' policy. The Commission was also informed that some school staff

must sometime cope with poor standards of infrastructure. Education authorities and school operators have therefore had to try to find ways to deal with these types of logistical problems.

Some schools with disadvantaged students face the logistical challenge of operating at a very small scale. This occurs not just in isolated regions with small populations, but also in some metropolitan areas where student enrolments have been falling due to such factors as the poor reputation of the school or the declining local economy.

Although funding considerations are outside the scope of this study, these logistical impediments highlight the need for adequate funding allocation mechanisms to complement school workforce policy. The effectiveness of even the highest quality teachers will be compromised without necessary resources to support their teaching practices.

Difficulties engaging parental involvement

Staff in low-SES schools, in particular, report of the struggle to engage some parents in their children's education. This matters because such engagement builds on the effectiveness of teachers' contributions and can also make a considerable difference to students' attendance rates (Berthelsen and Walker 2008). Research indicates that over 20 per cent of students' learning takes place out of school, through such activities as homework and tutoring (OECD 2008). Yet many parents are unable to help their children with their homework, fail to ensure their child's attendance, or are reluctant to visit the school to discuss their child's performance with teachers.

There are many possible reasons behind a lack of parental engagement. For instance, some parents may have had a negative experience of school themselves and some could struggle to find time to spend with their child due to long work hours. Further, while there are certainly parents in disadvantaged communities who have high aspirations for their children, some do not, especially if the costs of a post-school education seem unaffordable (Helme, Polesel, Teese, Nicholas and Walstab 2005). While parents from all parts of society can experience these challenges, they seem more likely to prevail in low-SES communities. This is especially so when it comes to parents having low aspirations for their children, which can be reinforced by others within the community and wider societal attitudes. Indeed, there is evidence that students whose parents have lower levels of education are found to be less positive in their attitude towards school and more likely to have learning problems (Considine and Watson 2003).

Low expectations among the schools workforce

It is not only the low expectations of some parents and others in the communities that can hold students back from achieving their best at school. The Commission also heard that teachers' motivation and commitment to improve the outcomes of their students can start to wane when they are working in difficult conditions or placed in schools with a reputation for underachievement. In these circumstances, there is a risk that students with characteristics associated with disadvantage can be improperly cast as low achievers in the eyes of their teachers and other school staff, and that these expectations will be self-fulfilling.

As detailed in chapter 3, teachers' capacity to set expectations that align to their students' potential is critical to quality teaching. This can be shaped by their training experiences as well as their school culture, as influenced by school leaders and other staff members.

Policy responses

The goal of reducing the level of educational disadvantage has been a key focus for policy for a considerable time. Consequently, an extensive array of policies aimed at promoting equality of educational opportunity are in place, implemented chiefly at a jurisdictional level and across both the government and private school sectors. More recently, the COAG national reform agenda has strengthened this focus, underpinned by the Melbourne Declaration and the National Education Agreement (NEA) (as outlined in chapter 3).

How the national education reforms seek to address educational disadvantage

Among its multiple goals, the Melbourne Declaration specifies a need to focus on improving the educational outcomes of students of low socioeconomic backgrounds, Indigenous students, and other students experiencing disadvantage. Similarly, the NEA articulates that schooling should aim to promote social inclusion and reduce existing educational disadvantage among children, especially Indigenous children. The NEA has set specific targets to improve the outcomes of disadvantaged students, and made additional Commonwealth funding available to the states and territories to achieve these goals. The specific performance targets set by the NEA, and details of the various National Partnerships designed to support these targets, are summarised in box 9.3.

Box 9.3 Addressing educational disadvantage in the National Education Agreement

The COAG National Education Agreement (NEA) proposes the following performance indicators to measure progress of the reforms addressing educational disadvantage:

- school enrolment and attendance rates of Indigenous children and children from low socioeconomic status (SES) communities
- literacy and numeracy outcomes of Indigenous children and children from low-SES communities, based on national testing of students in years 3, 5, 7 and 9
- the share of the Indigenous and low-SES population who have attained at least a Year 12 Certificate (or equivalent) or Australian Qualifications Framework (AQF) Certificate II by 19 years of age
- the share of Indigenous students completing Year 10.

Specific targets have been set for the Indigenous student population:

- to halve the gap for Indigenous students in reading, writing and numeracy within a decade
- to at least halve the gap for Indigenous students in year 12 or equivalent attainment rates by 2020

These specific targets will contribute towards the broader target of lifting the total population's rate of year 12 (or equivalent) attainment to 90 per cent by 2020.

The NEA is supported by several Smarter Schools National Partnership Agreements centred on: Low Socio-Economic Status School Communities; Literacy and Numeracy; and Improving Teacher Quality. Also supporting the reform agenda is the National Indigenous Reform Agreement.

These agreements have generated several National Key Reform Projects focusing on educational disadvantage, including the Innovative Strategies for Small and Remote Schools Project, and the Parental Engagement in Schooling in Low SES Communities Project.

Source: COAG (2008a).

While the COAG education reforms are a recent development, much policy activity continues to happen at the jurisdictional or more localised level. State and territory governments and the non-government schools have an extensive array of policy initiatives in place that directly contribute to, or complement, the COAG goals, and there are many specific programs at a classroom, school or community level. Some programs are operating in partnership with other parts of the community (such as youth centres) or research bodies (such as university departments). Some not-for-profit organisations and private sector companies outside of the education industry are also collaborating in research and policy work in this area.

Alongside the COAG reform agenda, broad funding arrangements are currently being examined by the Review of Funding for Schooling (RFS 2010). Improving equity of access to education, by way of funding allocations, is a key objective of the Review (see box 9.2 earlier).

The National Professional Standards for Teachers, newly developed by the Australian Institute for Teaching and Schools Leadership (AITSL), articulates the requirement for teachers to have knowledge and understanding of the learning needs of students from Indigenous backgrounds, students with diverse linguistic, cultural, and socioeconomic backgrounds, students with disability, and students across the full spectrum of ability. Further, the standards specify a need for teachers to have a knowledge of, and respect for, Indigenous culture, and how to impart this to students. Although these standards tend to reflect the principles already currently in place in each jurisdiction, they provide a platform for a nationally cohesive approach to school workforce policy development (as discussed in chapter 3).

Other targeted national-level initiatives will contribute to the objective of educational equality. For example, the National Disability Strategy and More Support for Students with Disabilities initiatives have recently come into effect, supporting a greater use of strategies for improving the educational opportunities for students with disabilities. This includes promoting teacher training in areas that support their learning needs (COAG 2011).

As noted earlier, schools workforce initiatives ideally need to be accompanied by a wider suite of reforms that address other dimensions of educational disadvantage. As an example of a high-level initiative to complement schools workforce policies, the Australian Government has been administering the Improving School Enrolment and Attendance through Welfare Reform Measure (SEAM) program. The program aims to lift attendance rates by making the receipt of income support and family assistance payments conditional on a family's school-aged children attending school regularly. The program is on trial in several Indigenous communities in Queensland and the Northern Territory, and is set to be expanded across the Northern Territory. While it is outside the scope of this study to assess such reforms, they are a reminder that policies to improve the school's workforce capacity to address educational disadvantage will have limited impact if other school-related policies, as well as the broad community conditions, are not also taken into account.

Approaches of current policy initiatives

Within the range of policy initiatives currently in use across various jurisdictions, there are programs and policy arrangements designed to:

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- attract teachers to hard-to-staff schools in rural and remote locations via financial allowances, subsidised housing, and guaranteed permanent teaching positions in their preferred locations following their rural or remote placements
 - attract high quality candidates to the teaching profession who would otherwise be unlikely to join, via specialised selection and training programs, with a view to placing them in hard-to-staff schools
 - attract people from disadvantaged backgrounds or locations to the schools workforce with the availability of tuition subsidies and specialised support programs, in anticipation that they will be more willing to take up jobs there
 - facilitate more suitable job-matching in hard-to-staff schools, with the aim of reducing turnover, by screening applicants more rigorously to select those with the personal attributes that will help in the challenging work environment.
 - help trainee teachers become more familiar with disadvantaged communities, in anticipation that this will heighten their interest in teaching in these locations, by offering more incentives and opportunities to train in rural and remote or low-SES areas, and by including specialist curriculum in their training
 - lift the employment of Indigenous school workforce via specialised training programs and designated job roles for Indigenous workers in schools
 - create a schools workforce mix that better caters to the learning needs of the student population, and helps ease the workload placed on teachers in hard-to-staff schools, through the deployment of more specialist and support staff.

Though far from exhaustive, box 9.4 presents some specific examples of the range of strategies being applied.

Box 9.4 **Examples of policies in action**

An array of specific policy initiatives are in place aiming to lift the supply and skills of teachers in schools with disadvantaged students.

- State and territory education departments, as well as non-government education employers, offer financial allowances to teachers in rural and remote schools. If teachers are not residents of the local area or jurisdiction, housing can be provided or subsidised. Other benefits, such as utility payments, travel allowances and accelerated rates of leave entitlement, can also be offered. Following their employment in rural and remote schools, teachers can be rewarded with fast-tracked opportunities to work at a school location of their preference or be awarded permanent employment.
- Several education departments offer scholarships and other support programs to year 12 students from rural and remote communities or from Indigenous backgrounds. An example is the 'Make A Difference: Teach' campaign by the Queensland Department of Education and Training.
- The newly-created Teach Remote scheme, run by the National Alliance for Remote Indigenous Schools (NARIS), attempts to broaden their recruitment drive for school staff across state and territory borders. The jurisdictions involved (Northern Territory, Queensland, Western Australia, South Australia and New South Wales), with support from the Australian Government, share processes and resources for staff recruitment, induction, networking and professional development.
- The Western Australian Department of Education's Remote Teaching Service works with universities to identify quality pre-service students who are suitable candidates for remote teaching, and suitable mentors to support their practicum placements.
- The Northern Territory education department has applied a more rigorous assessment of applicants' motivation for teaching in their screening process for employment. This aims to better ensure that teachers have the personal attributes to cope with the challenges of rural and remote locations, and match the school's culture and student profile.
- Teach for Australia and Teach Next programs offer accelerated training for teachers who are willing to work in rural and remote or low-SES schools. Trainees are accepted into the program on the condition that they work in high-need schools.
- The Queensland Department of Education and Training facilitates a community-based training program for Indigenous teachers, called the Remote Area Teacher Education Program (RATEP). Training is delivered via distance education with the support of on-site co-ordinators at the placement schools, and in collaboration with vocational and tertiary education institutions. A similar program is run by the Catholic Education Office in the Northern Territory, called 'Growing Our Own'.

(Continued next page)

Box 9.4 (continued)

- The Stronger Smarter Institute, run out of the Queensland University of Technology, guides school and community leaders towards lifting their expectations of Indigenous students and fostering a more positive sense of Indigenous cultural identity, via its leadership and community learning programs.
- The Cape York Aboriginal Australian Academy, run by the Cape York Partnerships, incorporates Indigenous culture and language programs in its curriculum, alongside mainstream curriculum in English literacy and numeracy, as a way of supporting Indigenous students' bicultural identity.
- Several education department have appointed Aboriginal Education Coordinators to each of their education districts or regions, and established school advisory groups comprising members the local Indigenous community.
- The Priority Schools Program, run by the NSW Department of Education and Communities (DEC), provides additional funding and resources for schools serving the highest densities of low-SES families in the state. The program supports supplementary staffing and innovative approaches to staffing arrangements.
- The Positive Behaviour for Learning program has been implemented in several schools in the Western Sydney region where classroom management has proved challenging. It provides resources to teach students socially-acceptable behaviour, intended to reduce the need for suspensions and other disciplinary actions.
- Several universities offer community service placements as part of their teaching degrees to help teachers better understand the communities they could be working in. Placement settings include Indigenous communities (both remote and urban), rural schools, after-school homework centres and refugee support programs.

9.3 What could the schools workforce do differently to reduce educational disadvantage?

When it comes to improving the schools workforce's capacity to address educational disadvantage, a multi-faceted approach is required. It needs to encompass general strategies to improve the school workforce's overall effectiveness (as canvassed throughout this report), strategies to fill hard-to-staff positions across the schools workforce (as considered in chapter 4), and a combination of other initiatives that are specially applied to disadvantaged students (some of which are discussed below).

The ways in which these policies can contribute to better outcomes for disadvantaged students are also discussed. However, the Commission emphasises that determining precisely which combination of policy approaches is likely to be the most cost-effective in reducing educational disadvantage is difficult, given: the

limitations of past approaches; the range of policy activity currently being undertaken by the jurisdictions and through the COAG reforms; and the lack of comprehensive and transparent evaluation (as discussed further in the next section).

Gains from improving the school workforce's overall effectiveness

Overall, it is important that teachers have the capacity to identify and respond to the needs of every student, recognise and act on underperformance early on in a student's learning, and maintain high aspirations for all students. Strategies that aim to enhance the overall effectiveness of the schools workforce are therefore very important for improving the outcomes of disadvantaged students, and, in some ways, offer the prospect of the largest gains to these students.

Innovative staffing and flexible workforce composition

Given the important role of specialist and non-teaching support staff, the capacity for schools to recruit staff with the skills to meet the particular needs of their students (as discussed in chapter 7) matters greatly for schools with disadvantaged students. Already some policies are in place to support more innovative and flexible staffing arrangements to better cater to the needs of disadvantaged students. For example, the NSW Department of Education and Communities' Priority Schools Program (PSP) encourages principals to customise their workforce mix (see box 9.4). Such flexibility and innovation would require, in some cases, higher quality school leadership and greater levels of school autonomy.

Mentoring and networks

Mentoring and networks are especially relevant for school staff in rural and remote schools who have to cope with isolation and limited resources (NCEC, sub. 7), low-SES schools where staff are more likely to encounter difficult classroom behaviour, and in Indigenous communities where staff need to develop an understanding of cultural practices. Lending weight to the potential value of mentoring, study participants noted that hearing stories of other teachers' success and fulfilment working with disadvantaged students is one of the most motivating factors influencing teachers' choices to work in this field (Catholic Education Office – Diocese of Toowoomba, sub. 11).

The Commission heard from some study participants that school staff in isolated locations tend to establish informal mentoring arrangements fairly naturally, while the systemic arrangements of some education departments and organisations also

help facilitate this. In relation to schools with disadvantaged students, formal arrangements for networking and mentoring are taking shape. For example, the recently-established National Alliance for Remote Indigenous Schools (NARIS) aims to promote networking across jurisdictional borders (see box 9.4). Again, quality school leadership will also help facilitate such developments.

Parental involvement and community collaboration

To enhance the learning experiences for disadvantaged student groups, it is important that the school workforce can more effectively engage parents in their children's schooling. This could be achieved by, for example, assisting parents to be more comfortable in approaching teachers and the principal, having different options available for communicating with them and devising activities that help parents find a worthwhile place for themselves in the daily rhythm of the school.

Building community links is also very relevant for schools with disadvantaged students, especially given the importance the school also plays in the economic and social life of many small communities. In particular, schools' collaboration with local businesses and community services can be helpful in rural and remote areas where it can be cost-effective to share limited resources, and where the building of support networks for school staff can involve members and leaders of the community. Links with local community services can also be valuable for providing relevant and timely responses to the welfare needs of students. Furthermore, schools' efforts to build ties to businesses in their local communities can be useful for helping disadvantaged students make a more successful transition from school to work or further study.

Essentially, to promote stronger parental and community involvement, what is required of the schools workforce is a close understanding of the characteristics of the families, as well as the social and cultural norms, in the local community. This is a consideration for teacher training as well as for school leadership.

Enhancing school leadership and expanding school autonomy

To facilitate the policy directions discussed above, quality school leadership, and a capacity to be responsive to local needs, are required. As discussed in chapter 8, greater school autonomy needs to be matched with systems for accountability. When it comes to the goal of promoting equality of educational opportunity, what is required are school leaders who make this a priority objective for their own school (United Care Children, Young People and Families, sub. 8). As an example of how

this could be facilitated, the Priority Schools Program run by NSW DEC requires principals to submit a formal school plan explaining their progress indicators.

Under more autonomous governance arrangements, it is also worth considering what other types of indicators of overcoming educational disadvantage are applicable at a school level. Apart from academic outcomes and attendance rates, other indicators that reflect steps towards achieving education equality — reflected in the themes of this chapter — could include whether students have a positive attitude towards school, how strongly students feel connected to their school, and the strength of their parents' involvement. These types of measures have been proposed in Victoria's School and Network Accountability and Improvement Framework (DEECD 2011a).

While greater school autonomy would give principals more discretion over the workforce mix, this approach could, however, work against the interests of disadvantaged students if it becomes harder for disadvantaged schools to compete for high quality staff in school-level negotiations. Complementary strategies to steer high quality teachers and leaders to disadvantaged schools, and appropriate funding systems, are therefore important.

Performance-based career structures

While the Commission is still examining the complexities involved in the use of performance-based career structures (see chapter 6), potential arrangements to link remuneration and promotional opportunities to performance could be useful in addressing educational disadvantage. Such arrangements could help attract high quality, experienced teachers and school leaders to disadvantaged schools where there is, arguably, greater scope for them to improve student outcomes.

Strategies to address imbalances in supply

As discussed in chapter 4, the Commission sees merit in offering higher remuneration for hard-to-staff positions as a way of signalling vacancies of the highest priority across the schools workforce. When it comes to the goal of reducing educational disadvantage, remuneration differentials recognise that teaching disadvantaged students requires a particular set of skills and attributes — including the willingness and resilience to work in challenging conditions — that are in short supply among the current workforce. Offering higher remuneration to attract a higher supply of teachers with these skills is the same as the rationale applied to addressing shortages of mathematics and science teachers (see chapter 4). Furthermore, differentiated remuneration recognises that teachers are not all

working in the same type of ‘classroom’. There are certain job characteristics — such as the isolation and lack of amenities in remote locations — that workers might need to be compensated for, if they to be expected to switch from more favourable working conditions.

Allowances in some hard-to-staff schools are already on offer, most commonly for rural and remote locations (see box 9.4). There is evidence that they can make a difference, depending on the individual characteristics of the teacher (Bradley, Green and Leeves 2006). Yet, as examined in chapter 4, such allowances are offered with varying degrees of transparency and, in any case, vacancies persist. This suggests that current levels of allowances might be insufficient, not publicised widely enough, or need to be better complemented by other supportive resources.

As per draft recommendation 4.1, the Commission considers that there is scope to investigate the use of more explicit, and possibly larger, differentials in remuneration for teachers, principals and support staff in low-SES, rural and remote and Indigenous communities and for specialist staff to support disadvantaged students, where these positions prove to be genuinely hard to fill. At the same time, the Commission acknowledges that a number of important issues need to be taken into account. These include: the need to also have suitable housing, other amenities and supportive resources (including access to professional development) to attract staff to disadvantaged communities; the need to concurrently promote high quality teaching; and the pragmatic complexities of implementing a differentiated remuneration scheme (as raised in chapter 4). Notwithstanding these concerns, the feasibility of expanding the use of such differentials warrants further consideration, given the importance of the objective it seeks to address.

Some other promising initiatives

There are various other initiatives which look to hold promise in improving the schools workforce’s capacity to address educational disadvantage. While no single policy offers a ‘silver bullet’, they could help to address a particular dimension of educational disadvantage. As such, a tailored combination of various approaches might be helpful, and the way in which they complement each other is a consideration for achieving policy co-ordination. While several of these approaches are already in place, it does not appear that their impacts have been fully or transparently evaluated for cost-effectiveness. The Commission therefore urges that these policies, along with other possible approaches, should be subject to rigorous evaluation.

Growing your own

Programs to encourage people from disadvantaged student groups to enter the teaching profession can help strengthen the supply of teachers willing to work in disadvantaged schools, by tapping into the benefits of the ‘localisation effect’ discussed earlier. Such a pool of prospective school staff might more likely be familiar with the community conditions and be motivated by a desire to make a difference to their own community.

Some research findings lend weight to the rationale behind ‘grow your own’ strategies: a survey of secondary school students found that those from low-SES or rural or remote areas were more attracted to teaching as a career — compared with mid- or high-SES or metropolitan students — because teaching allows them to stay in their region and serve a rewarding role in their community (DEST 2006). Similarly, Indigenous students were found to have a stronger cultural attachment and incentive to return to their community after study than other population groups (DEST 2006).

As a form of ‘grow your own’ initiatives, many scholarship programs are available to people from disadvantaged backgrounds to support them in teacher training. However, accessing teacher training can still be difficult for those who are located at a distance from training provider sites or are unfamiliar with tertiary education. To overcome this barrier, specialised programs are available to assist people from disadvantaged backgrounds undertake teacher training in their community. For example, the Remote Area Teacher Education Program (RATEP) (see box 9.4) offers off-campus training to Indigenous teachers, accompanied by intensive on-location support at placement schools and a modified program of coursework that is more relevant to Indigenous culture. While resource-intensive, some of these programs show signs of success. Since starting in 1990, RATEP has produced 146 university graduates, 90 of whom are employed in Education Queensland schools, and has another 65 trainees enrolled in teaching courses in 2011.

To complement ‘grow your own’ policies, strategies to steer high quality, experienced teachers and school leaders to disadvantaged schools are also important. Combined, these strategies help create a workforce with a balance of experience and expertise, as well as familiarity with the community.

Flexible delivery using interactive communication technology

Where it is difficult for teachers to relocate or travel over long distances, necessity has given rise to some innovative alternative modes of delivery. While ‘virtual classrooms’ are not a perfect substitute for face-to-face learning, the use of

interactive communication technology — such as video- and web-conferencing — is a way to deliver education to students who could otherwise miss out on a suitably-qualified teacher. Such forms of ‘flexible delivery’ are currently being used in many remote localities, such as the various Schools of the Air and Schools of Distance Education operating in regions across Australia. To supplement their online contact, teachers generally visit each of their students in-person at intervals throughout the teaching year. Although already widely used out of necessity, evaluating the effectiveness of these approaches would still be useful if there is scope to expand their use to other hard-to-staff school settings.

In addition to delivering school services, flexible modes of delivery could be used to deliver training to teachers, helping to facilitate ‘grow your own’ programs. It can also be used to provide professional development opportunities to school staff in locations where access is limited.

Strengthen teachers’ understanding of disadvantaged students’ learning needs

Alongside the essential role of specialist staff, there could be scope to broaden the skills and knowledge base of teachers more generally, to help equip every teacher with an awareness of how the learning needs of disadvantaged students can differ from other students, and what type of teaching and classroom management practices would be most appropriate. This can be achieved by incorporating specialist components in teachers’ training courses or giving trainee teachers more opportunities undertake their practicum in disadvantaged schools (as in some of the examples in box 9.4).

However, the feasibility of expanding these approaches is an issues for further evaluation. Among the relevant considerations, new or trainee teachers placed in disadvantaged schools need to be carefully assigned and given adequate support, to avoid the risk that the challenging conditions will deter them from working in these schools. This point was highlighted in an assessment of the Teach for Australia program by the Australian Council for Educational Research (ACER) (Scott, Weldon and Dinham 2011). Furthermore, programs targeting disadvantaged students need to be managed in a way that does not negatively impact students’ confidence or their perceptions of their school by, for example, portraying the placement school as a ‘failure’ (Scott et al. 2011).

While there are some suggestions that customised training in how to meet the needs of disadvantaged students should become a mandatory component of teacher training courses (United Care Children, Young People and Families, sub. 8; Ann Williams, sub. 43; Nola Firth, sub. 44), the potential benefits need to be balanced against the practical limits of expanding the teacher training curriculum (APPA,

sub. 41). As per draft finding 5.1, such considerations could be incorporated in trialling and evaluation of what type of practicum experiences, pre-service training and professional development opportunities can best contribute towards teacher effectiveness in the context of reducing educational disadvantage.

9.4 A need for better policy evaluation

While some of the approaches discussed here are notionally promising, ascertaining their suitability — as with all other school workforce initiatives to address educational disadvantage — requires gathering robust evidence of their effectiveness. As noted earlier, the Commission's capacity to determine which combination of approaches would be the most effective in addressing educational disadvantage (including those being pursued in the COAG reforms) is made difficult by the fact that there appears to be lack of transparent, rigorous and comprehensive evaluation of policies in this field.

It should be noted that there is not necessarily a lack of research *per se*. There is extensive analytical work that seeks to pinpoint the sources of educational disadvantage and quantify the impacts on student outcomes. This has been accompanied by many documented syntheses of what policy action has been, or is being, taken. However, the Commission notes that this research work has not yet been matched by the same intensity of focus on assessing the success (or otherwise) of these policies in improving student outcomes. While the current reform agenda led by COAG and MCEECDYA will help to establish systematic frameworks for performance reporting and evaluation (as discussed in chapter 10), these frameworks centre on performance outcomes, not on the particular strategies used to achieve them. And while increasing effort has been put towards collating data on student outcomes, even more value could be gained from these data if researchers could link improvements in student outcomes to particular policy initiatives.

There are other deficiencies in this policy sphere.

- Some programs and policies report anecdotal measures of success, but do not appear to have systematic evaluative mechanisms in place. For example, an evaluation by Monash University of the National Accelerated Literacy Program (implemented as part of the Closing the Gap program) found that stakeholder responses to the program were generally positive, but it was not possible to establish clear causality between this program and student achievement (cited in the Strategic Review of Indigenous Expenditure by the Department of Finance and Deregulation 2009).

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- Some programs and policies record and evaluate their effectiveness, but these results are not made transparent, or it is unclear how much attention is paid to them in future policy-making decisions (as observed by Uniting Care Children, Young People and Families, sub. 8).
 - Much research and policy work appears to take place in isolation, as exemplified by the many ‘one-off’ studies which fail to build on previous studies or related research.
 - The volume, and possible overlapping effects, of different policy initiatives could be detracting from their potential effectiveness, or at least the capacity to isolate and quantify their effects.
 - Published performance indicators generally focus on what is conventionally or easily measurable (such as academic achievement and attendance rates) or are reported at a highly aggregated level.

Most importantly, there appear to be very limited arrangements to conduct comprehensive, robust and independent comparative evaluations of the many and varied policy approaches currently in place, and to facilitate the sharing of this information.

Concerns about the lack of rigorous and systematic policy evaluation were expressed in the Australian Government’s Strategic Review of Indigenous Expenditure (Department of Finance and Regulation 2009) with respect to schools-related policies targeting Indigenous students. The Review cited a large number of Commonwealth-funded programs which failed to produce evidence of their effectiveness, and in some cases recommended cessation until such evaluation is conducted:

Program effectiveness ... is often questionable, with evaluation studies highlighting weaknesses in the evidence base and the difficulty of establishing any clear relationship between program inputs and outcomes achieved. (Department of Finance and Regulation 2009, p. 107)

The Commission notes that the evaluation of programs targeting educational disadvantage is likely to be undertaken, but generally without publication of the results. While internal evaluation can evidently be helpful to those implementing the respective programs, a lack of transparent publication reduces the scope for knowledge sharing and policy learning. As the APPA noted, one of the most important requirements in forming policy to address educational disadvantage is ‘a candid sharing of what is working and what is problematic’ (sub. 41, p. 9). A lack of transparency also does little to assure the wider community that the evaluations are robust and that funds are being spent in the most effective way.

Moreover, a more transparent policy environment would help enhance policy co-ordination. As a case in point, the Strategic Review of Indigenous Expenditure commented on the fragmented nature of the policy landscape:

Taken individually, most of the programs have objectives broadly consistent with those of the [national strategy], even if their effectiveness in meeting those objectives is often open to question. Considered as a whole, however, the current array of programs is an idiosyncratic mix, lacking any strong coherence or sense of strategy and with poor connections to the broader policy agenda ... Some significant changes should be made to current program arrangements in the interests of better alignment, greater clarity and improved effectiveness. (Department of Finance and Regulation 2009, p. 104)

The Commission considers that taking action to improve the rigor and transparency of policy evaluation is the most important step that can be taken to better address educational disadvantage in Australia at this point in time. A comprehensive assessment of the cost-effectiveness of initiatives to address educational disadvantage should be a priority component of the wider policy evaluation that the Commission is proposing in draft recommendation 10.1.

DRAFT FINDING 9.1

Reducing the adverse effects of individual, economic and social factors on student outcomes must be a high priority for schools workforce policy — especially for students from low socioeconomic backgrounds, students living in rural or remote areas, Indigenous students, and/or students with disabilities or other special needs. Despite a long history of policy attempts to address educational disadvantage, outcomes for disadvantaged groups — particularly Indigenous students — still fall well below the rest of the student population. While the current reform agenda has added impetus for action, and a number of initiatives look promising, a comprehensive evaluation of current and proposed initiatives is urgently required to determine the most effective combinations for future action (see draft recommendation 10.1).

10 Policy evaluation and research

Key points

- More robust evaluation of the effectiveness of schools workforce policies should be an immediate and high priority.
 - While the new national-level reporting framework could help to turn the current evaluation deficiency around, it will not by itself indicate which workforce and other policies are the most effective at delivering better student outcomes.
- The Commission has identified some evaluation exercises that should be initial priorities in a process of embedding robust evaluation across the full spectrum of schools workforce policies. These include:
 - the effectiveness of remuneration-based incentives as a means of addressing workforce shortages
 - the impacts of performance-based pay for teachers and on student outcomes
 - the comparative effectiveness of various workforce-related initiatives to ameliorate educational disadvantage.
- To assist policy evaluation, and the development of an evidence-based policy culture more generally, a reliable information and research base is crucial.
 - The policy focus here should be on ensuring that institutional structures are conducive to promoting soundly based and cost-effective data collection and research, and that there is adequate capacity to fulfil the research task.
 - Broadening the relationships between policymakers and researchers would help to improve the quality and relevance of information and research, as well as its dissemination across the policy-making community.
- Periodic review of the effectiveness of the evaluation and research structures is also important.
 - To this end, the information-related roles of the Australian Curriculum, Assessment and Reporting Authority and the Australian Institute for Teaching and School Leadership should be examined as part of a wider independent review of these entities in five years' time.
 - If these and other institutional arrangements do not prove to be sufficient to deliver a robust information base, further initiatives should then be examined.

A key theme permeating the preceding chapters in this report is the need for more robust evaluation of the effectiveness of schools workforce policies. Indeed, this is one matter on which there is almost total agreement across the various stakeholder interests.

To a significant extent, the impetus for improved evaluation must come from those entities responsible for policy development and implementation. Given the current and prospective workforce challenges affecting all school sectors, the fiscal pressures on governments, and the scope for improving the outcomes delivered by Australia's schooling system, a serious commitment by policymakers to better evaluation is required.

As a starting point, the Commission has drawn together the specific policy evaluation requirements identified earlier in the report to create an initial priority evaluation agenda. And to facilitate effective evaluation, the Commission has also examined the adequacy of current arrangements for the dissemination of research and information.

10.1 The role of evaluation

Robust policy evaluation can contribute in several ways to better informed and more effective policy making.

As demonstrated by the large number of different policy approaches employed in the schools workforce area, there are typically multiple options available to deal with any particular policy issue. Thus prior to any new policy being implemented, it should be incumbent on the responsible entity — whether government or non-government — to conduct *ex ante* evaluations of the merits of the different options.

For policies involving new or amended regulation, such an assessment will generally be mandated under Regulatory Impact Statement requirements. But the same principles are no less relevant for non-regulatory initiatives intended to address imbalances in workforce numbers, improve the quality of training and professional development, enhance leadership, or in other ways deliver better outcomes for students.

Following implementation, robust evaluation processes are necessary to enable evidence-based *ex post* assessments of how well policies have actually worked, and whether modifications to programs and initiatives are required. Such assessments will not always provide categorical or immediate answers — especially in an area such as schools workforce policy, given that there are many policy and non-policy influences on student outcomes (originating both from the education sector

specifically and the community as a whole), and that the time lag between implementation and impact can be considerable. Accordingly, *ex post* policy evaluation should not be a one-off event (unless, of course, it quickly becomes apparent that a particular policy should be abandoned). Periodic evaluations provide a means to build the evidence base, as well as to ensure that even meritorious policies retain their currency if circumstances change. And as indicated in chapter 3, such assessments should pay particular regard to the relative cost effectiveness of alternative approaches.

Robust evaluation requirements can play an important role in helping to make those developing and implementing policies accountable for their actions. In fact, a virtuous cycle can be set in train, with greater accountability encouraging more investment by policymakers in the supporting information base, leading to better evaluation and a further enhancement in accountability. Also, robust evaluation can be helpful in reinforcing the ultimate objective of policy — to deliver high quality and cost-effective educational outcomes for students — and thereby minimise the risk that this objective will be subjugated to more detailed operational goals.

10.2 The current state of play and next steps

There is broad recognition that, historically, the evaluation of school policies in general and schools workforce policies in particular have been deficient. Such commentary was aptly synthesised in the Grattan Institute’s observations on this matter.

Unfortunately, very little rigorous evaluation of programs and cost-effectiveness analysis is done within the Australian school system. Decisions are made without the best possible understanding of what works in different contexts, or — critically — which programs achieve results at the lowest cost. (sub. 30, p. 8)

More forcefully, the Australian Parents Council said that:

Approximately \$40 billion is invested annually in schooling yet, to the best of our knowledge, an efficiency audit in respect of how federal, state and territory funds allocated to schooling are spent has never been formally conducted. (sub. 19, p. 11)

Seeking to explain what may be driving this trend, Deakin University’s School of Education argued that:

... 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. ... funders, including government agencies such as [the Department of Education, Employment and Workplace Relations] 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. (sub. 24, p. 37)

One particular illustration of this ‘revolving door’ of policies and programs relates to ameliorating educational disadvantage. A discussion paper for the Review of Funding for Schooling observed that ‘a key problem in assessing the impact of targeted programs for disadvantaged groups is the absence of any formal evaluation for many of these programs’ (ACER 2011, p. 59). That is not to suggest that there are no evaluations taking place at all — indeed, as chapter 9 notes, some internal evaluations within departments and agencies are undoubtedly occurring. The problem is that, in general, these processes are not transparent or consistently applied.

A further complication, pertinent to schooling more broadly, is that funding models are in a near-constant state of evolution (Deloitte Access Economics 2011). Consequently, many assessments of system performance provide only a snapshot of what is happening at a point in time, rather than establish which policy settings work best over time. This also means that interactions between different policies and initiatives are unlikely to be adequately picked up.

There are encouraging signs of progress ...

The new national level reporting framework could potentially be an important vehicle for helping to turn the evaluation deficiency around. Central to the new framework is the collection of extensive new data on student numeracy and literacy outcomes (see section 10.3). In its recent review of Australia’s evaluation and assessment framework in the education area, the OECD (Santiago et al. 2011) commented favourably on these national level arrangements.

However, of itself, national level reporting on student outcomes — or monitoring by the COAG Reform Council (CRC) of the success of individual jurisdictions in meeting agreed performance targets under the education-related National Partnership Agreements (NPAs) — will not indicate which individual policies are making the most difference. Hence, as the OECD observed, there is a need for improved ‘articulations’ between assessments of the overall performance of the schooling system and detailed policy making and classroom practice.

Here too, there are some initiatives underway. For example:

- fulfilling a commitment of the NPA on Literacy and Numeracy, the Department of Education, Employment and Workplace Relations is overseeing the

development of a national evidence base on what works in improving numeracy and literacy

- the Australian Government has also agreed to fund evaluations of the ‘Smarter Schools’ NPAs, including analysis of the various state and territory-level initiatives encompassed within these agreements
- Victoria’s Department of Education and Early Childhood Development has partnered with the Melbourne Institute to establish a new research stream that will inform educational policy making (including on schools workforce issues).

In addition, as discussed in previous chapters, there are various policy pilot programs in place or in prospect that should help to provide evidence, and thereby enable evaluation of the effectiveness of particular policy approaches. Impending improvements to the comprehensiveness and accessibility of the workforce data base (see section 10.3) will likewise be helpful. And while not directly shedding light on the merits of specific policies, monitoring by the CRC could nonetheless provide impetus for improved evaluation at the jurisdictional level — especially if the reward targets that determine eligibility for additional Australian Government funding under some of the NPAs are suitably ambitious (see chapter 11).

... but more could, and should, be done

As outlined in previous chapters of this report, there are several specific program evaluation exercises that the Commission considers should be afforded a high priority. These relate to:

- the effectiveness of remuneration-based incentives as a means to address shortages of school workers (chapter 4)
- the impacts of performance-based pay arrangements on teacher and school performance (chapter 6)
- the comparative effectiveness of workforce-related policies and initiatives aimed at ameliorating educational disadvantage (chapter 9).

The Commission considers that responsibility for initiating and overseeing the evaluation of remuneration-based incentives and policies to address educational disadvantage would best lie with the Ministerial Council for Education, Early Childhood Development and Youth Affairs. And with regard to performance-based pay (where the Australian Government has already announced a national bonus scheme), the Commission has proposed that the evaluation process involves a series of experiments that build on recent trials undertaken in Victoria (see draft recommendation 6.1).

In addition to the high-priority areas above, the relative efficacy of pre-service training, induction and professional development of teachers must also be assessed. The Commission has sought to address weaknesses in this area through a proposed longitudinal data collection (see draft recommendation 5.1). Similarly, the opportunities for workforce innovation could be better explored at a policy level. To this end, the Commission has recommended that an evaluation function be included in a broader remit for the Australian Institute for Teaching and School Leadership (AITSL — see draft recommendation 7.1).

As well as shedding light on how best to tackle the specific issues concerned, this suite of evaluation exercises could be an exemplar and source of learning for improved program evaluation in other areas. Importantly, these particular evaluations should be seen merely as priority ‘first steps’ in a process of embedding robust evaluation across the full spectrum of schools workforce policies.

The Commission further considers that an investment of additional resources in building evaluation skills and experience — especially within policy departments if their in-house evaluation expertise is limited — could have a sizeable payoff. Even where the evaluation task is contracted out, a sound knowledge of both evaluation techniques and of what has happened in the past can assist greatly in selecting evaluators and translating their efforts into soundly based policy change. Notably, the OECD (Santiago et al. 2011) also referred to the scope for improvement in this area — with several participants likewise pointing to an evaluation skills deficit (see, for example, Catholic Education Office — Diocese of Toowoomba, sub. 11).

10.3 Strengthening the research base

A sound information and research base can greatly assist policy evaluation and the development of an evidence-based policy culture more generally.

Current schools workforce research

Data, information and research on the schools workforce are currently generated in a variety of often interrelated ways. For example:

- The Australian Council for Education Research is an independent not-for-profit entity that undertakes research into (and evaluation of) a variety of educational issues. Key stakeholders in the schools area are among its clients, with its research widely referred to in submissions to this study.
- Some universities, or academics within universities, are active players in the schools workforce research field. Again, this is often to meet explicit

requirements of policymakers and school operators. For instance, in its informal discussions during the early phase of the study, the Commission was advised of productive relationships between several state and territory education departments and researchers at particular universities. And in its submission, the South Australian Government (sub. 35, p. 3) referred to the work undertaken for it by the Australian Institute for Social Research at the University of Adelaide.

- Several independent think tanks contribute to schools workforce policy debates, including the Grattan Institute, which made a submission to this study.
- State and territory education departments and non-government school operators generate a range of schools workforce data additional to that assembled and published through formal collection channels — and, to varying extents, use this data for policy-oriented research. Indeed, the recent OECD report commented that:

Some jurisdictions have ... developed sophisticated data information systems — collection of data on students, teachers, schools, and their performance over time. Among the best examples are the School Measurement, Assessment and Reporting Toolkit ... developed by New South Wales and the Ultramet developed by Victoria ...

The OECD went on to outline a range of uses for this information, including to improve knowledge management and to ‘create a better data infrastructure for educational research’ (Santiago et al. 2011, p. 34).

- The new national level reporting and evaluation framework — and especially the NAPLAN-related activities of the Australian Curriculum, Assessment and Reporting Authority (ACARA) — is generating a range of new data on student outcomes. AITSL is intended to become a repository for data relating to the teaching workforce. And this national reporting effort also has access to the long standing datasets compiled for COAG by the Steering Committee for the Review of Government Service Provision (whose secretariat is located in the Productivity Commission). As well as comparative schools data in the *Report on Government Services* (SCRGSP 2011b), the Steering Committee compiles and publishes the *Overcoming Indigenous Disadvantage* report (SCRGSP 2011a), which includes additional information on Indigenous student outcomes. Policymakers and school operators can also draw on a large body of international data and research, including from the OECD.

Despite these various initiatives, several participants outlined perceived gaps or areas where better research would be helpful. For instance:

- The Australian Mathematical Sciences Institute (sub. 31, pp. 21–2) referred to the lack of national data on the qualifications, age profile and length of service of mathematics teachers, arguing that this hampers assessment of the full extent of current shortages.

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- UnitingCare Children, Young People and Families (sub. 8, pp. 13–4) pointed to deficiencies in information on the distribution of school welfare personnel and Indigenous support staff, and on rates of student attendance, suspension and inclusion.
 - The Grattan Institute (sub. 30, p. 3) contended that lack of information on teachers’ skills and their effectiveness within schools and classrooms restricts labour market flexibility by making it more difficult to recognise good performance and deal with underperformance.
 - The Community and Public Sector Union — State Public Services Federation (sub. 6, p. 2) called for more comprehensive research into the non-teaching workforce.
 - The New South Wales Department of Education and Communities (sub. 14, p. 26) proposed a comprehensive study to gauge ‘how current school resources achieve improvements in student and school outcomes.’

Are further changes warranted?

In looking to address gaps in the information and research base, governments could consider new institutional initiatives.

One option would be to establish a new, government-funded, educational research entity. Conceivably, doing so could help to signal the importance of evidence-based policy making in the education area and provide impetus to fill gaps in the research base.

But such signalling and impetus is already coming from the new national level evaluation and reporting framework. Moreover, a risk associated with attempts to consolidate research or funding in a single entity is that the diversity of ideas and approaches might be curtailed.

In any event, the establishment of ACARA and AITSL provides two additional national level vehicles that can house and share data and research. Like the OECD (Santiago et al. 2011, p. 34), the Commission considers that both entities could potentially play a significant role in consolidating, disseminating and evaluating a variety of educational research. An example of this is the Commission’s proposal to augment AITSL’s currently envisaged functions by including workplace composition and job design issues (see draft recommendation 7.1).

As with other aspects of the policy environment, it is important that the performance of ACARA and AITSL is evaluated. As relatively recent additions to the institutional landscape, it will be some time before their effectiveness can be

assessed — either in a general sense, or (more specifically) as vehicles for improving access to, and the evaluation of, relevant data and research. In the Commission's view, pending such evaluation, it would make little sense to incur the costs of establishing further institutions intended to fulfil similar functions.

Mind the gaps

In the meantime, the focus of policy in this area should be on addressing identified and significant data and research gaps. Beyond the issues raised above by study participants, the CRC has recommended to COAG a number of improvements in the data that are necessary for it to be able to monitor the progress made in meeting the goals of the NEA and related initiatives. Among the recommendations in its performance report for 2009 on the NEA, the CRC proposed 'investment in improvements to administrative collections to support national performance reporting, including enhancements to schools' administrative data collections for enrolment and attendance information and Year 12 completions and administrative data' (2010, p. 118). In addition, in building on the CRC's commentary, the recent OECD report (Santiago et al. 2011, pp. 131–2) identified several gaps in the national monitoring system, including an incomplete national measure of individual student or school SES backgrounds.

Assessment of the benefits and costs of such initiatives will usually call for detailed knowledge of both the information that is currently available and the extent to which gaps in that information impede effective policy making and evaluation. Accordingly, except for its proposals for a longitudinal study on the teaching workforce (see draft recommendation 5.1), the Commission has not sought to endorse or reject specific data or information collection initiatives.

However, with bodies like ACARA and AITSL supplementing the extensive array of researchers looking at schools workforce issues, the Commission considers that the current arrangements are well placed to identify and fill gaps in data and information relevant to schools workforce policy.

Harnessing research capacity

As implied by the preceding discussion, Australia's educational researchers should be regarded as a useful resource for policymakers. Indeed, as noted, there are already well-established linkages between some policymakers and researchers.

But some participants suggested that these relationships are typically of a one-to-one nature rather than systematic. For example, Deakin University's School

of Education observed that ‘there are no forums in which researchers can meet with policymakers on a regular basis’ (sub. 24, p. 37). Broadening the relationships between policymakers and researchers would help to improve both the quality and relevance of the information and research base and the dissemination of relevant material across the policy-making community.

Regular collective engagement — involving all of the jurisdictions and a wide range of researchers — could provide for a richer discussion of ideas, and more sharing of research outputs and evaluation techniques across jurisdictions. It might also pave the way for greater coordination in the sponsoring and management of research work. The Commission is therefore encouraged that there appear to have been some recent moves in this direction and supports their further development.

Given the importance of a robust information and research base for good policy making and evaluation, the Commission emphasises that recent and prospective changes to information collection and dissemination arrangements do not mean that this aspect of schools workforce reform can now be put to one side. As for other areas of workforce reform, periodic evaluation of the effectiveness of the structures now in place is required — with further initiatives to be examined if these structures do not prove to be sufficient or appropriate.

DRAFT RECOMMENDATION 10.1

The Ministerial Council for Education, Early Childhood Development and Youth Affairs should initiate and oversight:

- ***a program-based evaluation of the effectiveness of remuneration-based incentives as a means of addressing shortages of school workers***
- ***a comprehensive assessment of the effectiveness of the programs and policies to help ameliorate educational disadvantage***
- ***an independent performance review, to commence in five years’ time, of the Australian Curriculum, Assessment and Reporting Authority and the Australian Institute for Teaching and School Leadership. Among other things, this review should include consideration of the effectiveness of these institutions in improving access to and evaluation of: data on student outcomes and the schools workforce, and research and information relevant to workforce policy settings and to the performance of the workforce itself.***

These evaluations and assessments should complement the proposed evaluation initiatives relating to performance bonuses (see draft recommendation 6.1), pre-service training, induction and professional development (see draft recommendation 5.1) and workforce composition and job design (see draft recommendation 7.1).

11 Some broader framework issues

Key points

- While existing institutional structures do not guarantee effective policy coordination, it would be premature to introduce new coordination mechanisms.
 - The effects of recent reforms to the national-level reporting and assessment framework — such as the ‘Smarter Schools’ National Partnership Agreements, and the establishment of both the Australian Curriculum, Assessment and Reporting Authority and the Australian Institute for Teaching and School Leadership — cannot yet be fully identified.
 - Instead, the success of the current mechanisms — including in dealing with the close integration between the schooling, early childhood and vocational educational and training sectors — should be revisited as part of future evaluation of the current reforms.
 - However, more should be done to ensure that the interests of non-government schools, the non-teaching workforce and parents are appropriately represented in high level policy-making processes in the schools area.
- If National Partnership Agreements are to catalyse genuine performance improvement, then the hurdles that dictate eligibility for reward payments to state and territory governments must be suitably ambitious.
- The process of establishing pay and conditions for school workers is, for the most part, heavily centralised. This can reduce the scope for individual schools, operators of school systems and policymakers to respond to changing imperatives and pressures.
 - Overcoming rigidities in the current arrangements will be dependent on the goodwill of all parties and a capacity to bring a constructive, open and forward-looking perspective to the negotiating table.
 - There should be a particular focus on ensuring that awards and agreements are more accommodative of school level variation in workplace arrangements, and that they support governance and other changes that could improve the management of poor workplace performance.
- Targeted training will improve the capacity of teachers and principals to engage with parents and the community. And the availability of better information on how schools are performing will, if well implemented, provide a better platform for engagement.
 - But effective feedback on the quality of engagement — including via school boards — is also important.

As the current schools workforce reforms recognise, it is important to examine not only options for improving specific aspects of workforce policy, but also the efficacy of the broader institutional framework within which policy is developed, implemented and evaluated. Consequent on the new national-level reporting and assessment initiatives, and the associated schools workforce-related national partnership arrangements, this framework is undergoing considerable change (see chapter 3).

In keeping with its concern to avoid adding unduly to the already busy and active policy landscape, the Commission is not proposing major changes to this framework. However, as well as initiatives to help embed robust evaluation as an integral part of the framework (see chapter 10), the Commission does see the need to ensure that all key stakeholders are appropriately represented in high level policy-making processes. In addition, and though not putting forward specific proposals, it has commented on a number of other framework issues germane to the future efficiency and effectiveness of the schools workforce — including in the areas of policy coordination, the ambitiousness of reform targets, industrial relations and parental and community engagement.

11.1 Policy coordination and stakeholder representation

An increasing number of government entities have policy responsibilities that directly or indirectly affect the schools workforce. As well as state and territory education departments and the Australian Government's Department of Education, Employment and Workplace Relations (DEEWR), these entities include housing, health and community services departments at both levels of government. With governments meeting a major part of the cost of school education and of training school workers, treasury and finance departments are also influential players. And the Australian Institute for Teaching and School Leadership (AITSL) and the Australian Curriculum, Assessment and Reporting Authority (ACARA) — bodies recently established by governments, and that have significant government representation on their boards — likewise have central policy development roles.

Adding to this institutional web are the various non-government entities that are involved in developing and implementing schools workforce policy, or at least contributing to the policy development process. Paramount in this regard are non-government school operators — who are both the conduit for government-initiated workforce policies into the Catholic and independent schools systems, and a source of advice and evidence to assist government in its policy-making role. Parents and the multiplicity of bodies representing the schools workforce, or parts of it, are further key stakeholders in the process.

Plainly, within such an institutional environment, effective policy coordination, will be crucial for good outcomes.

- As discussed in chapter 9, addressing educational disadvantage will require a package of measures encompassing: workforce-related policies, more general school policies, and policies outside the education arena in areas such as health and housing. One of the likely benefits of the Commission's proposed comprehensive assessment of the effectiveness of the programs and policies in place to address educational disadvantage (see draft recommendation 10.1) should be to shed light on situations where lack of coordination in detailed policy settings or policy-making processes is impeding progress.
- The new university funding model has the potential to exacerbate the current surplus of general teachers. If dialogue between governments and the universities is unsuccessful in preventing this, the use of other available policy levers may be required (see chapter 4)
- As the Commission has emphasised in several places in this report, individual workforce policies must similarly be coordinated. Indeed, without appropriate synchronisation, some potentially useful policy initiatives may fail to deliver. For instance, without conducive remuneration structures, the incentives for teachers to invest in the skills necessary to meet the new higher level national teaching standards are likely to be muted (see chapter 5). Likewise, without robust measures of teacher performance, any performance-linked remuneration structure is unlikely to incentivise better performance and could even be counterproductive (see chapter 7). And without strong leadership skills at the school level, the devolution of decision-making responsibilities for hiring, staff deployment, performance management and day-to-day school operation will not achieve its full potential (see chapter 8).
- There are some emerging workforce-related coordination issues at the interface between the schooling system and the Early Childhood Development (ECD) and Vocational Education and Training (VET) systems that require close monitoring (see box 11.1).

Through the Council of Australian Governments (COAG) and the Ministerial Council for Education, Early Childhood Development and Youth Affairs (MCEECDYA), increased attention is now being given to high level policy coordination. As well as the guidance provided through the Melbourne Declaration on Educational Goals for Young Australians and the National Education Agreement (NEA) (see chapter 3), the new national-level reporting and assessment framework is intended to provide for an overarching picture of how student outcomes are influenced by current policy approaches. In addition, AITSL has been given

Box 11.1 Sectoral interface issues

In an educational sense, the schooling system does not operate in isolation. Most children starting primary school have received some instructional education in the ECD sector. And for many of those students who do not pursue undergraduate studies, the VET system plays a key preparatory educational role in their transition to paid employment. Importantly, recent initiatives to better integrate the three systems have increased the premium on cross-sectoral policy and program coordination. For example:

- As outlined in the Commission's draft report for its concurrent study on the ECD workforce (PC 2011a), Australian governments have committed to an increase in the instructional component of early childhood education. In the short term, the surplus of primary teachers will provide one means to accommodate the consequent growth in demand for teaching resources. However, strong growth in school enrolments (see chapter 4), and the expected general, age-related, tightening in labour markets, mean that over the medium to longer term, workforce planning in the two sectors will need to be better linked.
- The overlaps in teaching requirements may also necessitate changes in teacher registration requirements. As participants to the Commission's study on the ECD workforce (PC 2011a) identified, qualified school teachers who are employed in ECD teaching positions are not always able to roll over their school-based registration.
- There will likewise be implications for teaching standards. As well as the ECD interface (see the Victorian Institute of Teaching, sub. 36), the provision of VET in schools as part of efforts to boost year 12 retention rates raises its own suite of standards, qualification and teaching issues.
 - The Catholic Education Commission of Victoria (sub. 13, p. 14) and the Australian Education Union (sub. 28, p. 5) raised concerns about inadequacies in the education and training provided to those delivering school-based VET.
 - And while the Commission concluded in its recent report on the VET workforce (2011c, pp. 251–2) that there should continue to be specific vocational-related qualifications for those teaching VET in schools, it also pointed to the need for appropriate recognition of prior learning. Moreover, as the relationship between the schooling and VET sectors continues to evolve, the balance of the influences on appropriate qualification requirements will not necessarily remain the same.

As detailed in the text, the Commission does not see a need at this stage for specific institutional or procedural initiatives to meet the integration objectives enunciated in the terms of reference for the three studies — namely, to reduce divides between workforces in the three sectors, support a more learner-focused approach, achieve better individual outcomes and increase the efficiency of workforce development and planning.

That said, an openness to different ways of doing things, and an accommodative regulatory structure, will be no less relevant here than for other components of workforce policy. One matter that may require attention in this regard is ensuring that iteration over time of the new national teaching standards (and associated registration requirements) takes appropriate account of the closer integration between the schooling, ECD and VET sectors.

responsibilities that bridge a number of specific areas of workforce policy, including training, professional development and remuneration — with the Commission proposing that AITSL also assumes an explicit role in the area of workplace innovation (see chapter 7).

Moreover, departmental and portfolio responsibilities often span more than one of the policy areas relevant to promoting efficient and effective workforce arrangements. For example, within the Australian Government, DEEWR has policy carriage for both school and university education and, in a number of the states and territories, policy responsibility for school and early childhood education is combined in single departments. And the breadth of MCEECDYA's remit — which encompasses early childhood development and youth transitions as well as school education — should help to ensure that interface issues with the ECD and VET systems are not ignored.

Such institutional structures do not, of course, guarantee effective policy coordination. But especially given the new national-level reporting and assessment framework and the roles of COAG and MCEECDYA within that framework, the Commission considers that it would be premature to introduce further coordination mechanisms. A preferable approach would be to revisit the coordination issue once the current reforms and processes are properly bedded down and sufficient time has elapsed to properly assess their impacts.

However, the Commission is strongly of the view that policy coordination, and policy formulation more generally, would be advanced were all of the key stakeholder groups given appropriate opportunity to offer their input into the policy process. In particular, while engagement with the non-government schools sector and parental interests occurs for individual policy initiatives, these two groups appear to be under-represented in the new national-level processes.

In commenting on this matter, the Independent Schools Council of Australia argued that:

Decisions concerning the implementation of policies made at a national level are often determined without the input of representatives from the independent sector, despite those implementation decisions having a direct impact on school communities, school leaders, and teachers in the sector. ... [This] is not conducive to maximising the efficiency and effectiveness of the schools workforce. (sub. 18, p. 22)

Similarly, in putting a parental perspective, the Australian Parents Council (APC) contended that:

Parental engagement is evident in some worthwhile individual programs and projects throughout Australia but APC proposes that Australia should aspire to the systematic and sustainable integration of parental engagement into all aspects of the reform agenda.

Policies and practices that enable this strategic approach to parental engagement must be a part of schools workforce reforms. (sub. 19, p. 4)

Representatives from these sectors went on to outline some of the specific consequences of the current lack of representation. The National Catholic Education Commission (sub. 7, p. 3), for instance, said that ‘the implementation of the cross-sectoral schooling [national partnerships] has been bedevilled by the lack of capacity in many State Government bureaucracies to abide by the principle of competitive neutrality’. Even more forcefully, the APC claimed that:

Often State and Territory Ministers for Education perceive themselves to be ministers for public schools. There have been instances where they have determined the proportional allocation of national partnerships funding between the government and non-government school sectors from the perspective of ‘competitor’ with the non-government sector. (sub. 19, p. 10)

And in talking about the consequences of putting parents at the periphery of policy discussions, the APC said that a ‘pivotal plank in effective teaching and learning and effective schools is ignored’ (sub. 19, p. 2).

What is reasonable and sufficient involvement is, of course, a matter for judgement. Nonetheless, and especially given the potential conflict of interest for most state and territory education departments that arises from their dual funding/operational and regulatory roles, policymakers must be seen to act without preference or prejudice. The Commission further notes that the OECD (2011, p. 39) recently concluded that there is room to improve the integration of the non-government sector into the overall evaluation and assessment framework.

More also needs to be done to integrate the non-teaching workforce into the decision-making process. As is evident from the submissions to this inquiry, schools workforce policy continues to focus very heavily on teachers and principals. Though the performance of these two workforce groups will remain central to the effectiveness and efficiency of schooling outcomes, the contribution of the non-teaching workforce — including volunteer workers — is set to become increasingly important in the future. In addition to the growing diversity of student management and care needs and the increasing administrative and reporting burdens on schools (see chapter 2), there appear to be untapped opportunities to free up teaching resources by transferring more tasks to non-teaching staff (see chapter 7).

In light of the above, the Commission is proposing that MCEECDYA take steps to ensure that the interests of non-government schools, the non-teaching workforce and parents are appropriately represented on high level policy forums in the schools area. Specifically, the Commission is suggesting that MCEECDYA establish a

working group to consult with relevant stakeholders and advise on specific options to address the current representation gaps.

The Commission further notes that addressing these current representation gaps should help to guard against any biases in the distribution of national partnership funding in favour of government schools. Nonetheless, it also gave consideration to whether the sort of separation of education-related functions that applies in Western Australia and Victoria could be helpful in this context.

- In Western Australia, the Department of Education has responsibility for the establishment and administration of public schools, while the Department of Education Services registers and funds non-government schools, and regulates the entire sector. (Both departments, however, report to the same Minister.)
- In Victoria, registration and regulation of schools by the Victorian Registration and Qualifications Authority is separate from the provision of public school services by the Department of Education and Early Childhood Development.

In any sector where there are both government and non-government service providers, the separation of the public sector's service provision and regulatory roles is intrinsically desirable to promote competitive neutrality.

However, the separation of functions along the lines of the Victorian and Western Australian models would not necessarily address the particular competitive neutrality issue raised in this study relating to the distribution of national partnership agreement (NPA) funding across government and non-government schools. That distribution will seemingly depend mainly on the processes for developing criteria to allocate the new funding streams concerned, and the associated procedural checks and balances.

Given these uncertainties, and the potential costs of structural separation initiatives, the Commission is not making any formal recommendations on this matter. However, it should be kept under review at the COAG and Ministerial Council levels — both in a general institutional sense, and specific to evaluating the outcomes from the expenditure of NPA funds.

DRAFT RECOMMENDATION 11.1

The Ministerial Council for Education, Early Childhood Development and Youth Affairs should ensure that non-government schools, the non-teaching workforce and parents are appropriately represented in high level policy-making processes in the schools area. To this end, the Council should establish a working group to consult with the relevant stakeholders and advise on specific options for improving their representation on high level policy forums.

11.2 The ambitiousness of NPA reform targets

As detailed in chapter 3, the Australian Government will provide up to \$2.5 billion of additional funding over the next four to seven years under the three ‘Smarter Schools’ NPAs. These three agreements seek to improve student literacy and numeracy, enhance teacher quality, and address educational disadvantage in low socio-economic communities.

A number of submissions raised concerns about aspects of the NPA regime. As well as the perceived lack of neutrality in the distribution of this funding stream across government and non-government schools (see above), other claimed deficiencies included:

- the administratively cumbersome and costly nature of the arrangements for schools (Queensland Catholic Education Commission, sub. 20, p. 1)
- the short-term nature of the funding involved (Catholic Education Office — Diocese of Toowoomba, sub. 11, pp. 4–5)
- a tops-down approach to funding allocation that limits the capacity for teachers and schools to respond to local imperatives (Deakin University — School of Education, sub. 24, p. 12)
- lack of ambition in the performance targets that jurisdictions must meet to secure the additional funding (Australian Parents Council, sub. 19, p. 11)
- the provision of funding to schools most easily able to improve their performance — and thereby to contribute most to meeting a jurisdiction’s reward targets — rather than to those schools with the most urgent need for additional support (Australian Primary Principals Association, sub. 41, p. 9).

As a performance-linked funding mechanism, and given the distribution of public funds that are involved, such arrangements require accountability processes and other administrative imposts on funding recipients. This includes *ex ante* justification for the funding and *ex post* evaluation of outcomes.

Moreover, the NPAs are intentionally a time-limited, catalytic mechanism. And while the nature of the funding allocation processes may at times constrain which schools and what sorts of initiatives receive support, the implications of any such constraints need to be considered in the context of overall improvements in outcomes.

However, the ambitiousness of the high level performance targets used to assess eligibility for the reward component of NPA funding (see box 11.2) — and aspects of their development and application — seem to the Commission to be more of an

issue. Indeed, these matters were raised by the COAG Reform Council (CRC) in its first report on the Literacy and Numeracy NPA (CRC 2011). Amongst other things, the CRC:

- noted that while a degree of jurisdictional variation is important for successful implementation, differences in measurement approaches across jurisdictions have served to reduce transparency
- juxtaposed the ‘strong references to ambition’ in the NPA and the apparent variation in the ambitiousness of reform targets agreed with individual states and territories
- observed that the bilateral negotiation process had provided ‘no opportunity for collaboration and scrutiny’.

On this latter issue the CRC (2011) went on to conclude that:

... the sharing of reward frameworks between jurisdictions so that States and Territories are aware of the types of measures and targets negotiated by other jurisdictions [would] assist in a better understanding of good design and the potential for accelerated improvements for schools, school communities and students. (p. 90)

To the extent possible, the computational and methodological variations that the CRC has identified as impeding comparability and transparency should be

Box 11.2 Setting reward targets for the literacy and numeracy NPA

The literacy and numeracy NPA commenced in January 2009 and will expire at the end of 2012.

As detailed in CRC 2011, to achieve sustained improvements in literacy and numeracy, the NPA identifies three priority areas for reform and indicative actions for each area. To qualify for funding, states and territories were required to develop literacy and numeracy strategies that focused on these priority areas, and implementation plans detailing the measures of improvement and the reform targets governing eligibility for reward payments.

These measures of improvement and reform targets were bilaterally negotiated with DEEWR. However, as an input to the negotiation process, the Australian Council for Educational Research was commissioned to provide independent advice on each jurisdiction’s proposed measures and targets. Amongst other things, this advice considered whether these targets represented an accelerated improvement as required by the NPA, and whether targets were realistic and sustainable.

The upshot of this process is that, for the first reporting cycle of the NPA, there was variation in reward frameworks across the jurisdictions — not only in regard to the underlying methodological and computational platform, but also in the number and ambitiousness of the targets (see text).

expeditiously addressed. The CRC (2011, p. 89) has in fact mapped out a process for doing so.

As for variations in the ambitiousness of reform targets, like the CRC, the Commission recognises that improvement measures and reward targets must take into account differences in jurisdictional circumstances and different starting points on the reform path. It also notes that the involvement of the Australian Council for Educational Research should have helped to inject some independent rigour into the initial target setting process.

Even so, there is a limit on how far such considerations should reasonably extend in a rewards context. If flexibility leads to the negotiation of unduly conservative targets in some or all jurisdictions, reward payments may do little to catalyse performance improvement. In those circumstances, the reward payments could become little different from an ‘untied’ education contribution from the Australian Government to the states and territories.

Hence, in the Commission’s view, there should be an onus on the Australian Government to take a firm line on any jurisdictions seeking to negotiate ‘low ball’ targets. Certainly, some of the outcomes referred to by the CRC (see, for example, p. 90) suggest that for the first reporting cycle of the literacy and numeracy NPA this was not the case.

The Commission understands that the recent process of negotiating reward targets for the second reporting cycle of this NPA has taken account of the CRC’s commentary on levels of ambition, and that the Australian Council for Educational Research was once again called on to provide independent advice. The thrust of that commentary may also prove to be pertinent to the future negotiation of reward targets for the second reporting cycle of the improving teaching quality NPA. And the CRC’s suggestion that reward frameworks be shared across states and territories would be a generally relevant procedural improvement for injecting additional scrutiny and discipline into the target setting process.

11.3 Industrial relations

The industrial relations regime permeates several key areas of workforce policy and service delivery, including job design and workplace innovation, performance management and remuneration structures, and school autonomy.

As mentioned earlier in the report, in comparison to many other occupations, the process of establishing pay and conditions for teachers (see box 11.3) and other

Box 11.2 The framework for determining teachers' pay and conditions

In general, the conditions of teachers' employment are set through industrial awards and collective bargaining arrangements (enterprise agreements).

Prior to the establishment of the *Fair Work Act 2009* (Cwlth), separate awards existed in each jurisdiction for government school teachers, Catholic (systemic) school teachers and independent school teachers.

This award structure has now been somewhat rationalised through the *Educational Services (Teachers) Award 2010*. It covers teachers in non-government schools in all jurisdictions except Western Australia, and teachers in government schools employed in Victoria, the Northern Territory and the Australian Capital Territory. However, state-based awards continue to cover government school teachers in the majority of jurisdictions, and all teachers in Western Australia. (There has been a similar rationalisation in the award arrangements for non-teaching school workers, with the relevant federal system 'modern award' being the *Educational Services (Schools) General Staff Award 2010*.)

Awards stand on their own in the absence of an enterprise agreement. But where an enterprise agreement has been negotiated, it becomes the primary arbiter of a teacher's employment conditions. In the majority of cases, agreements are 'multi-enterprise' and apply across a jurisdiction's government or Catholic school system. And though most independent schools negotiate single-enterprise agreements directly with staff, these agreements can draw from a model agreement for the sector.

In terms of their content, awards and agreements for teachers may include provisions governing: class size and teacher workloads; professional development; the use of 'temporary' teachers (see below); school management, including the level of oversight by school councils; and employer consultation with teachers over workforce changes. (Awards and agreements for non-teaching school workers are typically more generic, partly due to the variety of different workers that they cover.) As discussed in the text, such requirements can constrain changes to job design and workplace organisation — not only in individual schools, but also across school systems.

Contract employment

The pay and conditions under which temporary (or 'contract') teachers are employed are broadly consistent with those for permanent staff — including in regard to leave entitlements (which are generally pro-rated, with varying provisions to deal with pay during school holidays), and access to professional development. But temporary teachers are employed on a fixed-term basis in one school for no more than 12 months (other than in exceptional circumstances), and they have no guarantee of a new appointment in another school at the end of their contract.

Separate from these arrangements, many government school principals in Victoria and the Northern Territory, and non-government school principals in general, are employed under individual contracts for periods of up to five years. Contract employment of principals is discussed further in chapter 8.

school workers is heavily centralised. ABS (2010a) data indicate that nearly 90 per cent of those employed in the education and training sector — of which school workers comprise a sizeable proportion — are remunerated through awards or enterprise agreements. Across the economy as a whole, the comparable share is less than 60 per cent.

In various ways, such centralisation can reduce the capacity for individual schools, those responsible for operating school systems, and policymakers to respond to changing imperatives and pressures. For example:

- At a broad level, the Grattan Institute commented that centralised agreements ‘fail to recognise that there are numerous labour markets for school teachers, with differences stemming from subject and year level taught. Treating these labour markets as homogenous creates both surpluses and shortages in particular areas’ (sub. 31, p. 3).
- ‘One size fits all’ strictures on maximum class sizes can impede changes in workforce composition (collectively or in particular schools), thereby limiting the scope for better value to be obtained from the funding available to employ school workers. And the target reductions in average class sizes that have featured prominently in awards and collective agreements have been a costly policy measure that does not appear to have translated into a commensurate improvement in student outcomes (see chapter 7).
- The Government of South Australia referred to award-related impediments to the employment of para-professionals.

The “Scope and Persons Bound” clauses of the safety net award for school support staff has resulted in a very narrow range of employees, and subsequently services, in school sites. For example, schools are currently unable to employ social workers, psychologists or nurses as members of staff to provide direct services to students. Such employees must be employed centrally or through a regional office, and provide services to the school rather than be an integral part of that school’s staffing. (sub. 35, p. 10)

- Centralised restrictions on the employment of temporary (contract) workers can similarly reduce the scope for schools to deploy staff and organise their workplaces in ways most suited to their particular circumstances. So too can any conditions in awards and agreements that make it difficult to dismiss poorly performing tenured school workers.
- Despite some rationalisation of award structures (see box 11.3), the process of negotiating changes to remuneration and working conditions remains time-consuming. In discussing these processes in Western Australia, which has one of the most complex set of awards and enterprise agreements, the WA Department of Education said that:

Within the public sector industrial agreements are negotiated on average every three

years. Achievement of workforce flexibility requires a long lead time and is likely to only be achieved over several enterprise bargaining agreement cycles. Employers must also balance tensions that may arise as the pace of change will differ between workforce cohorts and new roles may cross over more than one industrial agreement. For example, workforce reform identified in 2009 may only be feasible to implement in 2015.

... There is a real need to change industrial instruments to enable greater agility within the school workforce. (sub. 45, pp. 14)

Indeed, there is a significant systemic tension between the current centralised industrial relations regime and the underlying thrust of a number of the specific workforce policy approaches that offer the prospect of material improvements in schooling outcomes for students. The provision of a greater degree of autonomy for skilled leaders (see chapter 8) is a case in point. As the WA Department of Education emphasised, ‘autonomous schools require not only flexibility but the ability to respond quickly to the dynamic needs of their school community’ (sub. 45, p. 13).

The Commission recognises that a completely decentralised wage and condition setting process would bring with it sizeable costs. Especially for smaller schools, negotiating all aspects of their staffing arrangements would most likely be administratively onerous and a drain on leadership and teaching resources. This is why independent schools often draw on model agreements. And as the provision of autonomy to government schools in Victoria and Western Australia illustrates, with sufficient effort and time, flexibility can be improved under the current arrangements. More broadly, while the appropriate nature and level of overarching employee protections can be debated, the need for some such protections is not in dispute.

But such considerations do not, in the Commission’s view, negate the case for an industrial relations regime that is more accommodating of the directions in which other aspects of schools and schools workforce policy are evolving, and that, in particular, gives individual schools more scope to tailor workplace arrangements to their particular circumstances. In the words of the SA Department of Education and Children’s Services:

Historically the level of award based regulation in the schooling sector has been an influencing factor on flexibility of the education labour market. A key challenge in all jurisdictions is striking the balance between regulation and appropriate employment conditions, with the necessary flexibility to respond to the rapidly changing 21st century educational context. (sub. 35, p. 9)

More specifically, it is important that provisions in awards and enterprise agreements do not obstruct or unduly slow the implementation of agreed reforms, or impede school-based trialling of approaches that might have application across a wider range of schools. In addition to facilitating further school autonomy and

performance pay trials, awards and agreements should not discourage the use of remuneration incentives that can help address a wider range of workforce shortages (see chapter 4).

Furthermore, as part of the push to improve performance management within schools, it is critical that the industrial relations regime facilitates the effective management of poor performance. While the Commission is seeking further information on governance and other changes that could potentially help to improve this key aspect of performance management (see information request 6.1), it observes that employment arrangements (whether system-wide or more tailored) should not provide cover for perennially and demonstrably poor performers to be retained within the workforce.

Of course, changes that increase the flexibility and responsiveness of the industrial relations regime cannot simply be imposed. As the Australian Education Union observed, ‘reform will only ever be effective where it has ... the support of those who will ultimately be tasked to implement it, the workforce’ (sub. 28, p. 2). In building on this theme, the union referred to the conclusions of an assessment of past education reform, which commented that:

[F]ar too many education reforms ... have seen teachers as the equivalent of assembly line workers whose job is simply to follow instructions or, in some cases, as an opposition to be controlled through policy. This cannot work. ... Motivated and committed people are by far the most important resource any human organisation has to dispose, so engagement must be a high priority. (Levin 2010, p. 742)

Indeed, many of the changes that could ensue from a more flexible and responsive industrial relations regime would have benefits for some or all school workers. For example, there is an intrinsic case for remunerating high-performing teachers more appropriately than at present. More flexible industrial relations arrangements could also help to facilitate provision of a more rewarding set of responsibilities for quality teachers and other talented school workers.

Delivering what will often be beneficial outcomes for both students and the workforce will be dependent on the goodwill of all parties and a capacity to bring a constructive, open and forward looking perspective to the negotiating table. Given the multiplicity of awards and enterprise bargains governing the schools workforce, this is yet another area where sharing of information across jurisdictions and schools systems is likely to be helpful. Amongst the matters that such information sharing could usefully encompass would be institutional innovations pertaining to the structures of awards and enterprise agreements, innovations in the processes for revising awards and negotiating new agreements, and promising specific approaches for addressing common workplace rigidities.

Greater flexibility in the industrial relations regime governing the employment of school workers is desirable, with a particular need to ensure that awards and enterprise agreements:

- are more accommodative of school-level variation in workplace arrangements*
- support governance and other changes to improve the management of poor workplace performance.*

11.4 Parental and community engagement

Schools are both an integral part of the community and probably the biggest influence on most students' upbringing and development beyond their parents and immediate family. Hence, it is very important that schools engage effectively with parents and the wider community.

Drawing more heavily on the knowledge and perspectives of parental interests in the policy-making process (see draft recommendation 11.1) is one means to achieve this. But engagement at the grass roots level must also be encouraged and supported. In the words of the APC:

Meaningful engagement between parents and the teachers and school leaders in whose hands they entrust their children to be schooled is a critical element of school reform. (sub. 19, p. 12)

And putting a student perspective, the Victorian Student Representative Council said that:

The relationship between teachers and parents is an area about which the [Council] is receiving a growing amount of feedback. While some students are quite happy to maintain the status quo of minimal interaction between parents and school, much of the feedback the [Council] receives is from students who would like their parents to be more engaged in their school life. This is consistent with students seeing their school life as being embedded within their wider life journey. ... In most cases this requires an improved relationship between teachers and parents with more regular communication. (sub. 34, p. 3)

The benefits of effective engagement have been the subject of much research, which is extensively referenced in the APC's submission. Reporting on its own recent research, the APC commented that parental engagement programs:

... are not only effective in terms of student outcomes, but ... have wider and lasting benefits for parents, teachers and the community which feed directly into improvements in the life quality and economic wellbeing of individuals, the social

capital of communities and the fortunes of the economy generally. (sub. 19, p. 12)

The importance of parental engagement is explicitly recognised in the Melbourne Declaration and supported through the National Family–School Partnerships Framework (see box 11.4).

There are various means for helping to facilitate effective engagement.

- Providing parents with more information on how their schools are performing — a key element of the new national-level reporting arrangements — will, if well implemented, provide a better platform for engagement. By empowering parents, such information may also increase their collective willingness and desire to engage.
- The use of targeted training modules in both undergraduate teacher courses and in professional development programs for current and future leaders is another obvious vehicle. Some specific applications of this approach, which to varying extents are already being employed, are outlined in the APC’s submission.

The provision of greater autonomy for schools that have the capacity to self-manage their affairs (see chapter 8) will enable them to put in place high quality engagement processes. There will be a more direct nexus between the contribution that effective engagement can make to the performance of schools and the specific autonomy benefits that a school receives when it achieves or sustains a high level of performance.

Box 11.4 The National Family–School Partnerships Framework

This framework was jointly prepared by a range of stakeholders, including national parent bodies, the Australian Government, state and territory governments, non-government school authorities, and school principals’ associations. Its aim is to encourage sustainable and effective partnerships between all members of the school community, including teachers, families, and students.

The framework is intended for application across both school systems and within individual schools, and seeks to engage school leaders (both staff and parents), families and other interested people in the cooperative development of partnerships. To support this process, the framework contains:

- a vision for improved partnerships between Australian families and schools
- a set of principles to guide families and schools in developing partnerships
- seven key dimensions of effective family–school partnerships
- a set of strategies that provide practical guidance to school communities and school systems in implementing and fostering family–school partnerships.

Source: DEEWR (2008).

That said, for low performing schools who may often have the most to gain from effective engagement, more direct advice and support from central agencies will often be required.

Moreover, similar strategies will help to build engagement between schools and other elements of the community, including the business community. In particular, equipping teachers and principals with appropriate skills and giving them the scope and incentive to employ those skills, will go a considerable way to meeting the engagement goals enunciated in the recent report by the Business–School Connections Roundtable (2011).

Finally however, as one participant noted, reliance on such input and process-oriented approaches would be tantamount to pursuing only half a strategy. The capacity and willingness of individual principals and teachers to engage will vary, as will the responsiveness of even well-informed parents and communities. Hence, in seeking to improve engagement, the other side of the equation — effective feedback to principals and teachers on how successful their engagement efforts have been — should not be forgotten. In this respect, school boards have an important conduit role to play.

A Public consultation

In keeping with its standard practice, the Commission has actively encouraged public participation in this study.

- Following receipt of the terms of reference on 22 April 2011, it advertised the study in newspapers and sent a circular to likely interested parties.
- In early June 2011, it released an issues paper to assist those wishing to make written submissions. Some 46 written submissions were subsequently received (table A.1). These submissions are available online at: www.pc.gov.au/projects/study/education-workforce/schools.
- As detailed in table A.2, it met informally with a wide range of stakeholders across Australia. These included education authorities across all jurisdictions and school sectors, unions and professional organisations representing different members of the schools workforce, education faculties, researchers, parent and student groups and individual schools.

The Commission thanks all those who have contributed to this study and now seeks additional input. It welcomes further submissions to discuss the substance of the draft report, including responses to the information requests, draft recommendations and findings.

Table A.1 Submissions

<i>Participant</i>	<i>Submission no.</i>
ACT Council of Parents and Citizens Associations	17
Appleton, Julie	46
Association of Heads of Independent Schools of Australia	2
Australian Association of Mathematics Teachers Inc.	10
Australian Education Union (AEU)	28
Australian Institute for Teaching and School Leadership (AITSL)	39
Australian Mathematical Sciences Institute	31
Australian Parents Council (APC)	19
Australian Primary Principals Association	41
Bonnor, Chris	9
Burnett Youth Learning Centre	4
Career Industry Council of Australia	29
Catholic Education Commission of Victoria	13
Catholic Education Office — Diocese of Toowoomba	11
Community and Public Sector Union/Civil Service Association (CPSU/CSA)	16
Community and Public Sector Union/State Public Services Federation Group (CPSU/SPSF)	6
Darby, Dr Linda	32
Deakin University — School of Education	24
Department of Education — Tasmania	33
Department of Education — Western Australia	45
Department of Education and Children's Services — South Australia (DECS)	35
Department of Education and Communities — New South Wales (DEC)	14
Department of Education and Training — Queensland (DET)	40
Department of Education, Employment and Workplace Relations (DEEWR)	42
Educational Transformations	22
Firth, Dr Nola	44
Grattan Institute	30
Independent Education Union of Australia (IEUA)	12
Independent Schools Council of Australia	18
Meyer, Denny	15
National Association of Field Experience Administrators	1
National Catholic Education Commission	7
National Disability Services	21
Principals Australia	37
Queensland Catholic Education Commission	20
Queensland Council of Parents and Citizens' Associations	5
Rawolle, Shaun and Hodge, Steven	25
Steele, Thomas	26
Teach for Australia	27
Teachers Registration Board of Tasmania	23
Thomas, Jan	3
Uniting Care Children Young People and Families	8
University of Melbourne — Melbourne Graduate School of Education (MGSE)	38
Victorian Institute of Teaching	36
Victorian Student Representative Council (VicSRC)	34
Williams, Ann	43

Table A.2 Visits

Participant

Adelaide

Australian Association of Mathematics Teachers
Department of Education and Children's Services
Flinders Park Primary School
Underdale High School

Alice Springs

Alice Springs School of the Air
Department of Education and Training — NT (Central Region Office)
Yipirinya School

Brisbane

Department of Education and Training — Queensland
Independent Schools Queensland
Queensland College of Teachers
Queensland Teachers' Union
Stronger Smarter Institute (via videoconference)

Cairns (and surrounds)

Cairns West State School
Cape York Aboriginal Australian Academy
Department of Education and Training — Queensland (Far North Qld Regional Office)
James Cook University — School of Education
Remote Area Teacher Education Program
Tropical North Queensland TAFE
Yarrabah State School

Canberra

ACT Teacher Quality Institute
Association of Heads of Independent Schools Australia
Australian Council for Educational Leaders
Australian Council of Deans of Education
Australian Primary Principals Association
Australian Science Teachers Association
Department of Education and Training — ACT
Department of Education, Employment and Workplace Relations
Independent Education Union
Independent Schools Council of Australia
Leigh, Andrew
National Catholic Education Commission

(Continued next page)

Table A.2 (continued)

Participant

Darwin

Association of NT School Educational Leaders
Charles Darwin University — School of Education
Department of Education and Training — NT
NT Catholic Education Office
Teacher Registration Board of the Northern Territory

Hobart

Australian Education Union — Tasmania
Department of Education — Tasmania
Teachers Registration Board of Tasmania

Kalgoorlie (and surrounds)

Eastern Goldfields College
Kalgoorlie–Boulder Community High School
O'Connor Education Support Centre
Yintarri Remote Community School (Coonana)

Melbourne

Australian Council for Educational Research
Australian Education Union
Australian Institute for Teaching and School Leadership
Business Council of Australia
Dawkins, Peter
Department of Education and Early Childhood Development — Victoria
Grattan Institute
Hattie, John
National Teaching Database Working Group
Pascoe, Susan
Teach for Australia
Teese, Prof Richard
University of Melbourne — Melbourne Graduate School of Education
Victorian Student Representative Council
Victorian Teacher Supply and Demand Reference Group

Perth

Department of Education — Western Australia
Paioff, Phil
Rutherford, Tony
WA Association of Independent Schools

(Continued next page)

Table A.2 (continued)

Participant

Sydney

Australian Council of State School Organisations
Australian Curriculum, Assessment and Reporting Authority
Department of Education and Communities — NSW
Faculty of Education and Social Work, University of Sydney
Marrickville West Public School
National Independent Special Schools Association
NSW Institute of Teachers
NSW Teachers Federation
Review of Funding for Schooling

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