

## New directions for school leadership and the teaching profession

Discussion paper June 2012



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### Ministers' message

The Government's goal is to lift the performance of Victoria's students into the global top tier in the next 10 years.

We know this will improve opportunities for young Victorians in the labour market and in life. A top tier education system is the most effective driver of social opportunity and mobility. It is the key to ensuring that the circumstances of a child's birth or geographic location do not limit that child's life chances.

Moving from the middle of the pack to the top tier will provide Victoria with the global competitive advantage it needs to prosper in a demanding economic climate by driving economic growth and labour productivity. It will also create a stronger and more cohesive Victorian society. Strong education outcomes lead to reduced crime and better physical and mental health, increased social cohesion, and reduced reliance on welfare.

The greatest force for realising our goal of moving into the global top tier is the quality of teaching in Victoria's schools. Teaching matters when it comes to the quality of a child's education – it has one of the largest impacts on student outcomes, and can make the difference between good and great performance.

Every education system that has reached the global top tier of school performance has engaged in ambitious reform to improve the quality of teaching and the school leadership that drives it. Our reform will need to be every bit as ambitious.

This paper aims to stimulate and inform discussion about the reform we need. It outlines a vision for the future of the teaching profession and school leadership in Victoria, gives an overview of key challenges, and recommends potential actions. Now is the time to take stock of where we are and to examine best practice across educational jurisdictions to chart the way forward.

We know that school leadership must be at the centre of our reform effort. In our decentralised system where principals have a high degree of autonomy it is they who have the power to improve the quality of teaching. They will determine the quality of teaching in Victoria through the standards they insist on in the teachers they hire, the quality of professional development that occurs in their schools, the extent to which they accelerate the development of great teachers, and how they manage underperformers.

To support our principals we need to make sure that the teachers who are available for them to hire are of the highest quality. Who we attract and select to enter the profession and how they are trained is of the utmost importance. Our goal must be to make teaching the career of choice for talented people, whether they have just finished school or have decided to change careers, and we need to make the transition to teaching more attractive than it is today. For all entering the profession we have to set new standards and create transparency about how well our universities are training teachers.

Other countries have shown that genuine workforce reform is possible and there are opportunities to learn from our peers. We have a solid foundation to build upon in Victoria, but it will require a concerted and strategic effort if we are serious about elevating the teaching profession and school leadership. We ask you to join us in this challenge.

The Hon. Peter Hall, MLC
Minister responsible for the Teaching Profession

The Hon. Martin Dixon, MP Minister for Education

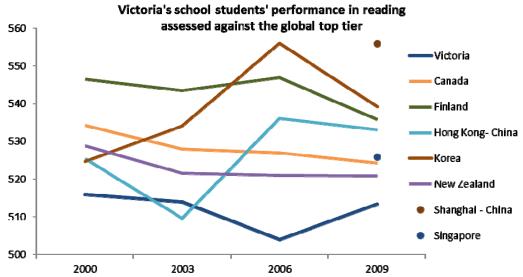
## Moving Victorian education to the global top tier

## Victoria has good education outcomes but we are not improving, despite increased expenditure

While Victoria performs well in national and international tests of educational performance, our results have not improved significantly in the past decade.

Victorian students perform above the Australian average across most areas tested in the National Assessment Program – Literacy and Numeracy (NAPLAN), yet overall Victorian literacy and numeracy outcomes have remained static.

The same story of good – but not great – performance emerges in international assessment programs such as the Programme of International Student Assessment (PISA). Victoria consistently achieves above the Organisation for Economic Cooperation and Development (OECD) average in the program but is not in the global top tier of high achievers, including Shanghai, Finland, Hong Kong, Singapore and Korea (see Figure 1).



Source: Challenges for Australian Education: Results from PISA 2009 and PISA 2000, 2003 & 2006 reports

Compared to these jurisdictions Victoria also has a low proportion of students performing at the top end of the achievement scale.

Victoria's good outcomes also mask the following concerns:

- Students at the same school differ more in their performance than students at different schools, pointing to significant variability in standards of teaching within each school;
- Students do not perform as well at secondary level as they do in primary school;
- Students from rural and low SES communities do less well than their city peers; and
- The gap between our highest and lowest performing schools is growing.

Most notably, Victorian education outcomes have failed to improve during a period when Australian real expenditure on schooling has increased by 44 per cent. Our investment in education has matched OECD averages and even exceeded the spending of some top tier systems including Finland and Korea. Much of this expenditure in the last 20 to 30 years has gone towards efforts to reduce class sizes, despite evidence that this does not have a significant impact on improving student outcomes. Our growing education expenditure and flagging results are cause for concern.

## Teaching will have the greatest single impact on our education outcomes

To reach the global top tier of performance will require great effort. Improvement in student outcomes of this magnitude demands comprehensive and complementary reforms across a range of areas.

Many elements contribute to lift the performance of an education system:

- Relevant and well-designed curriculum and assessment are essential to prepare young people to participate productively in a 21st century economy and society;
- Ordered and disciplined education environments where children feel safe and supported help student achievement;
- Acting early and providing support for those with greater needs will prevent disadvantaged students falling behind; and
- A coordinated and joined-up education system with strong partners across government and from business, community and non-government organisations will support better student outcomes.

But above all, the evidence shows us that the quality of **teaching has the largest impact on student learning outcomes**, other than a student's socioeconomic background.<sup>3</sup>

Improving the quality of teaching in our schools is the single most critical factor that can push our students to match the performance of the global top tier. A good teacher can take an average child from the middle of the class to the top of the class within three years.<sup>4</sup>

For Victorian students to catch up with their peers in the top performing jurisdictions, our 15-year-olds would need to progress an **extra six months** in their learning by the time they enter Year 10. If we invest in the right reforms to support quality teaching, 15-year-old Victorian students could bridge the gap within a decade.

- Improving the quality of new teachers entering the profession (through more selective entry and better courses) could improve our system by about two months of learning:
- Exiting the lowest performing 5 per cent of teachers (as occurs in many industries)
  and replacing them with more effective teachers could improve our performance by
  an additional two months of learning; and
- Improving the day-to-day work of the teaching workforce (through professional learning, feedback, leadership) by around 2 per cent per annum would deliver a further three months of improved learning.<sup>5</sup>

<sup>2</sup> Jensen (2010b)

<sup>&</sup>lt;sup>1</sup> OECD (2011)

<sup>&</sup>lt;sup>3</sup> Hattie (2003)

<sup>&</sup>lt;sup>4</sup> Whelan (2009)

 $<sup>^{\</sup>rm 5}$  Modelling for DEECD by the Melbourne Institute of Applied Economic and Social Research

As higher performing jurisdictions have shown, moving into the global top tier requires bold and sometimes difficult reform.

## Improving the quality of teaching will require strong action on three fronts

Improving the quality of teaching is a complex task, in part because teaching is a complex task. It is a profession that requires both technical and emotional intelligence, the ability to be flexible and respond to new demands all the time, and the courage and commitment to help young people find and fulfil their potential every day. The Government recognises that there are many great teachers working in Victorian schools at present, achieving outstanding successes in educating, motivating and inspiring young Victorians. Our schools need more still of these teachers and we need to lift the quality of the profession as a whole in order to achieve this.

While no single action or area of reform will deliver the improvements required, there are some very clear steps we can take to achieve early progress, and others that will sustain and build on that progress. Taken together, these actions will deliver the improvements we need to put Victorian students in the global top tier.

## Action 1: Attract great people into teaching: attract stronger candidates and improve their preparation

Developing teachers of the highest quality begins with candidates of the highest quality.

The desirability of the profession, and how candidates are selected and prepared for teaching, is of critical importance. Teaching must once again be a career of choice for our most talented people, whether they are graduates or professionals from other disciplines. A more attractive set of employment conditions, including merit-based remuneration, reward for effort, peer collaboration, recognition of the power to make a difference in children's lives, a focus on performance management and development and greater flexibility to move into and out of the profession are aligned to the aspirations of the current generation.

Career pathways that make it easier for professionals to apply their experience to teaching must be opened up. High standards must prevail. The bar for those entering the profession must be raised. Universities must better prepare teachers for the classroom.

## Action 2: Create a high performance profession: stimulate a culture of excellence and effective professional development

Principals need to invest in the development of teachers throughout their careers, especially teachers already working in Victorian schools. Learning should not stop when teachers qualify and get their first job in a school. A culture of excellence and effective professional development for all teachers must become the standard, and the Victorian Government needs to partner with the tertiary sector and other providers to ensure that teachers are constantly striving to increase their professional knowledge and skills. All teachers need opportunities for professional development that encourage them to innovate, develop, and share teaching practices with their peers. This must be complemented by much more robust performance management that sets clear goals for teachers, encourages them to reflect on and improve student outcomes, and ensures they are accountable to principals, peers and the community.

## Action 3: Provide strong direction and support: elevate the role of leadership at school and system levels

In our decentralised and highly autonomous government school system, it is principals who will drive sustainable performance improvement. They must be supported by a system which ensures the right people become principals and that provides the right balance between incentives, support, accountability and autonomy.

To empower school leaders and their executive management teams to lift teacher quality changes must be made to the career structures, training and management of teachers and principals, professional pay and employment arrangements and regulatory frameworks.

The Government believes that improving the quality of teaching will require strong action on each of these three fronts. In the following sections of this paper we explore the types of actions required around these areas. We do this by considering our current challenges and the practice of top tier education systems, making a frank assessment of Victoria's achievements and failures to date, and setting out what we need to do this.

#### Purpose of document

This paper serves as a statement which will stimulate and facilitate discussion on the future of the teaching profession and school leadership in Victoria. It outlines a clear vision for the future and sets out potential initiatives and the evidence supporting them.

If the next steps were easy, they would have been taken already. The Government fully intends to make the changes that are required – we know they will be challenging to implement successfully and that we must not limit ourselves to incremental adjustments because they will not deliver the substantial improvement required. If the changes outlined here are implemented effectively, Victoria will experience substantial improvements in our students' learning and development.

#### Contribute to the discussion

We encourage you to contribute to this discussion by submitting your feedback to the Department on the proposed actions outlined in the paper via email to teachingprofession@edumail.vic.gov.au or by mail:

Teaching Profession Paper
Department of Education and Early Childhood Development
Level 3, 33 St Andrews Place
East Melbourne, VIC 3002

We invite your feedback around the following key questions, being guided by the need to focus on areas that will deliver substantial improvements. However, you need not confine your responses to these questions if you think there are other issues that should be addressed.

#### Q1. What is missing?

Are there significant areas of action or ideas for reform that are not addressed by the paper, or are given insufficient treatment?

#### Q2. What are the priorities?

In an environment of fiscal constraint the Government needs to ensure it is investing in areas that will deliver the greatest return. We also need to determine what combination of levers will work best together. What do we need to focus on?

#### Q3. Where should effort not be directed?

Are there areas of action which should be avoided and, if so, why?

The deadline for making submissions relating to this paper is **1 September 2012**. Unless you request that your submission be treated confidentially, it will be made publicly available on the Department's website at <a href="http://www.education.vic.gov.au/">http://www.education.vic.gov.au/</a> or on request, and authorship will be acknowledged.

#### Consultation

Consultative meetings including roundtables and focus groups will be held with invited individuals and organisations over the coming months. These meetings will seek to discuss the areas of action outlined in this statement in greater detail and to develop a shared commitment to achieving their goals.

After the consultation and submissions period the Government will develop a comprehensive workforce strategy that will articulate a long-term vision for the teaching profession in Victoria. It will be informed by your submissions and feedback as well as the evidence base and ongoing evaluations of workforce initiatives currently being undertaken across the Department.

# 2. Attract great people into teaching: Attract stronger candidates and improve their preparation

#### What the top tier jurisdictions do

Leading jurisdictions make teaching a more attractive profession by raising its standards and status, and by improving incentives and conditions. Singapore, Finland and Korea recruit their teaching cohort from the top third of secondary school students. Finland made teaching a high status profession by raising entry standards and giving teachers greater autonomy over their classrooms. The Finnish selection process for teacher training is rigorous and robust, identifying candidates with the strongest aptitude for teaching. A national test of numeracy, literacy and problem solving is followed by interviews, group work, essays and assessment tasks that test the soft skills that will make graduates effective teachers. Teachers enter the profession with master's degrees and are given a high degree of responsibility. England reversed years of teaching shortages through a strong recruitment campaign that promoted the profession as a career of choice and by improving salaries and working conditions.

Multiple pathways into the profession broaden the pool of high quality candidates in leading jurisdictions. England offers more than 30 pathways into teaching. Requirements for teacher training can be amended for candidates with relevant experience, although each pathway is subject to the same set of standards for skills, experience, knowledge and behaviours for full certification. Some of the more innovative pathways include:

- The Graduate Teacher Programme in which participants train as teachers on the job;
- Teach First which recruits high calibre candidates for challenging schools;
- Schools Direct where participants choose the school in which they train with an expectation of employment;
- The Overseas Trained Teacher Programme which supports entry for teachers qualified outside the European Union;
- The Registered Teacher Programme under which participants are employed by a school, earn a salary, complete their degree and work towards qualified teacher status; and
- Assessment-based training for those with substantial school experience.

In top tier systems teacher training programs focus on preparing teachers with skills for the 21st century learning environment, and are genuinely responsive to feedback from students, teachers and principals. School placements and practical experience are prioritised as part of teacher training, as well as the development of skills that reflect modern learning and teaching practices. East Asian jurisdictions in particular focus on preparing teachers with deep content knowledge, skills for effective teaching of that content, and the ability to share practice and research with others to drive improvement. In countries such as Singapore teacher training is under constant

<sup>8</sup> Whelan (2009)

<sup>&</sup>lt;sup>6</sup> Auguste, Kihn & Miller (2010)

<sup>&</sup>lt;sup>7</sup> OECD (2011)

<sup>&</sup>lt;sup>9</sup> Barber & Mourshed (2007)

<sup>&</sup>lt;sup>10</sup> The Training and Development Agency for Schools (2012)

review and subjects that are identified as not having a significant impact on student learning are removed from the syllabus.<sup>11</sup>

#### Assessment of Victoria

#### Perceptions of teaching

Few Victorian top school graduates choose teaching as a career. Those who do rarely obtain the specialist skills we need in disciplines such as maths and science.

Of those year 12 students who nominate education as their first preference for university study, only 1 per cent are high achievers with a ranking over 90.

Admission requirements to get into teaching are declining while at the same time admission into other courses is becoming more competitive. <sup>12</sup> In 2012, the average first round Australian Tertiary Admission Rank (ATAR) required to enter teaching in Victoria was 67, while in regional Victoria it was 59 (see Table 1).

Table 1: 'Clearly In' ENTER/ATAR for Victorian undergraduate teaching courses, 2001–11

	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011
Average	71.91	74.09	74.91	75.26	72.58	69.81	68.40	69.08	68.23	68.89	67.53

Source: Victorian Institute of Teaching from Victorian Tertiary Admission Centre published information.

Teaching in Victoria is perceived as a low-paid profession that does not offer significant rewards for strong performance. Victoria's starting salaries in teaching are actually high relative to other professions such as law, veterinary science and accounting. But the top of the earnings scale is comparatively low at around \$84,000 for a classroom teacher with 10 years of experience. Opportunities to recognise and reward top performers are limited. There is negligible flexibility for differentiated pay based on performance.

The salary schedule and associated conditions are the same for all subject areas and do not account for the relative scarcity of skills in certain disciplines such as science, technology, engineering and mathematics that are in demand in other sectors. Similarly, there is insufficient capacity to better compensate good teachers working in high need areas, such as low SES communities and rural and regional schools, which typically offer more challenging working environments, living conditions or both.

Differentiated remuneration and reward for high performance are not the only enticement needed to attract more talented people to teaching. For example, we know that current generations of young people anticipate staying with an employer for no more than two to four years and place greater value on other aspects of the job, such as robust performance management and professional development opportunities, flexible leave and working options, and differentiated rewards based on effort and performance. <sup>13</sup> The package of benefits for teachers needs to be reshaped, with individual offerings tailored to appeal to the workforce at different stages of their careers.

#### **Teacher training**

All too often Victoria's teacher training, referred to as pre-service education, falls short of the demands of today's schools. While there are many providers, quality outcomes are inconsistent. Principals report that in the case of more than one-third of teachers,

<sup>12</sup> DEEWR (2009)

<sup>&</sup>lt;sup>11</sup> Jensen (2012)

<sup>&</sup>lt;sup>13</sup> Coggshall, Ott, Behrstock & Lasagna (2010); Rice (2008)

insufficient pedagogical preparation hinders student instruction. <sup>14</sup> The market does not provide transparent data about the quality of graduates and has not been open to competition from new entrants, such as high quality providers from overseas that have obtained better results. Despite being the largest employer of graduates in Victoria, the Department of Education and Early Childhood Development has not used its influence to make providers more responsive to schools' needs.

In our decentralised system demand from principals, as the direct employers of graduates, will drive improvements in pre-service education, rather than the Department. At present less than 30 per cent of principals feel new teachers are well prepared to communicate with parents, manage classroom activities well, and provide effective support and feedback to students, which are all largely recognised as important skills for effective teaching and learning. Around 15 to 20 per cent of graduates are not employed as teachers following graduation and only around half report satisfaction with the preparation provided by their courses.

A recent review of the practical component of these programs found large variability between providers, which is significant given that practical school experience has one of the greatest impacts on student outcomes, and graduates themselves regard this component of teacher education as one of the most valuable. <sup>16</sup> There is a clear need for pre-service teacher education programs to respond to changing circumstances and to prepare graduates with the skills and motivation they need to become great teachers. We also need all Victorian schools, including the non-government sector, to work with universities to provide practicum placements for preservice teachers in their schools.

#### Regulatory environment

The Victorian Institute of Teaching (VIT) determines the qualifications, criteria and standards for the registration of teachers in all Victorian schools. VIT's current requirements for teacher registration and permission to teach do not offer sufficient flexibility, making teaching a less attractive career option for qualified professionals and mature workers in a variety of fields. For example, under the current system a person with an engineering degree cannot receive permission to teach maths, while someone with a law degree cannot teach English if they have not taken the requisite number of units at university. The Productivity Commission recommends that the kind of discipline-specific knowledge required to enter postgraduate teaching courses and be granted permission to teach should be interpreted more flexibly. Pathways into the profession still remain largely limited to undergraduate students, with only a quarter of Victorian teachers reporting that they were in full/part-time employment or undertaking home duties before starting their teacher education program. Pathways need to be more flexible to open up a teaching career to qualified professionals, mature workers in a variety of fields and those with specific discipline skills we are seeking.

#### What Victoria is doing

In recent years, Victoria has trialled initiatives in response to some of the issues identified above, including measures to address teacher shortages, efforts to strengthen teacher education, and support for multiple pathways into the profession. These are examined in further detail below.

The **School Centres for Teaching Excellence initiative** seeks to improve pre-service teacher education programs through stronger partnerships between schools and universities and a better integration of theory and practice. Seven partnerships between

<sup>15</sup> McKenzie, Rowley, Weldon & Murphy (2011)

<sup>&</sup>lt;sup>14</sup> Jensen (2010a)

<sup>&</sup>lt;sup>16</sup> Ure & Gough (2009); Jensen (2010a)

<sup>&</sup>lt;sup>17</sup> Productivity Commission (2012)

different Victorian universities and regions became operational in 2011. Early evidence indicates the further development of site-based or 'clinical' models of teacher education and extended practicum placements by universities, and significant changes in teacher education course quality and design.

**Teach For Australia** has placed over 120 Associates across 45 secondary schools in Victoria, the ACT and Northern Territory. The program provides opportunities for top graduates from various disciplines to undertake teacher and leadership education, while being employed in educationally disadvantaged schools. Strengths of the program include the rigorous selection process that identifies high quality candidates with the necessary ability and personal attributes to succeed in the program, the quality of the teacher preparation program, and the significant support the Associates receive.

The Victorian Career Change program provides a paid pathway for qualified professionals to undertake a qualification in teaching while being employed in schools, with weekly paid study leave and other financial benefits. Industry experience is recognised and linked with a teaching qualification. To date over 320 new teachers have entered the profession through this program.

In 2011 the Victorian Government provided:

- 400 scholarships for graduate entry teaching (GET) study through the science graduate scholarship over the period 2012 to 2015. Over 150 applications were submitted for the first scholarship intake.
- \$29.3 million to fund maths and science specialists in primary schools and attract more science graduates into teaching. Sixty maths and 40 science specialists have been employed to work in 55 schools across the state.
- 210 new languages teaching scholarships to increase the number of qualified languages teachers in schools.

#### Potential actions

To build a profession of the highest quality we must start by attracting and recruiting candidates of the highest quality and providing them with pre-service education that prepares them for the challenges of the 21st century learning environment.

Strong action is required to raise the status of the teaching profession and make it a career of choice for high performers, including by increasing pathways into the profession and by finding the right package of benefits to attract top performers. This must be matched by higher standards across the board – for the quality of pre-service education offered by universities, for entry to pre-service education and entry to the profession itself.

Our potential actions are directed towards the following four areas.

- 1. Make teaching an attractive career option for high quality candidates
- Progressively work towards a more productive, higher skilled workforce in which the top performers are paid significantly more.
- Systematically improve the total package of benefits available to teachers, and tailor individual packages to target and appeal to teachers at different stages of their careers. Key elements include:
  - o strong performance management and professional development opportunities;
  - o flexible leave and working options; and
  - o differentiated rewards based on effort and performance.
- Diversify employment-based pathways into teaching from different professions and recognise the experience of qualified professionals to enable them to transition into teaching without leaving paid work (e.g. based on the Victorian Career Change program and Teach Next models).

 Create an integrated talent strategy to coordinate the various actions and support, and leverage them with a first-class marketing campaign to reposition the profession.

#### 2. Provide greater incentives for teachers to work in areas of high need

- Enable 'packages' of incentives that empower principals to attract excellent teachers to move to, or stay working in, hard-to-staff positions, including low SES and rural areas and in-demand disciplines such as maths and science. This could include:
  - A mix of financial and non-financial incentives such as career pathways, varied pay levels, professional development, mentoring, support networks and special leadership roles.
  - Establishment of specialist career tracks such as for Master Teachers or
    Discipline Specialists that provide separate pay scales and other incentives for
    teachers who select them and demonstrate high performance (e.g. based on
    Singapore's Master Teacher career track).
  - Establish regular access to great teachers and specialists via high quality video conferencing with high need schools.

#### 3. Raise the bar for applicants to the teaching profession

- Authorise principals to demand high standards in teaching graduates, using a
  portfolio of measures to assess quality and setting minimum standards in areas
  such as:
  - scores for specific subjects;
  - o aptitude assessments; and
  - o outcomes of team work exercises.
- Progressively increase postgraduate course entry to improve the standard of graduates.
- Reward entrants with master's degrees or higher level qualifications with higher salaries.

#### 4. Make pre-service education fit for the 21st century learning environment

- Improve regulatory oversight, to hold providers accountable for better quality through:
  - independent reviews of providers with public ranking of courses;
  - o principal-led reviews of the quality of graduates; and
  - o opening up the pre-service education market to further competition, including from elite providers overseas and through remote training options.
- Strengthen Departmental oversight of the standards required of teaching courses, for example by establishing an annual review requiring providers to:
  - demonstrate how they are responding to feedback from graduates and principals;
  - incorporate new evidence on effective teacher preparation into their courses;
     and
  - focus on the development of core skills for the 21st century learning environment.
- Introduce more extensive in-school teaching experiences that enable pre-service teachers to put theory and research components of their courses into practice.

 Set up formal mechanisms that strengthen relationships between schools, employers, VIT, AITSL<sup>18</sup> and universities to ensure that pre-service teacher education is responsive to the changing demands of schools and the pool of potential teachers.

<sup>&</sup>lt;sup>18</sup> The Australian Institute of Teaching and School Leadership (AITSL) provides national leadership for the Commonwealth, state and territory governments in promoting excellence in the profession of teaching and school leadership.

## 3. Create a high performing profession: Stimulate a culture of excellence and effective professional development

#### What the top tier systems do

Professional collaboration is used as a primary driver of school improvement in high performing systems. Teachers are encouraged to work with peers on research and to observe and provide feedback on each other's teaching practices. They routinely use information about their students' learning progress (known as 'formative assessment') to inform effective teaching, and to identify student needs and their own professional development requirements. Research shows that this is an effective professional learning approach and is consistent with teachers' own preferences for learning.

Teachers in Japan and Finland jointly plan lessons, observe each other teach and provide feedback in order to improve their practice. <sup>19</sup> Teachers in Ontario engage in team-based programs targeted at improving instruction and sharing ideas and practice to raise student learning outcomes. Expert facilitators support teachers to use joint lesson planning, co-teaching, observation and debriefing to refine practice and enhance curriculum knowledge. This peer-to-peer partnership in schools has led to teachers being more accountable to each other and jointly using teaching practices that are more effective with students. <sup>20</sup>

In Shanghai professional learning is based around lesson observation. Mentors, junior teachers and members of research and lesson groups regularly observe each other teaching. The system has made deliberate choices, such as having larger and fewer classes to reduce teaching hours and free up non-teaching time to engage in these activities, which are known to have a large impact on student learning outcomes.<sup>21</sup>

High performing systems support research undertaken by teachers to drive innovation and school and system improvement. Practitioner-led research allows teachers to investigate issues and explore solutions to the teaching problems they face in their own school setting. High performing systems recognise that it has a much higher impact on teacher professional learning than other development opportunities and invest in it accordingly. Teachers are encouraged to reflect upon and try out new ideas to better support student learning and document their findings in research articles for education journals. This school-level flexibility and teacher collaboration drives innovation in teaching and learning that can then be translated into schools across the system. Some content of the c

Effective teacher appraisal processes support a culture of performance. A common characteristic of high performing organisations more broadly is an intensely performance-based culture. This is a culture where rigorous and transparent standards are set, performance assessment is evidence-based, and opportunities to develop are well targeted and job based. In such organisations the consequences of performance assessment, both positive and negative, are real.

<sup>&</sup>lt;sup>19</sup> Barber & Mourshed (2007)

<sup>&</sup>lt;sup>20</sup> Mourshed, Chijioke & Barber (2010)

<sup>&</sup>lt;sup>21</sup> Jensen (2012)

<sup>&</sup>lt;sup>22</sup> BCG (2003); OECD (2011)

<sup>&</sup>lt;sup>23</sup> Mourshed, Chijioke & Barber (2010); OECD (2011)

Systems of appraisal and feedback directly linked to improved student performance can increase teacher effectiveness by 20 to 30 per cent. These work best where schools use a balanced scorecard approach to effectively appraise teachers' performance. Most of the strongest performing systems link teacher appraisal to improving student learning outcomes by identifying teachers' professional development needs while holding them accountable for enhancing student learning. The key is to take this one step further and align teacher appraisal and feedback with school and system objectives in order to contribute to school improvement goals. The statement of the strongest performance can increase teacher schools appraise teachers' performance can increase teacher effectively appraise teachers' performance.

Since 2005 Singapore has used a comprehensive system of teacher appraisal and feedback that is linked to teacher pay, known as the Enhanced Performance Management System (EPMS). Teachers are ranked on a scale of A–E by a school committee based on their end of year reviews, with those ranked from A–C receiving a bonus. Five to 10 per cent of teachers receive an A rating, with less than 5 per cent receiving a D or E rating. Bonuses are paid to most teachers, but the amount differs for each performance grade and depends on funds available to the Ministry each year.<sup>26</sup>

#### Assessment of Victoria

#### Professional learning and collaboration

In Victoria, teachers are required to complete a minimum of 20 hours of professional development in order to renew their teacher registration each year. In comparison, Hong Kong requires 150 hours of professional development over three years. Average participation in professional development in Australia is nine days, which is well below the OECD average of 16 days, even though Victorian teachers currently benefit from 11 weeks of 'non-attendance' time, some of which could be used for further professional learning.<sup>27</sup>

Anecdotal evidence suggests that many teachers do not use information about their students' learning progress (i.e. 'formative assessment') as the basis for their own professional learning activities, despite evidence that this is an effective approach. <sup>28</sup> Current evidence suggests that professional learning has the most impact on student learning where it provides opportunities for teachers to watch peers in the classroom and give feedback to each other on ways to improve practice, and where it includes activities such as joint lesson planning and teacher-led research. Principals need to do more to support and prioritise effective professional development through productive management of the workforce and improving the environment for ongoing collaboration and peer networking.

#### A culture of excellence

There is **no systematic approach to acknowledging and rewarding high performance in Victoria**. Across Australia, teachers feel there is almost no link between evaluation, their performance, salaries and any financial bonuses or career advancement.<sup>29</sup> Ninety-two per cent of teachers feel that even if they improved the quality of their teaching they would not receive any recognition in the school; 91 per cent feel that in their school the best teachers do not receive the greatest recognition; and 83 per cent feel that the evaluation of their work has no impact on their career advancement.<sup>30</sup>

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<sup>24</sup> Jensen (2011)
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<sup>&</sup>lt;sup>25</sup> OECD (2011)

<sup>&</sup>lt;sup>26</sup> Jensen (2012)

<sup>&</sup>lt;sup>27</sup> McKenzie, Rowley, Weldon & Murphy (2011); OECD (2009)

<sup>&</sup>lt;sup>28</sup> Timperley (2008)

<sup>&</sup>lt;sup>29</sup> Jensen (2010a); OECD (2009)

<sup>&</sup>lt;sup>30</sup> Jensen (2010a)

In Victoria, all teachers have individual performance and development plans. Although teachers must demonstrate that they have met all relevant professional standards in these plans to receive salary progression, over 99 per cent progress to the next pay scale each year despite stated policy that such progression is not automatic. This strongly suggests that the current system is poorly implemented and that promotion is based predominantly on time served rather than rigorous assessment of performance.

A teacher's number of classes and face-to-face time do not adequately capture the complexity of individual teacher's roles. We need more sophisticated ways to understand teacher workload and how differential approaches will help to add flexibility to the way principals organise their school's workforce.

#### What Victoria is doing

In addition to professional learning activities Victoria offers a number of coaching and mentoring initiatives in which schools and teachers can participate. Although evidence on the impact of the Victorian programs is not available, we do know that coaching in schools is effective in improving instruction in the top performing jurisdictions.<sup>31</sup>

The **Performance and Development Culture (P&D Culture) initiative** has sought to develop a culture of continuous school improvement, and improve teaching practice and student learning in schools.<sup>32</sup> From 2005 to 2009, 98 per cent of government schools achieved accreditation. The initiative has contributed to improved school environments and more open and collaborative teaching practice. However, it has not produced the type of robust, systematic performance management required to lift teaching effectiveness.

In 2010 the former Labor Government began trialling a three-year performance pay initiative, the **Victorian Rewarding Teaching Excellence model trials**, which includes both whole-school and individual teacher rewards models. The Teacher Rewards model provides individual bonuses for high-performing teachers after assessing them against a scorecard of measures including classroom excellence, team work and leadership, professional learning, and school and system contribution. Early evidence demonstrates that the model increases the rigour of teacher performance management. It requires teachers to reflect more on performance and collect evidence to support their claims, while assessors are more attentive to conclusions knowing there are individual financial rewards available. However, peer observation and evaluation was not commonly used as evidence, despite general consensus that this is an important mechanism for improving performance. By contrast, in the School Rewards model trial there was less focus on improved teaching and less impact on day-to-day practice within schools.

The Department has established a comprehensive unsatisfactory performance process to support principals to deal with poor performing teachers. This process seldom results in the departure of the teacher and there is a strong perception among principals that it is cumbersome, lengthy and overly complex. The Productivity Commission has recommended the removal of unnecessary barriers in this area and that principals are delegated authority to take disciplinary action, including dismissal, when a teacher's performance fails to meet standards. 33

Starr (2009)

<sup>33</sup> Productivity Commission (2012)

<sup>&</sup>lt;sup>31</sup> Barber & Mourshed (2007)

<sup>&</sup>lt;sup>32</sup> Starr (2009)

#### Potential actions

The organisation of teaching must prioritise teamwork and support, especially for teachers in their early years of teaching. Principals must set clear expectations of teachers, address areas of underperformance thoroughly, and promote a culture and workplace where increasing skills and continuous development are the norm. Excellent teachers should be rewarded for their contribution, based on real results.

Our potential actions are directed toward the following four areas:

#### 1. Build a culture of evidence-based performance management

In order to better implement evidence-based standards of teaching effectiveness:

- Provide further in-school support and guidance on evaluation processes, data collection and the provision of feedback to teachers.
- Make routine use of reliable measurement tools that reflect both teacher and student progress (e.g. value-added measures, student and peer review feedback measures). NAPLAN results should serve only as a reference point.
- Mandate classroom observation as part of the teacher performance review and school review processes.
- Remove barriers identified by principals that prevent them from providing meaningful feedback and evaluation of teacher performance.
- Consult with the profession to identify the most critical data to support both system and local performance management of the workforce.

## 2. Exit teachers who are unable to improve after training and development support

- Improve evaluation of teaching performance so that weaknesses are identified and addressed early.
- Adapt approaches used by other professions to deal with underperformance and benchmark against these professions to ensure that fair process is adhered to.
- Introduce a requirement for all teachers to demonstrate annual progress towards higher levels of proficiency as part of the performance management system.
   Teachers unable to do this within a set period of time should be exited from the profession.
- Improve strategies for managing ineffective teachers and address any barriers identified by principals within the context of industrial frameworks.

#### 3. Trial new ways of rewarding effective teachers

- Expand incentive schemes, with consideration of evidence from international performance pay trials and the Victorian Rewarding Teaching Excellence model trials.
  - This should include consideration of non-financial rewards that motivate teachers, such as post-graduate studies, professional development, mentoring, and opportunities to innovate and lead, linked to the Master Teacher and other career tracks mentioned in section 2 of this document.

#### 4. Improve professional development and collaboration

- Mandate classroom observation and feedback as part of the professional development required of teachers for registration renewal.
- Improve teachers' capacity to use information about their students' progress so schools can better determine teacher professional learning needs.
- Establish exchanges and secondments for teachers to work in other schools to allow them to develop their skills and share effective teaching practices.

- Require teachers to undertake additional days of high quality professional learning and planning from the 11 weeks of 'non-attendance time' at their schools.
- Assess the results of professional learning and planning at the school level.
- Monitor and manage the numbers and levels of learning areas that teachers work on in order to increase their teaching and content expertise.
- Provide support and resources to help principals organise and manage the whole school workforce to allow teachers to engage in peer observation and feedback, joint curriculum planning, and mentoring activities that improve student learning outcomes, for example through the use of teaching assistants and team teaching.
- Introduce practitioner-led research, requiring teachers to undertake a new individual or team-based research project every two years and include progress on this as a requirement in the performance management system.
- Partner with the tertiary sector to build the volume and quality of continuing professional learning undertaken in schools.

## 4. Provide strong direction and support: Elevate the role of leadership at school and system levels

#### What the top tier systems do

Leading jurisdictions **identify and nurture potential leaders early**. They do not wait until a teacher applies for a leadership role to consider their potential. In Singapore teachers who demonstrate leadership potential are identified early and move into middle management teams for development. They participate in training that prepares them for school leadership and innovation and complete a six-month, full-time Management and Leadership in Schools program. Those that do well are matched to a school and receive continuous mentoring, peer group learning and professional development.<sup>34</sup>

High performing systems **support the transition into school leadership**. They provide significant support to new school leaders through development programs that address their broader roles and responsibilities, encourage a student-centred approach to leadership, and take a system-wide perspective. Tormal training is complemented by mentoring from an experienced principal and networking with other school leaders, which encourages more collaborative problem-solving and reduces the sense of isolation felt by some new leaders. The school leaders are the sense of isolation felt by some new leaders.

Strategic principals lead an executive leadership group responsible for school improvement. In Norway, schools have experimented with a three-person leadership structure, with each member responsible for one of three key areas of teaching, human resources or finance. In Korea, the authority and responsibility of the assistant principal role are tailored to complement the principal's leadership style and key strengths, while in France school leadership teams are more integrated with operational aspects of school management and include the principal, one or more deputy principals, an administrative manager and educational counsellors.<sup>37</sup> In Finland, distributed leadership extends beyond the school level, with principals playing a leadership role in schools across their district. Finnish principals cooperate and share management and supervision of schools in their district, as well as the evaluation and development of curriculum planning.<sup>38</sup>

Top tier systems invest in **effective principal performance evaluation and peer feedback**. Principals have performance goals that are aligned with school improvement goals. Clear expectations are set around their role in working with other school and community leaders in their local area and across the system. In leading jurisdictions principal evaluation is valued for its contribution to professional development and system improvement. Clear criteria are established as the basis for review, taking into account school context and teacher and student outcomes and drawing on valid and reliable assessments.<sup>39</sup> Feedback from a variety of sources supports accountability to peers and the community, which is important in systems where increasing school autonomy is the norm.<sup>40</sup> Peer networks are another important source of performance

<sup>&</sup>lt;sup>34</sup> OECD (2011); Jensen (2012); Barber, Whelan & Clark (2010)

<sup>35</sup> OECD (2012); Barber, Whelan & Clark (2010)

<sup>&</sup>lt;sup>36</sup> Dempster, Lovett & Flückiger (2011); Barber, Whelan & Clark (2010); OECD (2012)

<sup>&</sup>lt;sup>37</sup> OECD (2012)

<sup>&</sup>lt;sup>38</sup> Hargreaves, Halász & Pont (2007)

<sup>&</sup>lt;sup>39</sup> National Comprehensive Center for Teacher Quality (2010)

<sup>&</sup>lt;sup>40</sup> National Comprehensive Center for Teacher Quality (2010)

review and feedback. Peer review supports not only principal evaluation but also the ongoing professional learning and accountability of principals to their peers across the system.

#### Assessment of Victoria

#### Decentralised and autonomous system

Victoria's principals work in the most autonomous government school system in the nation. They have the power to hire teachers and education support staff, enabling them to develop and manage a workforce of both permanent and fixed short-term employees with differing skill sets. Principals can determine which courses and extracurricular experiences to provide, have the freedom to forge partnerships that support education goals and are empowered to manage student behaviour and discipline. This local decision-making is critical in helping foster the right conditions for strong school leadership and effective teaching, and is consistent with the evidence that educators perform well where there are high levels of trust in their professionalism.<sup>41</sup>

#### Principal preparation

Despite these favourable conditions, principal attrition in Victoria remains much higher than for the teaching service as a whole (6.8 per cent compared to 5.4 per cent in 2010) and principals report high levels of stress and poor preparedness for leadership.

Preparatory training does not succeed in equipping principals with the skills for school leadership. Principals identify external communications, budgeting and finance, school accountability and stress management as areas where they feel least prepared. First-time principals in particular are challenged by the performance management of staff, understanding technology packages and systems, workforce planning, and risk and change management. New principals also consistently highlight the difficulties they face in having difficult conversations with members of the school community. 42

#### Becoming a principal

Current legislative requirements, such as the requirement for a teaching qualification, limit the range of potential applicants for school leadership roles. This also limits potential for a stronger executive management approach to leadership in schools which could ensure more effective use of expertise within the leadership team. Schools should have the opportunity to consider applicants for school leadership positions from a range of professions, not just teaching.

At present selection panels for principals must include both teachers and parents. This differs from most workplaces where employees do not have a role in determining their employer. Where local expectations are low this can encourage principals to conform to the status quo rather than pursue ambitious reform. The selection process needs to be more closely connected with the principal's peers and other leaders, and draw on hard evidence of leading practices.

#### Performance culture

The peer review (and 360 degree feedback) element of the principal performance management process is not used systematically to drive improvement and accountability, despite its demonstrated success as a management tool for leading organisations. The use of validated assessments to measure principals' performance against explicit criteria is not mandatory. Most importantly, not all principals are subject to consistent and rigorous annual performance review. The evaluation effort – if it occurs at all – takes place at the point of contract renewal, when it may already be too late.

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<sup>&</sup>lt;sup>41</sup> Whelan (2009); Fullan (2011)

<sup>&</sup>lt;sup>42</sup> McKenzie, Rowley, Weldon & Murphy (2011)

We are proposing a reform agenda that places high expectations on principals and requires them to take significant leadership risks and to back their performance. The best managers in all professions receive ongoing training and support and an attractive package of benefits to reward them for the challenges they take on. The current system in Victorian education does not adequately acknowledge the primacy of the principal in driving school improvement and the need to invest in continuous leadership development and support and appropriate performance incentives. The principal salary scale is not flexible enough to attract and reward top performers – today a principal responsible for a large school of thousands of students, numerous staff and an annual budget of over \$15 million can earn a maximum of around \$165,000.

#### What Victoria is doing

The Victorian Government is progressively investing in initiatives that support the key role of principals in the system.

Victoria's **Professional Support for New Principals initiative**, introduced in 2012, provides new principals with a mentor or coach who assists them to undertake a needs analysis and develop an appropriate professional development plan for their first year in the role.

In 2012 Victoria began **offering leadership coaching to assistant principals, acting and early stage principals**. Two hundred staff have already participated in the initiative and early evidence indicates that this coaching is increasing the confidence of assistant principals and having a positive impact on their perceptions of the role.

The **Technical Leadership Coach (TLC) program** offers support for principals with gaps in their technical leadership capacity in the area of school finance and may be expanded to cover the management of school facilities and human resources in future.

Principal class officers can undertake the **iLead 360-degree survey**, a tool that enables school leaders to be assessed by school council members, regional leadership, peers and school staff regarding their leadership or specific skill development. Principals can also obtain feedback on their performance from staff through the leadership module, which is an optional attachment to the annual Staff Opinion Survey.

The **Bastow Institute of Education Leadership** provides programs designed to support and develop teachers and leaders at all stages of their career. In 2011, over 2500 participants engaged in leadership initiatives. Bastow has developed a leadership curriculum and a range of leadership development programs. From 2012 participants have access to an online learning management system that provides resources, networks and online collaboration and allows them to harness new technologies.

#### Potential actions

In our decentralised system, principals must lead the reform effort targeting teacher quality. The Department must establish, nurture and support a network of highly effective principals throughout Victoria, and ensure that these leaders are enabled to make sound decisions, supported in their development, and networked with a broader range of peers, other leaders, the Department and government. Principals must take responsibility for the organisation of teaching and use the industrial flexibilities available to them to increase productivity and implement any other changes required to support great teaching. Potential actions are directed towards the following three areas:

#### 1. Attracting and preparing school leaders

The development of principals in Victoria requires a much stronger focus at all stages of a principal's career:

• Strengthen the package of benefits available to principals, including leadership support provided, differential salary structure, incentives and working conditions to

- ensure the package is commensurate with principals' responsibilities, risks and expected results.
- Support existing school leaders to identify high potential teachers at an early stage and support them on a leadership pathway.
- Provide much stronger development for principals at all stages, including targeted support around priority needs for both early stage and experienced principals.
- Review the composition of selection panels to ensure principals are appointed based on merit and their capacity to deliver high performing schools with high performing teachers. As part of this, remove teachers from selection panels – staff can be consulted, but they should not make decisions on their future employers.
- Increase the flow of quality school leaders across different school sectors and
  jurisdictions through the use of an executive search function to create a wider pool
  of leadership applicants for schools to choose from.
- Allow applicants for school leadership positions from beyond the teaching profession, including through the use of an executive search function that can draw in high performers from other industries.

#### 2. Supporting and evaluating school leaders

Consolidate principal evaluation activities into an effective, systematic process that:

- Links principal performance to ambitious targets around school improvement supported by clear evidence;
- Provides meaningful, localised feedback and evaluation of principal performance, including incorporation of peer review;
- Has a transparent reward model for high performance;
- Includes a management plan, culminating in exits for consistently poor performance where necessary; and
- Encourages effective performance management of staff.

#### 3. Acting at a system level to enable continuous improvement of schools

- Improve the evidence base schools can draw on by providing appropriately targeted and accessible data, research and networks. For example, providing universal access to a core reporting and assessment system will enable performance improvement.
- Provide principals with the flexibility and means to manage teacher performance (as noted in section 3).
- Provide principals with flexibility and means to hire staff on limited term (e.g. five year) contracts which will appeal to young teachers (as noted in section 2), not just fixed term one-year or ongoing contracts.

#### 5. How we will know when we are there

This paper proposes that in order for the teaching profession in Victoria and the student outcomes it produces to reach the global top tier we must make changes that see us attract stronger candidates into teaching and improve their preparation; stimulate a culture of excellence and effective professional development; and improve leadership at school and system levels.

We will know we have achieved our goal when:

## 1. Teaching is an attractive profession to high quality candidates and they are better prepared to teach

- More high quality candidates are entering the teaching profession, including top graduates from a range of different subject areas, and there is evidence that the teaching profession is valued because it offers excellent career opportunities, development and recognition.
- The expanded pathways into teaching make it demonstrably more attractive to qualified professionals, mature staff and quality former teachers.
- Teachers participate in quality pre-service education that emphasises practical experience as well as theory. It equips them with skills to be effective in the 21st century learning environment.
- Teacher training continues to improve as a result of principal demand and transparent results through strong partnerships between schools, the Department and universities as well as greater competition and transparency.
- High need areas such as low SES and remote schools are better supplied with high quality teachers.

## 2. Teachers and student outcomes benefit from a culture of excellence and collaborative professional learning at school and system levels

- Teachers are highly engaged and motivated, and achieve better progress in the classroom, making use of a wide array of opportunities at school and system levels to learn from each other and to share good teaching practices.
- There is a strong and growing evidence of better supported professional learning and collaboration, driven by teachers, school leadership and the Department.
- Evidence supporting teaching standards and achievement against them is sound, easily accessible and used systematically.
- Evaluation of teacher performance is rigorous and fair, and includes localised feedback from peers and students.
- There is a shared understanding of what good teaching looks like and how it is measured.
- All teachers are motivated to improve, and consistent underperformance is addressed.
- High performing teachers are recognised and rewarded.

## 3. Leadership is supported at all stages and strengthened by peer networks and rigorous evaluation

- The role of the principal is more prestigious and has a greater impact on school performance.
- Principals are taking full advantage of the flexibility provided by an autonomous system along with the associated accountability.
- A sufficient flow/supply of teachers with leadership potential is identified early and developed for future leadership years before they apply for their first school leadership position.

- Principal attrition rates decline; new principals are supported and mentored by experienced, leading principals during the initial years in the job; and experienced principals are better linked into supportive peer networks.
- Principals are drawn across sectors and other industries to work in Victorian government schools.
- The overall quality of principals across the system is independently shown to have improved, with principal evaluations aligned with school improvement goals; principals obtaining feedback on their performance from a variety of sources including peers, and using this to identify appropriate professional development opportunities and improve student outcomes.
- Principal job satisfaction levels and school outcomes have improved as a result of school leadership being distributed across a team of leaders in each school.
- Principals are better networked in with peers and better supported in their development.
- We have more and better data to support effective system-wide and local management of the workforce.

The ultimate test of quality teaching and leadership is enhanced student outcomes. We will know we are there when student outcomes are consistently improving and the Victorian system is on a steady trajectory towards the global top tier.

#### References

Auguste, B., Kihn, P. & Miller, M. 2010, Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching, McKinsey & Company, London.

http://www.mckinsey.com/clientservice/Social\_Sector/our\_practices/Education/Knowledge\_Highlights/Closing\_the\_talent\_gap.aspx

Barber, M. & Mourshed, M. 2007, *How the world's best school systems come out on top*, McKinsey & Company, London.

http://www.mckinsey.com/App Media/Reports/SSO/Worlds School Systems Final.pdf

Barber, M., Whelan, F. & Clark, M. 2010, Capturing the leadership premium: How the world's top school systems are building leadership capacity for the future, McKinsey & Company, London.

http://mckinseyonsociety.com/downloads/reports/Education/schoolleadership final.pdf

Boston Consulting Group (The) 2003, *Schools workforce reform strategy*, DE&T, Melbourne.

http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/innovation/widerworkforce/bcgreport.pdf

Coggshall, J. G., Ott, A., Behrstock, E. & Lasagna, M. 2010, *Retaining teacher talent: The view from generation Y*, Learning Point Associates, Naperville, IL and Public Agenda, New York.

http://www.learningpt.org/expertise/educatorquality/genY/Gen%20Y%20report.pdf

Dempster, N., Lovett, S. & Flückiger, B. 2011, *Strategies to develop school leadership: A select literature review*, AITSL, Melbourne.

 $\underline{\text{http://clearinghouse.aitsl.edu.au/Static/Strategies\%20to\%20Develop\%20School\%20Le} \\ adership.pdf$ 

Department of Education, Employment and Workplace Relations 2009, Year 12 student choices: A survey on factors influencing year 12 decision-making on post-school destination, choice of university and preferred subject, DEEWR, Canberra.

http://www.deewr.gov.au/HigherEducation/Publications/Documents/Year12StudentChoicesReport.pdf

Fullan, M. 2011, Choosing the wrong drivers for whole system reform, Centre for Strategic Education Seminar Series 204, CSE, East Melbourne.

http://www.michaelfullan.ca/home\_articles/SeminarPaper204.pdf

Hargreaves, A., Halász, G. & Pont, B. 2007, School leadership for systemic improvement in Finland: A case study report for the OECD activity improving school leadership, OECD Publishing, Paris. http://www.oecd.org/dataoecd/43/17/39928629.pdf

Hattie, J. 2003, *Teachers make a difference: What is the research evidence?*, Paper presented at ACER Research Conference, October 19-21, Melbourne. http://research.acer.edu.au/research\_conference\_2003/4

Jensen, B. 2010a, *What teachers want: Better teacher management*, Grattan Institute, Melbourne. http://www.grattan.edu.au/pub\_page/report\_what\_teachers\_want.html

--2010b, *Investing in our teachers, investing in our economy*, Grattan Institute, Melbourne.

http://www.grattan.edu.au/publications/057 report education investing teachers.pdf

--2011, Better teacher appraisal and feedback: Improving performance, Grattan Institute, Melbourne.

http://grattan.edu.au/static/files/assets/a9daf733/081 report teacher appraisal.pdf

--2012, Catching up: Learning from the best school systems in East Asia, Grattan Institute, Melbourne.

http://www.grattan.edu.au/publications/129 report learning from the best main.pdf

McKenzie, P., Rowley, G., Weldon, P. & Murphy, M. 2011, Staff in Australia's schools 2010: Main report on the survey, ACER, Camberwell, Australia.

http://www.deewr.gov.au/Schooling/Documents/SiASMainReport.pdf

Mourshed, M., Chijioke, C. & Barber, M. 2010, *How the world's most improved school systems keep getting better*, McKinsey & Company, London.

http://ssomckinsey.darbyfilms.com/reports/schools/How-the-Worlds-Most-Improved-School-Systems-Keep-Getting-Better Download-version Final.pdf

National Comprehensive Center for Teacher Quality 2010, *Evaluating school principals: Tips & tools*, National Comprehensive Center for Teacher Quality, Washington, DC. <a href="http://www.tqsource.org/publications/Keylssue">http://www.tqsource.org/publications/Keylssue</a> <a href="PrincipalAssessments.pdf">PrincipalAssessments.pdf</a>

Organisation for Economic Co-operation and Development 2009, *Creating effective teaching and learning environments: First results from TALIS*, OECD Publishing, Paris. <a href="http://www.oecd.org/dataoecd/17/51/43023606.pdf">http://www.oecd.org/dataoecd/17/51/43023606.pdf</a>

-- 2011, Building a high quality teaching profession: Lessons from around the world, OECD Publishing, Paris.

http://www2.ed.gov/about/inits/ed/internationaled/background.pdf

--2012, Preparing teachers and developing school leaders for the 21st century: Lessons from around the world, OECD Publishing, Paris. http://www.oecd.org/dataoecd/4/35/49850576.pdf

Productivity Commission 2012, *Schools workforce research report*, Productivity Commission, Melbourne. <a href="http://www.pc.gov.au/projects/study/education-workforce/schools/report">http://www.pc.gov.au/projects/study/education-workforce/schools/report</a>

Rice, S. 2008, *Attracting and retaining effective teachers*, The University of Melbourne, Melbourne.

Starr, K. 2009, Overview of the evaluation of the performance and development culture initiative 2005-2008, DEECD, Melbourne.

http://www.eduweb.vic.gov.au/edulibrary/public/teachlearn/innovation/panddc/PDC\_Evaluation\_Overview.pdf

The Training and Development Agency for Schools 2012, *Teacher training options*, TDA, Manchester, England. <a href="http://www.tda.gov.uk/get-into-teaching/teacher-training-options.aspx">http://www.tda.gov.uk/get-into-teaching/teacher-training-options.aspx</a>

Timperly, H. 2008, 'Teacher professional learning and development', *Educational Practices Series- 18*, IAE, Brussels and IBE, Geneva.

http://www.ibe.unesco.org/fileadmin/user\_upload/Publications/Educational\_Practices/Educational\_Practices/Educational\_Practices

Ure, C. & Gough, A. 2009, *Practicum partnerships: Exploring models of practicum organisation in teacher education for a standards-based profession*, Australian Learning and Teaching Council, Strawberry Hills, Australia.

http://www.vit.vic.edu.au/SiteCollectionDocuments/PDF/practicum%20partnerships.pdf

Whelan, F. 2009, Lessons Learned: How good policies produce better schools, MPG Books, London.