



**WESTERN AUSTRALIAN PRIMARY  
PRINCIPALS' ASSOCIATION**

# **A High Performing Public Education System: Ideas from Research**

**Paper prepared for the Western Australian Primary Principals' Association**

**Stephen Macdonald 2015**

## Executive Summary

*“Nothing is more emotive than education. The quality of our children’s schools affects every aspect of their life, shaping the child’s personal destiny and the society’s capacity for creativity and economic development. This rightly can make school system reform the major focus not just for educationalists but also for political leaders, employers, and parents alike. Often, because of the magnitude of what is at stake in the quality of education provided in our schools, passions run high and debate is heated.”*

*-How the worlds most improved school systems keep getting better (Mourshed, Chijioke & Barber, 2011).*

The Western Australian Primary Principals’ Association has commissioned Kaya, an Organisational Psychology firm, to facilitate a research process with local members and external stakeholders. The aim is to develop a position paper on the future of primary education in Western Australia for the next ten to twenty years. To initiate conversation about future possibilities Kaya have prepared this research paper drawing on ideas from other high performing educational systems.

This paper provides a synopsis of what the research tells us about high-performing systems. It is not intended to be comment on what will work in Western Australia, nor an evaluation of what the Western Australian system is doing well – or otherwise. It is simply a collation of research about high-performing education systems around the world that will provide a springboard for conversation about possibilities for the Western Australian system. The paper intends to stir thought, provide a background for debate, and encourage readers to think about the education system, rather than providing a focus on individual school improvement or pedagogical methodology.

It is important to recognise that there is not a ‘one-size-fits-all’ system that will work across the world.

This paper seeks to identify those practices and ideas across a number of systems that may be of value in the Western Australian context. It is too simplistic an approach to merely copy another system because our own situation is unique. System change requires evaluation of what is currently occurring, setting of goals, and development of processes that will enable a high-performing system and the removal of practices that have been shown in education and business to strangle innovation and productivity.

Note too that while the Australian system rates in the good phase with PISA results it appears that the aim is to go to great. The Australian system has a range of performance results and in order to minimise this range and see the whole system grow from good to great it may be that systemic change needs to be differentiated depending on the performance of school clusters. Reform in this context is therefore not saying that the system is broken and needs to be fixed but rather identify that the system needs to continue developing. The purpose therefore is to identify those drivers that will lead to a concerted effort towards taking the education system to the next level

In *The Schools We Need*, the report that followed a review of the Ontario system, the authors state that

*“... a high quality public school system is essential, not only for parents who send their children to these schools, but also for the public good as a whole”*  
(Leithwood, Fullan & Watson, 2002).

**“Often to understand why a system is working, one must understand the history of the system, the overall country culture and to understand how each of the components of the system reform work in tandem. Cherry picking elements of a successful system is to ignore the often complex interplay between the various elements and student performance”**

**(Hargreaves, 2012).**

The conversation for the WAPPA membership is about how public education system is seen as a viable and maybe even a preferable alternative; one where the best leaders and teachers are employed; where all students have equal chance of achieving their potential; and where graduating students are not only work-ready for the 21st century but able to take a lead in this space. While the WA system has worked hard to implement reform there is always room for improvement within the system to ensure that what is offered is best practice.

As the purpose of this paper is to inform thinking for the next phase of developing a strategic blueprint for primary education in Western Australia it is formatted in a manner that aims to identify the key observations with a synopsis of the research that influence the observations. In the body of the paper that follows the left-hand column contains the author's conclusion of the key themes with a range of evidence offered in the right-hand column.

Some of the main ideas and evidence may appear to be contradictory and the reader may arrive at a different conclusion. This paper however, is about providing stimulus for thought based on the evidence that exists rather than delivering a consensus of opinion. An important part of developing a view for the future of education in WA is to debate ideas, arrive at alternate viewpoints from the evidence provided and offer alternate ideas about what the future could look like.

To ensure rigour in this process it is important that any views offered are based on sound research. The reader is encouraged to submit new or alternative evidence to further inform the discussion that will follow.

# **An Overview of the Observations About High Performing Systems**

The key drivers of a high-performing education system seem to be based around the following themes:

## **1. A system approach to improving student outcomes.**

- 1.1 Sustaining educational excellence and improved student performance requires a different way of thinking and structuring than what has gone before.
- 1.2 System-wide success requires more than structural changes. It requires a strategic and disciplined process on changing the culture of teaching and learning within and between schools.
- 1.3 Appropriate external accountability is important for system improvement and improved student outcomes; this needs to rely on more than just standardised testing.
- 1.4 Rather than the mandate of a one-size fits all instructional model either a localised and contextualised system-oriented strategy is needed to implement national and state-wide strategic directions, or a systemic response that provides for a localised intervention is needed.
- 1.5 On its own, school autonomy does not appear to be a driver for improving student achievement.
- 1.6 A strong need for a mid-tier layer between individual schools and the Centre is identified.
- 1.7 Competitive collaboration between schools and clusters of schools may provide the impetus needed in collectively improving student outcomes; but this requires a different mindset about school leadership and teaching practice.
- 1.8 Data-informed practice is an essential part of the process of improving student outcomes.
- 1.9 A focus on early intervention and sustained intervention is required. This is based on a philosophy of equity and the belief that all students can learn if the appropriate interventions are provided.

## **2. Improving student outcomes requires more than the education sector.**

- 2.1 Improvement of student outcomes is a whole-of-society responsibility rather than just the responsibility of the education system.
- 2.2 Australia has a framework in place that requires a whole-of-government response to achieve the desired educational outcomes.

## **3. Talent identification and development of teachers and leaders ensures a successful education system.**

- 3.1 Improving the Education system is directly related to improving teaching standards.
- 3.2 The profile of teaching as a profession is raised to one of respect within the community.
- 3.3 Teaching operates as a collaborative practice within high-performing systems; teachers actively learn from each other within collaborative clusters.

- 3.4 School leadership is an integral component of a high-performing system.
- 3.5 Successful organisations pay careful attention to who they hire and how they develop those they select.
- 3.6 Principal and Staff wellbeing are linked closely with student engagement and achievement.

#### **4. Preparing students for the future of work.**

- 4.1 Preparing students for the future of the work requires a paradigm shift in what makes for an effective education.
- 4.2 Literacy and numeracy must still be a priority.
- 4.3 There is an understanding that the future of work is changing. While we may not be able to identify what the jobs of the future, there is some idea of the types of future work skills that will be needed.
- 4.4 There is an understanding of the importance of the Asian market.

## 1. A systems approach to improving student outcomes

Key Theme	Observations from Research										
<b>1.1</b> <b>Sustaining educational excellence and improved student performance requires a different way of thinking and structuring than what has gone before.</b>	<p><i>“The lack of sustained progress seen in most school systems, despite their massive investments, should not be seen as the justification for abandoning the desire for educational improvement. But we believe it does demonstrate the need for adopting a different approach – one that will hopefully be guided by the experiences of school systems that have succeeded in improving over the longer term”</i>  (Gonski, 2011)</p> <p>Most school systems have stagnated or regressed in achievement (including generally Australia, USA, Canada) while research has shown a steady upwards trajectory in other systems (England, Hong Kong, Korea, Latvia, Lithuania, Ontario, Poland, Saxony, Singapore, Slovenia, Boston, Long Beach.) What has confused much of the discussion about system improvement in the past is that each system’s journey is different; each school system starts from a different point, faces different expectations, and operates in a different social and political context (Mourshed, Chinezi, &amp; Barber, 2011).</p> <p>To move from one stage to the next (i.e. <i>poor</i> to <i>fair</i>) the authors of the “How The Worlds Most Improved School Systems Keep Getting Better” report found that while context did influence the emphasis and combination of interventions, the intervention pattern was similar across systems pursuing similar outcomes.</p> <p>The improving systems, were disciplined about</p> <ul style="list-style-type: none"> <li>» Choosing interventions appropriate to their level, and</li> <li>» In maintaining the integrity of those interventions.</li> </ul> <p>They also found the interventions were a <i>system</i> thing not a <i>single</i> thing. <b><i>They found that there was a strong and appropriate correlation between central guidance to schools and the performance stage they were at.</i></b> Schools moving from <i>poor</i> to <i>fair</i> were provided with tight guidance and accountability measures. Whereas schools moving from <i>good</i> to <i>great</i> were afforded much more autonomy. (Note that the Australian system sits within the <i>good</i> stage according to PISA rankings.) They found that the providence of loose central guidelines was essential to encourage a high level of peer-led creativity and innovation (Mourshed et al, 2011).</p> <p><b>Pedagogical Rights</b>  Percentage of Systems in reform phase that decentralised pedagogical rights to middle layer or schools (Mourshed et al., 2011).</p> <table border="1"> <caption>Percentage of Systems in reform phase that decentralised pedagogical rights to middle layer or schools</caption> <thead> <tr> <th>Performance Stage</th> <th>Percentage</th> </tr> </thead> <tbody> <tr> <td>Poor to Fair</td> <td>0</td> </tr> <tr> <td>Fair to Good</td> <td>14</td> </tr> <tr> <td>Good to Great</td> <td>33</td> </tr> <tr> <td>Great to Excellent</td> <td>60</td> </tr> </tbody> </table>	Performance Stage	Percentage	Poor to Fair	0	Fair to Good	14	Good to Great	33	Great to Excellent	60
Performance Stage	Percentage										
Poor to Fair	0										
Fair to Good	14										
Good to Great	33										
Great to Excellent	60										

	<p>An important observation from the system improvement is that schools within the overall system can be at various levels of performance and therefore different interventions will be needed. This point is addressed in more detail in 1.1.4.</p> <p><i>“I count myself among those who are convinced that our present governance arrangements for schools are no longer fit for purpose. They will become less and less fit as the system moves to the new organisational form of alliances and partnerships. Before long we shall need instruments to audit governance that are equivalent to those devised for businesses.”</i> (Nooteboom, 1999 cited in Hargreaves, 2011).</p> <p>Achieving different results requires a different approach if schools are truly going to meet the learning needs of their students and communities.</p> <p><i>“They should have a greater capacity to introduce more flexible school hours to cater for the needs and circumstances of students and their families. There should be greater scope to reconfigure classroom structures to meet the learning needs of different cohorts. School leaders should also make local arrangements to respond to particular needs related to student welfare, mental health and school readiness, and work directly with local public or not-for-profit providers of human services more broadly”</i> (Sahlberg, 2006).</p> <p><i>Appendix 1 provides an overview of the interventions used with performance stages as identified in the McKinsey and Co report (Mourshed et al, 2011).</i></p> <p><i>Appendix 2 is a case study of how the Singapore system deliberately matched the performance stage they were at with appropriate interventions.</i></p>
<p><b>1.2</b> <b>System-wide success requires more than structural changes. It requires a strategic and disciplined process on changing the culture of teaching and learning within and between schools.</b></p>	<p>High-performing systems know how to diagnose performance with precision, and they track and monitor progress against their delivery plans (Spillane and Coldren 2011). They also build the capacity for change and improvement. Without purposeful, focused and sustained capacity building, evidence shows that implementation will be superficial at worst, and uneven at best, and where any learning gains are likely to be short-lived ((Fullan 2010, 2011, Hargreaves et al. 2011).</p> <p><i>“Change is hard to do and takes sustained effort ... gradually we have come to learn that real change requires will, skill and capacity’. The power of collective working to build the capacity for system improvement is, above all, the most important consideration for leaders of system improvement”</i> (Levin &amp; Fullan, 2008)</p> <p>Michael Fullan highlights that the drivers of change need to be more than ideological or just something that sounds plausible Rather they should be recommendations that are measurable, both in practice and results, and for which a clear causal relationship can be identified (Fullan, 2011b). Drivers that change the culture of systems rather than those that alter structure and procedures will result in improved student achievement. The drivers of capacity building, group work, instruction and systemic solutions are those that are culturally oriented –</p>

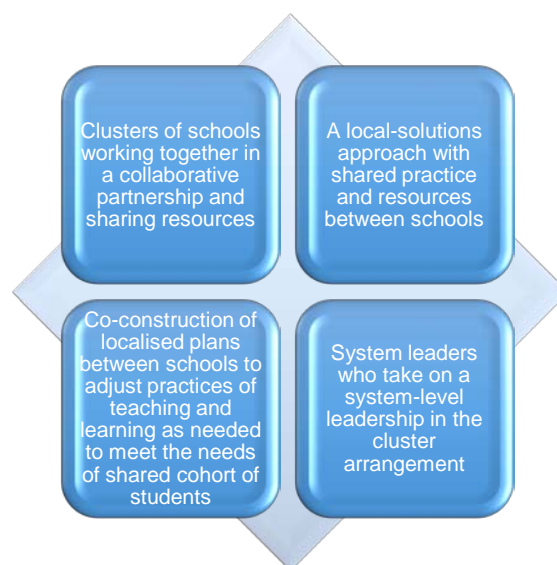
and therefore more difficult to implement – but which bring about the cultural change required.

#### The Wrong Drivers for System Reform (Fullan, 2011b)

<b>Accountability</b>	using test results, and teacher appraisal, to reward or punish teachers and schools vs capacity building;
<b>Individual teacher and leadership quality</b>	promoting individual vs group solutions;
<b>Technology</b>	investing in and assuming that the wonders of the digital world will carry the day vs instruction;
<b>Fragmented strategies</b>	vs integrated or systemic strategies.

*“No successful system in the world has ever led with these drivers. They cannot generate on a large scale the kind of intrinsic motivational energy that will be required to transform these massive systems. The US and Australian aspirations sound great as **goals** but crumble from a **strategy or driver perspective**. At best they can tighten up an otherwise loose system and get temporary pockets of improvement, but can never establish the conditions for whole system reform. These wrong drivers are ineffective because they fail to get at changing the day-to-day **culture** of school systems”*  
(Fullan. 2011b).

Hargreaves proposes that increased decentralisation offers an opportunity for the school system to put in place four building blocks and become a self-improving system. The four building blocks are (2010)



A McKinsey and Co report found that the vast majority of interventions were



	<p>processed-based and that 75% of these had to do with school delivery. Only 15% of interventions were related to content (i.e. standardised curriculum). As one school leader from the Boston system observed</p> <p><i>“For student learning to improve, we had to improve teaching and learning practices in classrooms. And for that change to stick, the culture of classrooms and schools needed to change.”</i></p> <p>(Mourshed et al., 2011)</p>
<p><b>1.3</b> <b>Appropriate external accountability is important for system improvement and improved student outcomes; this needs to rely on more than just standardised testing.</b></p>	<p><i>“Accountability that promotes transparency of results as a practice will not only secure public commitment and a positive perception of education but at the vertical level is also essential for sustainable progress”</i></p> <p>(Fullan, 2011).</p> <p>The accountability must be built on a platform of capacity-building of instructional skills and trust-building rather than punitive or league tables approach.</p> <p>McKinsey and Co found that a fine balance between capacity-building and accountability interventions was required, along with knowing your starting point and adapting strategies according to context; for example, whether the situation was one of going from <i>‘fair to good,’</i> or from <i>‘good to great.’</i> (Mourshed et al, 2011).</p> <p>Accountability-driven reforms use assessment of performance, punishment, and rewards, whereas capacity-building invests in individual and group learning. Both are needed, but more of the latter leads to greater change.</p> <p>(Fullan, 2011)</p> <p><b><i>It is not that the presence of standards and assessment is the problem but rather the assumption that by increasing external pressure, instructional improvement will occur.</i></b> The McKinsey and Co study of 20 strongly-improving systems measured the number of interventions that could be classified as ‘accountability’ based, and the number that focused on ‘professional learning’ (capacity building). Accountability interventions included externally conducted performance assessments with consequences, school inspections and reviews and the like; capacity-building referred to investments in collaborative practices, coaching technical skill building and so on. They found that in developing countries, where systems were noted as ‘improving’ the interventions were split 50/50 – an equal proportion of accountability and capacity-building activities. By contrast, in the <i>good to great</i> countries, the percentages were 78 per cent professional learning, and 22 per cent accountability (Mourshed et al, 2011).</p> <p>While all improving systems used data proactively and regularly to understand where students and schools were progressing or failing, there was a wide range of how this data was shared with the broader public. Systems moving from <i>poor to fair</i> along with the US, UK and Canadian systems, used the data to set quantitative targets at the school and classroom level. This data was shared with all stakeholders and the broader public. The Asian and Eastern European systems shared systems- level data but only performance data with individual schools and engaged them in private conversations. This can be best understood in the context of broader socioeconomic, political and cultural contexts.</p>

*“Improving countries and systems do use standardised testing in the early stages of reform to identify some base benchmarks. The external accountability does also identify the underperforming schools or systems and can serve as a “wake-up call” and as a way of directing attention to a limited number of measurable goals.”*  
(Hopkins, 2013).

The problem with standardised testing as identified by McKinsey & Co (Mourshed et al., 2011) & Hopkins (2013) amongst others is that this approach works well in the early stages of the improvement process, but in fact if continues will reduce both performance and motivation.

Standardised testing can be useful but needs to be used for more than accountability of standards. This leads to the following recommendation in *The Schools We Need* report:

*“Provincial assessments, and the standards on which they are based, should be extended significantly beyond their current focus to reflect the capacities students need to develop in order to work and to participate in an increasingly complex, knowledge driven world”*  
(Leithwood, Fullan, Watson, 2003).

When the focus shifts to achieving a higher level of performance and increased equity, the data then needs to be used to formatively create the most effective learning conditions for students. Accountability is still necessary and as Leithwood, Fullan & Watson state;

*“Schools and school districts should implement systematic, ongoing data collection and feedback processes of their own, aimed at improving the actions they take to accomplish the goals of education established by the province. This would include data about effects of the educational processes they use to improve student achievement”.*  
(2003)

This provides accountability for the local-level interventions used to meet the wider learning goals that have been set. A more sophisticated interrogation of the data provides insight into what is working and for whom. If the data is then used to develop evidenced-based interventions in collaborative practice teams across schools, then the gap may begin to close.

The Office for Standards in Education, Children’s Services and Skills (Ofsted) in England (2010) asserts the importance of performance data in acting as an early-warning system to address issues, and lists four components to a systemic school improvement strategy:

1. Setting the standard, which is done through inspection frameworks and local and national targets
2. Avoiding any school becoming inadequate, which depends on effective monitoring and accountability
3. Quick turnaround of any school that becomes inadequate
4. Sustaining good and outstanding practice.

*“Whilst PISA is seen as the benchmark of measurement in terms of high-performing systems it is important to note that it is not without its critics in*

	<p><i>terms of validity, reliability and representativeness of the samples chosen” (Hargreaves, 2012).</i></p> <p>Recently the Obama administration has announced that it wishes to encourage changed thinking in terms of standardized testing. The White House has acknowledged that it’s “No Child Left Behind” policy while well intentioned has taken valuable time away from learning, teaching and fostering creativity in schools.</p> <p><i>“Learning is about so much more than just filling in the right bubble,” Obama said in a video posted on Facebook... in moderation, smart, strategic tests can help assess the progress of children in schools and help them learn. But he said that parents are concerned that too much time is being spent on testing, and teachers are under too much pressure to prepare students for exams” (Doering, 2015).</i></p> <p><b><i>“The fixation on high-stakes testing hasn’t moved the needle on student achievement”</i></b> (Doering, 2015).</p> <p><i>Appendix 3 highlights how the Ontario system uses accountability data in an integrated model to shape both district level and school level strategy.</i></p> <p><i>Appendix 4: Obama Wants to Limit Class Time Devoted to Standardized Testing</i></p>
<p><b>1.4</b> <b>Rather than the mandate of a one-size fits all instructional model, a localised and contextualised system-oriented strategy is needed to implement national and state-wide strategic directions, or a systemic response that provides for a localised intervention is needed.</b></p>	<p><i>“An overly centralized regime dramatically lowers the collective problem-solving capacity of the education system, losing the insights those at the local level have about the needs of their clients and communities and cutting off their contributions to addressing challenges” (Leithwood, Fullan &amp; Watson, 2003)</i></p> <p>The responsibility of school leaders and teachers is to take on a system-wide level of thinking rather than just own school. It is important that the centre (i.e. DET) provides a clear sense of priorities but that there is freedom for these to be contextualised at a local system level (rather than necessarily at a local school level).</p> <p>Leithwood, Fullan &amp; Watson maintain that even in a system that encourages localised response that there are policies which are difficult to decentralise yet in terms of maintaining a quality system are important to be maintained. They state that curriculum, testing, and reporting policies need to be centralised.</p> <p>The implementation of localised interventions that collectively combine to meet national improvement have been traditionally tough to achieve.</p> <p><i>“What makes ‘local solutions’ effective is their local specificity, and the ability of groups to tailor solutions to local contexts? Local groups are also best placed to encourage community engagement on a social issue, through access to local networks and existing relationships. There is therefore an inherent tension between the factors for successful localism and the impulse to achieve impact nationally...”</i></p>

(Bunt & Harris, 2010)

*“There is a powerful relationship between context and educational outcomes and, while policies can be borrowed, the cultural dimensions that make them work so well, unfortunately, cannot. There are inevitable pitfalls when superimposing policies from one context on another, and even with the most careful grafting they can disappoint by failing to deliver the outcomes anticipated”*  
(Harris, 2012).

Drawing on the business literature as well as directly from school partnerships, Robert Hill has provided a high-quality guide for school leaders to succeed in the localised cluster approach.

Key lessons include: (cited in Hargreaves, 2010)



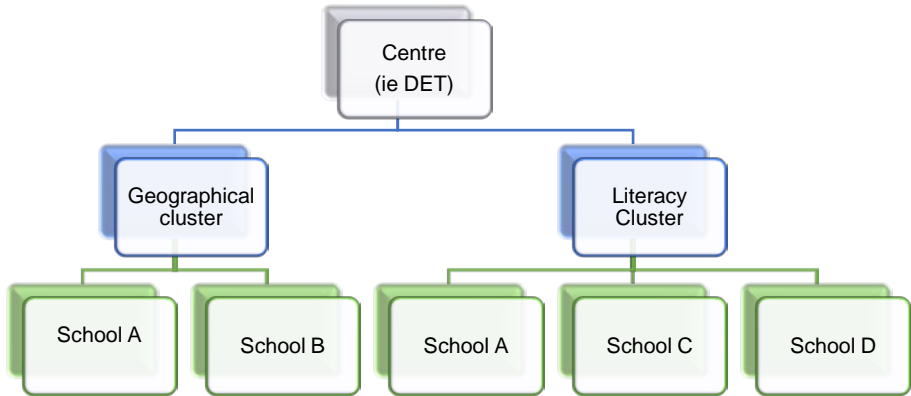
Hargreaves argues that a self-improving system of schools capitalises on the benefits of clusters of schools working together. These family clusters can provide a range of curriculum, deal more effectively with special education needs, provide staff within the cluster with opportunity, support new leaders, build succession planning, distribute innovation, transfer professional knowledge more readily, provide a more integrated approach to children's services and become more efficient in the use of shared resources (2010).

Distributed leadership across the school and across the cluster requires a new paradigm of thinking for leaders and staff. Rather than fighting to be the best school to ensure that they appear in a good position in a league table, there needs to be a moral purpose to see the success of every student within the cluster/alliance as important. This requires a change in approach to the way the education occurs at the current stage. As in business, the collaboration is seen as a pragmatic altruism to boost the success of the industry as a whole and therefore one's own standing. This moral imperative within alliances provides a snapshot of how schools can compete to be the best that they can be and also to collaborate with others in their alliance to improve the outcomes of students within the alliance

	<p>as a whole.</p> <p><b>Therefore, a successful cluster needs more than a collection of high-performing individual schools, it needs a high-performing system.</b> This requires</p> <ul style="list-style-type: none"> <li>» leadership expertise,</li> <li>» a shared purpose, and</li> <li>» strong collaborative capital between schools (Hargreaves, 2011).</li> </ul> <p><i>“Each particular stage of the school system improvement journey is associated with a unique set of interventions. Our research suggests all improving systems implement similar sets of interventions to move from one particular performance level to the next, irrespective of culture, geography, politics, or history ... <b>This suggests that systems would do well to learn from those at a similar stage of the journey, rather than from those that are at significantly different levels of performance.</b> It also shows that systems cannot continue to improve by simply doing more of what brought them past success”</i></p> <p><i>(How the World’s Most Improved School Systems Keep Getting Better, Mourshead et al, 2010), p 3)</i></p> <p>The OECD (2011d) argues that direct and student-oriented instruction methods are most effective for teaching disadvantaged students. Similarly, the Productivity Commission (2011) suggests that specialist components on appropriate pedagogies for disadvantaged students be incorporated into all teacher training courses, and that pre-service teachers should be given more opportunities to undertake their practicum in disadvantaged schools. This is balanced with high-performing schools moving from <i>good</i> to <i>great</i> due to teacher-designed learning programs and more freedom and flexibility in how they implement these to maintain high student outcomes.</p> <p><i>“The population profile of public schools in Western Australia is very broad and, in a number of dimensions, is distinctive.</i></p> <ul style="list-style-type: none"> <li>» <i>Every twelfth student attending a public school in the state is indigenous.</i></li> <li>» <i>Every third student in a remote or very remote area in Australia is enrolled in a public school in Western Australia.</i></li> <li>» <i>There are proportionately three times as many students in remote settings in the state as in Australia as a whole.</i></li> <li>» <i>In socio-economic terms, the population of public schools in Western Australia is very diverse, and the proportion of low SES students in the state is higher than in Australia as a whole.</i></li> </ul> <p><i>These different dimensions of population diversity have implications for the comparative performance of the public school system of Western Australia”</i></p> <p><i>(Lamb &amp; Teese, 2012)</i></p>
<p><b>1.5</b></p> <p><b>On its own, school autonomy does not appear to be a driver for improving student achievement.</b></p>	<p>It appears that often a major driver for introducing school autonomy is that:</p> <ol style="list-style-type: none"> <li>1. the “system” has too much control</li> <li>2. the power of the profession needs to be unleashed to achieve maximum results (Hopkins, 2013).</li> </ol> <p><i>“It is not enough to assume that scaling back government bureaucracy and control will allow local innovation to flourish.”</i></p> <p><i>(Bunt &amp; Harris, 2010).</i></p>

	<p><b><i>There appears to be a lack of evidence from around the world that dismantling the system and handing control to schools raises standards</i></b> (Hopkins, 2013). One of the observations from the 2007 McKinsey &amp; Co study is that “Differences in what leaders do are not directly related to the level of autonomy they are given” (Barber, Whelan and Clark, 2010, p 8).</p> <p><i>“There is a balance to be achieved between prescriptive centralised control and complete autonomy for schools. On one hand there are solutions that don’t necessarily work at the local level; whereas with complete autonomy, schools may be left without a sense of what they need to do and good practice might not become embedded across the system where it is most needed”</i> (In Conversation, 2012).</p> <p>Improvement in teaching and learning needs to be a feature of all schools. When schools work in isolation there tends to be a lower level of system wide improvement. However, when schools partner together and capitalise on the collective social and intellectual capital then the combined capacity to improve is achieved (Hargreaves, 2012b).</p> <p><i>“The Ontario system provides autonomy in exchange for increased transparency of practice and results and a contribution to the wider system. There is central direction but no prescription, and the local level identifies good practice, is transparent and is accountable for results. This is proportional to the success of the approach; <b>If there is no improvement over a two to four-year process then the centre will intervene with a ‘working together to solve the problem, approach in response to evidence that some central external support is needed’</b>”</i> (In Conversation, 2012).</p> <div data-bbox="571 1238 1452 1467"> <p><b>One thing that remains clear about those systems that are improving is that autonomy within a collaborative system is only provided to schools that are moving from good to great. Schools and systems that are performing below the requisite level are provided a more prescriptive approach in an effort to rapidly improve student outcomes.</b></p> </div>
<p><b>1.6</b> <b>A strong need for a mid-tier layer between individual schools and the Centre is identified.</b></p>	<p>There has been much criticism that mid-tier organisations (those that exist between the central department and schools), have become over bureaucratic and administrative and lost focus on the core task of improving schools and therefore need to be removed. However, a recent McKinsey report (Capturing the Leadership Premium), recognised the importance of this mid-tier system reform in order to drive improvement in learning (Barber et al., 2010).</p> <p>The mid-tier becomes vital in supporting weaker and less-experienced school leaders, identifying development needs and providing appropriate support, managing and supporting collaborative practices across clusters of schools, and strengthening school accountability (Hopkins, 2013).</p> <p><i>“The improvement of the Ontario system has come about by focussing on the improvement of this mid-tier level culture rather than focussing on individual school culture. This is about building individual capacity and the</i></p>



	<p><i>capacity of these people to work together productively for the good of the system. When the culture in the district is a two-way dialogue between schools, between schools and the district, and the agenda is improved student achievement, then the improvement occurs at individual school level”</i> (In Conversation, 2012).</p> <p>This mediating layer between the centre and the schools seems to be important for sustaining improvement for three reasons: it provides targeted hands-on support; acts as a communications buffer between the centre and schools, and shares and integrates improvements across schools (Mourshed et al, 2011). There were four types of mediating layers found amongst the 20 improving systems: a geographically mediating layer (the main proportion); school clusters; subject-based mediating layer; and a level-based (primary and secondary) mediating layer (Mourshed et al, 2011).</p>  <pre> graph TD     Centre[Centre (ie DET)] --&gt; Geo[Geographical cluster]     Centre --&gt; Literacy[Literacy Cluster]     Geo --&gt; SA1[School A]     Geo --&gt; SB[School B]     Literacy --&gt; SA2[School A]     Literacy --&gt; SC[School C]     Literacy --&gt; SD[School D]   </pre> <p>School improvement depends on improved leadership but the scale and sustainability of development means that this cannot be achieved by centralised or local school level only (Hargreaves, 2010).</p> <p><i>Appendix 5 shows how system improvement requires integration across every level (Mourshed et al, 2011).</i></p>
<p><b>1.7</b> <b>Competitive collaboration between schools and clusters of schools may provide the impetus needed in collectively improving student outcomes. But it requires a different mindset about school leadership and teaching practice.</b></p>	<p>While each school is unique and has its own idiosyncrasies, there is much that can be transferred. The myth that all schools are unique with their own set of issues is counterproductive to developing a collaborative approach to learning between schools (Hopkins, 2013).</p> <p>School leaders often see a tension between collaboration and competition in terms of sharing expertise. It is often said that collaboration will increase as the competition is removed. Hargreaves challenges this mindset and claims that where a high level of social capital exists (trust and reciprocity) that competition may actually promote competition in a healthy way. In fact, this competition can drive innovative practice and improvement (Hargreaves, 2011)</p> <p>Collaborative competition is a combination of working with others to improve learning across the district, (cluster network and the like), and also a competitive edge to do better than other systems. The aim to continually outperform others, not for the sake of outperforming but a recognition that as we continually improve,</p>

then that means that learning is improving and student outcomes are improving (In Conversation, 2012). The driver is how can we do better than we did last year, and if they can do it then I am sure we can.

*Hargreaves states;*

*“The challenge in education is not to abolish competition in the hope that unparalleled levels of collaboration and innovation will be instantly unleashed”.*

(Hargreaves, 2011)

*“Organizations that are dramatically more successful develop cultures of relational coordination (shared goals, shared knowledge, and mutual respect), and transparent communication (frequent, timely, accurate, and problem-solving communication). These cultures continually clarify and reinforce the focused efforts of the organization. Coordinated, focused organizations are both more efficient and more effective. The reason is that vastly more members of the organization are knowledgeable, skilled, and committed to getting things done, individually and collectively. Because core ideas are pursued collectively, day after day, they generate deeper, consistent practices across the organization. Shared depth of understanding and corresponding skills are the result”*  
(Fullan, 2011)

The co-construction of professional practice by observing each other's work across the cluster and co-constructing teaching and learning strategies will enhance schools as a learning community. Having a mixture of 'levels of performance' of schools in the partnership provides a way for high-performing schools to build the capacity of their own staff and for staff in low-performing schools to receive 'on-the-job training'.

In the improving systems collaborative practice brought about three major changes in high-performing school systems.

1. It moved teachers from being emperors in their classroom to where there was shared responsibility for student learning.
2. A culture shift occurred enabling a focus on what students were learning rather than what teachers were teaching
3. Teachers became the custodians of a shared understanding of what 'good pedagogy' was in that school/system (Mourshed et al, 2011).

*“Collaborative practice is about teachers and school leaders working together to develop effective instructional practices based on a rigorous attention to what works in the classroom and with a commitment to improve one's own practices and that of others”*  
(Mourshed et al, 2011).

This has the effect of increasing peer accountability and requires supporting teachers to do this with appropriate professional development and resourcing. In the successful systems this accounted for 56% of the total school support intervention offered, whereas teacher appraisal accounted for only 3% of the school level accountability interventions. Teachers were held accountable through the learning of their students. Effective collaboration depends on teachers with



	strong capabilities (Mourshed et al, 2011).
<p><b>1.8</b>  <b>Data informed practice is an essential part of the process of improving student outcomes.</b></p>	<p>Data is best views as essential to strategy implementation rather than merely an accountability measure. When data is used to monitor, provide feedback and enhance student performance then student's progress will accelerate more quickly (Hopkins, 2013).</p> <p>Formative assessment by classroom teachers that is tied to objectives of lessons, provides accurate and 'real-time' updates, and used to inform individualised instructional design in the daily delivery of lessons, is essential for achieving better student outcomes. It is also important that this is administered and monitored in a manner that is not disruptive to daily routines (Fullan, Hill &amp; Crevola, 2006 cited in Hopkins, 2013).</p> <p>Finding 5 of the Review of School Funding report notes that,</p> <p><i>"The performance of Australia's schooling system is about more than just literacy and numeracy results in national and international assessments and Year 12 or equivalent attainment rates."</i>  (Gonski, 2011)</p> <p>Fullan highlights that student assessment data should be positioned primarily as a strategy for instructional improvement and external public accountability is of secondary purpose (2011). In other words, more instructional improvement in a culture of increased social capital (where teachers share instructional learning and accountability within a school culture of trust) will lead to more accountability.</p> <p>To help with learning, effective change-leaders integrate and use data about practice and outcomes, which allows them to cause and to mark progress. This requires not only analytical investigation of the data, but a preparedness to accept the findings without excuse, investigate better ways of operating, and the discipline to implement and continual evaluation and redesign in order to ensure continuous improvement.</p> <p><i>"Change-leaders need to focus on a small number of quantitative and qualitative measures of impact and use these as a core part of the strategy of moving even further. With the overwhelming amount of data, they are now exposed to they need to be sharp at deciding what not to do. It is easy to get overloaded, confused, and misdirected by too much information"</i>  (Fullan, 2011)</p> <div data-bbox="517 1659 842 1881" data-label="Image"> </div> <p>More data doesn't mean better results – focussed collection, evaluation and implementation based around the results - makes the difference!</p> <p><i>"Defining and measuring the broader schooling outcomes is difficult and requires further development and information gathering if</i></p> <p><i>Australia wants to be able to gauge the effectiveness of its schooling system as a whole. <b>A focus on the broader outcomes of schooling leads to a more holistic approach to education, encouraging</b></i></p>

	<p><b><i>students to become more resourceful and prepared for life beyond schooling.</i></b> Such a focus is also known to have a positive impact on individuals and society, promoting trust and tolerance and leading to a healthier and more satisfied nation. However, the broader outcomes are often difficult to measure and compare within a national and international context”</p> <p>(Gonski, 2001)</p>
<p><b>1.9</b>  <b>A focus on early intervention and sustained intervention is required. This is based on a philosophy of equity and the belief that all students can learn if the appropriate interventions are provided.</b></p>	<p>Equity means that all children, no matter what their background, need to be offered the opportunity to achieve at a high level. To overcome the wide range of ‘readiness for school’ it is important that an equitable system provides significant investment in early childhood programs. Families and communities vary greatly in the social capital they are able to provide to their children and students with weak family and community resources have considerable difficulty taking advantage of learning opportunities. (Leithwood, Fullan, Watson, 2003)</p> <p>A belief that all students can achieve common educational goals. This focus on learning is not about all students achieving the same results. Rather it is a belief that with personalised learning and differentiation all students can achieve these common results.</p> <p><i>“Diversity of students’ personalities, abilities, and orientations has to be taken into account in crafting learning environments and choosing pedagogical methods in schools. This turned out to be one of the most demanding professional challenges for teachers”</i></p> <p>(Sahlberg, 2012)</p> <p>Inequity in student performance can be addressed through</p> <ul style="list-style-type: none"> <li>» a focus on early intervention,</li> <li>» direct classroom support for those falling behind,</li> <li>» targeted resourcing, and</li> <li>» differential strategies (Hopkins, 2013).</li> </ul> <p>Special Education in the Finnish system is predominantly understood in the learning deficit and difficulties context. It is also understood that early intervention at this level is a priority and so students are identified and ‘treated’ early. Special Education in the context of early intervention is an integral part of the Finnish curricula and as such is resourced appropriately in terms of specialised staff (Sahlberg, 2012). This early intervention refers to early recognition of learning difficulties and social and behavioural problems. The intervention uses both educational and psychological services as part of the professional support offered to these students to enable them to complete school to the best of their ability with their peers.</p> <p>In the 2009/2010 school year, 8.5% of students were in ‘Permanent Special Education’ schools where they are withdrawn from the mainstream. Nearly 50% of students who complete the compulsory education (at age 16) have been in what is known as part-time special education groups. These are groups of children who are identified as needing intervention and placed on individual learning plans and receive specialist support, but continue in mainstream schooling. It is therefore nothing unique for students to receive special education and the stigma surrounding this is reduced (Sahlberg, 2012).</p>

The longer school and education and training systems wait to intervene, the costlier it is to have impact and change outcomes.

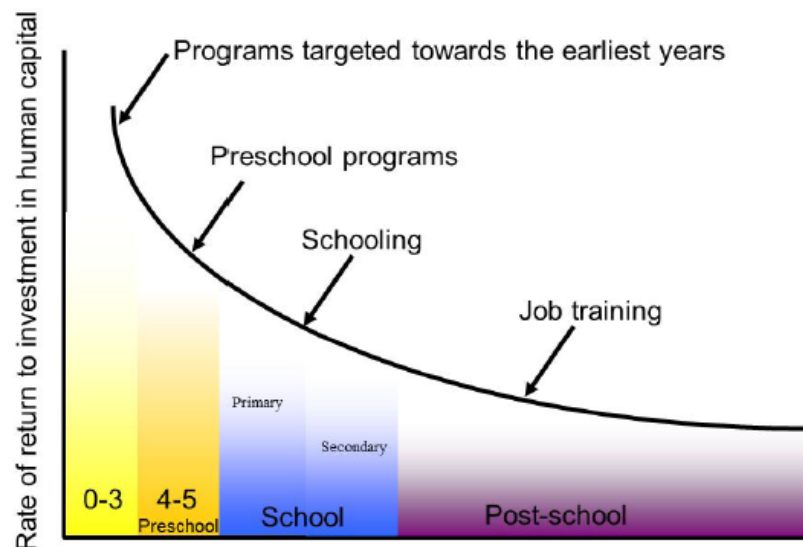
Finding 18 of the Review of School Funding report (Gonski, 2011) notes that

*“Strategies to address educational disadvantage in school are most effective when integrated with, and complementary to, approaches to support early childhood development.”*

Students in the Alberta system in Canada continue to rank amongst the best in Canada and the world according to 2009 PISA results. Alberta focuses the weighting of its teacher loading to the early years (1.22 in pp to yr. 3) compared to 1.00 for secondary schools (Lamb & Teese, 2011)

### **Return on Dollar Investment for Spending on Education**

(Lamb & Teese, 2011)



Source: Heckman and LaFontaine (2007).

*“Linked to the issue of rising cost and declining benefit across stages of learning in addressing gaps in skills is the role of initial learning and skills to later acquisition. If students start to fall behind as they ascend school it impacts not only their confidence, but also their capacity to successfully negotiate later skills acquisition. Most subject areas, and some in particular such as mathematics), are organised sequentially across stages of learning in ways that require earlier mastery to ensure successful progress at later stages. If students fall behind, then this tends to compound their difficulties by making subsequent learning more difficult and increasing the gaps in skill levels”*

(Lamb & Teese, 2011)

## 2. Improving student outcomes requires more than the education sector

Observation	What the Research Says
<p><b>2.1</b>  <b>Improvement of student outcomes a whole-of-society responsibility rather than just the responsibility of the education system.</b></p>	<p>There is growing recognition that, at the local community level, many schools cannot overcome their particular schooling challenges alone and that collective action through school and community partnerships can help to strengthen efforts by governments to address educational disadvantage (Black 2009).</p> <p>The importance of all schools developing partnerships with their communities to foster improved student outcomes is clearly articulated in the <i>Melbourne Declaration on Educational Goals for Young Australians</i> (Barr et al., 2008).</p> <p>Leithwood, Fullan &amp; Watson propose that as part of the evidence informed systematic policy that government as a whole be responsible for a small number of policies in areas known to have powerful effects on student learning. Policies that address areas known to have a substantial impact on student <i>learning</i> and achievement. These would include areas such as prenatal health care and housing for low-income families. Improvements in these areas may do more for student learning than many current classroom and school-oriented policies (2003).</p> <p><i>“There is a recognition that parents play a vital role in their children’s learning and development from a young age and that a positive relationship with the school can enhance academic achievement”</i> (OECD 2011d cited in Gonski, 2011).</p> <p>A more cohesive partnership with community role models, health services and the like would help lift learning outcomes and improved student wellbeing.</p> <p>The Finnish success is seen as the result of systematic attention paid to both early intervention and a strong social justice agenda delivered as a partnership between multiple sectors (Sahlberg, 2012). To understand the success in systems like the Finnish, Singaporean, Canadian (Ontario) is to understand the entire system within which they sit, rather than just looking at just the education system. In the Finnish system there is no choice of school sector; all schools are part of a comprehensive public education system. The system in Ontario however has choice and they are also seeing great turn around.</p> <p>Countries such as Finland have sought to continually improve their schooling systems through innovative approaches to learning. These approaches include</p> <ul style="list-style-type: none"> <li>» adapting family support services,</li> <li>» creating new kinds of schools, and</li> <li>» seeking to use new technologies to promote learning (Leadbeater and Wong 2010).</li> </ul> <p>In the Finnish system, the support systems that enhance teaching and learning are a priority for schools; school meals for all students, health services, psychological counselling and student guidance are normal practice (Sahlberg, 2012).</p> <p>A Royal Commission on Learning, established by the Canadian province of Ontario, found that schools cannot be responsible for everything to do with the</p>

	<p>child. The school's primary responsibility is in learning (intellectual nurturing); responsibility for the other purposes (i.e. citizenship, preparation for work, instilling values) need to be shared by the wider community (Leithwood, Fullan, Watson, 2003).</p> <p>The UK system has legislated that each local council has in its employ a Director of Children's Services (DCS) and one of the council members must take on the role of Lead Member for Children's Service (LMCS). These roles provide local leadership and work with schools and children's sector services to ensure that they are integrated across the local government area.</p> <p><i>"The DCS and LMCS have a key role in ensuring that the local voluntary and community sector, charities, social enterprises, the private sector and children and young people themselves are included in the scope of local authority planning, commissioning and delivery of children's services where appropriate."</i> (Statutory guidance on the roles and responsibilities of the Director of Children's Services and the Lead Member for Children's Services, 2013).</p> <p>The London Leadership Strategy has worked with the Norfolk County Council amongst other local government jurisdictions to improve the educational outcome of students through a shared cluster approach. An evaluation of the <i>Good to Great</i> (G2G) program conducted by the London Leadership Strategy shows that with the right kind of inter-school support, sharing of practice and appropriate outside mentoring these schools can go from good to outstanding. (<a href="http://londonleadershipstrategy.com/content/case-studies">http://londonleadershipstrategy.com/content/case-studies</a>)</p>
<p><b>2.1</b> <b>Australia has a stated aim requiring a holistic approach to achieve the desired educational outcomes.</b></p>	<p>Over recent years, a number of historic steps have been made to improve Australia's schooling system. In December 2008, the Australian Government and state and territory Education Ministers released the <i>Melbourne Declaration on Educational Goals for Young Australians</i> (Barr et al, 2003), setting out the national purpose and policy for Australian schooling for the next 10 years. The goals focus on promoting equity and excellence in schooling, and on young Australians becoming successful learners, confident and creative individuals, and active and informed citizens. Central to realising these goals is providing all students with access to high-quality schooling.</p> <p><i>National priorities and reforms have also been agreed by all governments through the Council of Australian Governments to progress the national goals. Key policy directions under the National Education Agreement include improving teacher quality and school leadership, greater accountability and better directed resources, integrated strategies for low socioeconomic school communities, and improving the outcomes of Indigenous students. National curriculum is being developed to set clear achievement standards for all students. The My School website is providing public access to information about school performance and resources.</i> (Gonski, 2011)</p> <p>The Melbourne Declaration seems to fall short of other high performing systems in improving education outcomes despite the stated goals of</p> <ol style="list-style-type: none"> <li>1. Australian schooling promotes equity and excellence</li> </ol>

	<p>2. All young Australians become: successful learners, confident and creative individuals, and active and informed citizens.</p> <p>There is a mention of the importance of community and parents in improving educational outcomes but the feeling the reader is left with is one that improving the outcomes is the responsibility of the education system only.</p> <p><i>“Australian governments commit to working with all school sectors to ensure that schools engage young Australians, parents, carers, families, other education and training providers, business and the broader community to support students’ progress through schooling, and to provide them with rich learning, personal development and citizenship opportunities”</i> (Barr et al, 2003).</p>
--	--

### 3. Talent identification and development of teachers and school leaders ensures a successful system

Observation	What the Research Says
<p><b>3.1</b> <b>Improving the Education system is directly related to improving teaching standards.</b></p>	<p>The Finnish system deliberately brought together a wide variety of students and abolished ability grouping. The consequence was a fundamentally new approach to teaching and learning (Sahlberg, 2012). This came from a basic philosophy that an understanding of, and learning through, human diversity is an important educational goal and should function as small-scale philosophies. Teachers therefore needed to become skilled at employing alternative teaching strategies and designing learning environments that differentiated learning for different students.</p> <p>McKinsey and Co concluded from their extensive international study of high-performing schooling systems “<i>that the quality of an education system cannot exceed the quality of its teachers</i>” (Barber and Mourshed 2007). They concluded that in the top 10 performing systems there were three things that mattered the most:</p> <ul style="list-style-type: none"> <li>» getting the right people to become teachers;</li> <li>» developing them into effective instructors; and</li> <li>» ensuring the system is available to deliver the best possible instruction for every child.</li> </ul> <p><i>The quality of teaching is the best determinant of student performance and the focus of policy needs to be quality of teaching rather than structural change if we wish to improve student achievement</i> (Hopkins, 2013).</p> <p>John Hattie found that expert teachers do things differently than average teachers and that we need to focus on,</p> <p style="text-align: center;"><i>“Dependably identifying, esteeming and encouraging excellent teachers”</i> (Hattie, 2003)</p>
<p><b>3.2</b> <b>The profile of teaching as a profession is raised to one of respect in the community.</b></p>	<p>The impact of quality teachers on student engagement and performance is well documented and cannot be underestimated (Goodwin 2010; Hattie 2008; Levin 2008).</p> <p>Lessons can be learned from the world’s leading schooling systems, where teaching is a high-status profession. <b><i>In these systems, competition from school students to become teachers is strong and only the best are selected.</i></b> For example, Finland has raised the social status of its teaching profession to a level where there are few occupations with higher status, and a master’s degree is required to enter it (Fullan, 2011; OECD 2011a).</p> <p>In addition, countries that have succeeded in making teaching an attractive profession have offered teachers greater career prospects, providing responsibility as professionals and leaders of reform.</p> <p><i>Teaching is generally not thought of as an evidence-based profession but rather an art</i> (Hopkins, 2013). It is vital to embed research-based practice and review into daily professional practices across the school. It is vital that this evidence-based practice is shared and explored across schools to ensure that faddism does not take hold or the concept of ‘teacher as an artist or inherently skilled individual’ remain as the external</p>



	<p>understanding.</p> <p><b><i>“Australia’s teachers and school leaders must be valued by the community. Teaching should be regarded as among the most important and respected occupations in our society. It is teachers and school leaders, in partnership with parents, who are directly responsible for developing, guiding and influencing Australia’s future generation. Excellence in teaching, in all schools and at all levels of schooling, is by far the single most important factor in achieving sustained improvements in the performance of Australia’s schooling system”</i></b> (Gonski, 2011)</p>
<p><b>3.3</b> <b>Teaching operates as a collaborative practice within high-performing systems and teachers actively learn from each other within collaborative clusters.</b></p>	<p>The successful transference of good practice is generally not achieved through networking or professional development events but through a deliberate mentoring process. When teachers acquire a richer repertoire of pedagogic practice then student learning will improve (Hopkins, 2013).</p> <p><b>In great systems teachers engage in professional learning with others within their cluster of schools to share best practice, view best practice, problem solve together and take on a localised system-level view of how to ensure continuous improvement in the teaching and learning space.</b></p> <p>A new model for the sharing of good practice is to ensure that it is more than just sharing of good practice but is in actual fact practice transfer. This involves the co-construction of joint practice development and to have the staff participating in shared practice and reflection opportunities to ensure incremental innovation in that practice (Hargreaves, 2011). In an alliance, schools can identify the leaders of pedagogy, leadership strengths and the like within the cluster as well as those that are also competent at sharing practice (as the two do not always coexist in the same individual). They can then make these people available to enhance the overall professionalism of all teacher within the cluster.</p> <p>Hargraves calls this ‘Joint Practice Development’ which is different to the sharing of professional practice ideas. In this model the practice of the skill is shared as an interaction between two people and it is the development of the practice rather than simply a transfer of it from person to person or place to place (Hargreaves, 2012b).</p> <p><i>See Appendix 6 for the way one school alliance in the UK uses professional service days to support the Joint Practice Development.</i></p>
<p><b>3.4</b> <b>School Leadership is an integral component of a high-performing system.</b></p>	<p>In the first of two studies sponsored by The Wallace Foundation, Kenneth Leithwood and his colleagues reported,</p> <p><b><i>“Leadership is second only to classroom instruction among school-related factors that contribute to what students learn at school.”</i></b></p> <p>Findings from the second study, led by Karen Seashore Louis, confirm the earlier statement:</p> <p><b><i>“After six additional years of research, we are even more confident about this claim. Moreover, it appears that principal effects are even more pronounced in high-poverty and low-performance schools”</i></b> (Gordon, 2013).</p> <p><b><i>“School leadership needs to set high expectations for teachers and students</i></b></p>



*with an unrelenting focus on the quality of teaching and learning. This requires both trust and distributed leadership across the staff and the deliberate building of a school culture and created structures that ensure an orderly learning environment and professional responsibility and accountability”*  
(Hopkins, 2013).

AITSL have identified that a principal needs to be clear about their own vision and values, have a good knowledge of teaching and learning, and a good set of interpersonal and personal skills. Principals need to be innovative, be able to engage with their communities and be able to lead the management of a school. A recent study conducted by AITSL on preparing future leaders found that Australian principals are taking much longer to move into the role than their overseas counterparts. This may be a result of the traditional process of becoming a principal in Australia based on tenure and moving through positions, or that older principals are staying on and there are no vacancies opening up for new talent (AITSL, 2015).

School leaders now have responsibility for instructional leadership but also *organisational* leadership. They need to be able to build solid teams of teachers, focus on instructional leadership and also like any other organisation manager, be responsible for running of the ‘business’ (In Conversation, 2012; Leithwood 2012).

Fullan, in an article published in Education Week (<http://www.edweek.org>), warns that while the evidence is clear about the impact of school leadership on student outcomes that those focusing on systems must remember,

*“We should not have leadership-development programs for individuals in the absence of parallel strategies focusing on changing the culture of school systems. It will take the combined efforts of both components. Individual and organizational development must go hand in hand”*  
(Fullan, 2008)

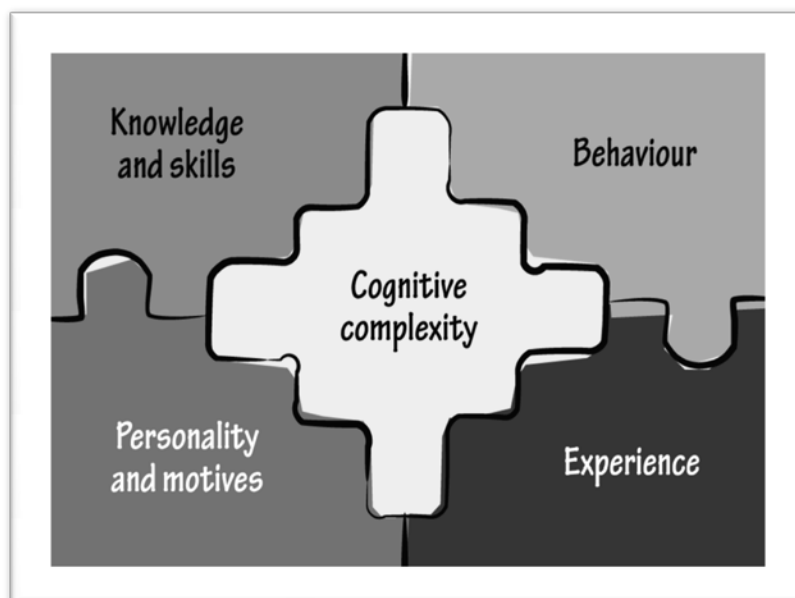
What is labelled a common approach in Western nations of being clear about the goals but leaving the means to those in the field is where the Ontario system was. They have moved to taking a stronger role in helping leaders and teachers use the best available means to accomplish those goals. School leaders in the Ontario system have a system-level responsibility where they are not only responsible for improving instruction and learning within their own schools but to also contribute to the improvement of schools in their district and to develop leaders (In Conversation, 2012).

School leaders often feel prepared for instructional leadership but under-prepared for other elements of the job that cannot be ignored. Principals may need to reorganise the school, delegate some responsibilities and think differently about the way they undergo their work. The succession planning of leaders and preparing them well before there are vacancies to be filled is an important component of the system responsibility. Talent identification therefore becomes an important part of the process.

The Ontario Leadership framework describes characteristics of effective leaders that creates the variation between those leaders that will be able to enact effective leadership practices at different levels. Cognitive resources, social and emotional resources and psychological resources are considered as essential (In Conversation. 2102).

This echoes the understanding that business has of high-performing leaders who, apart from a level of skill, experience and knowledge in the field, need a certain level of cognitive resourcing (problem solving, judgement, ability to deal with complexity) and personal skills (emotional intelligence, motivators). This Leadership jigsaw is an important part of identifying high-performing leaders and providing appropriate developmental pathways (Connor & Mackenzie-Smith, 2003).

#### What makes a leader?



*Adapted from: The Leadership Jigsaw – Finding the missing piece – Connor & Mackenzie-Smith, 2003*

### 3.5 Successful organisations pay careful attention to who they hire and how they develop those they select.

*“Research shows that high-achieving and high-equity schooling systems typically invest in building quality and capability in school leaders and teachers. Strategic and systematic approaches are also typically in place to attract, develop, and retain the most talented teachers, and to make sure skilled teachers serve students of all socioeconomic backgrounds”*  
(Auguste, Kihn and Miller 2010).

The McKinsey & Co report found that as systems moved up the performance phases that teacher professional development also changed. The focus shifted away from a focus on technical training to a greater reliance on peer-led collaboration and development. As the system performance expanded from centre-led standardised student assessment to also including teacher and school level self-evaluation. **The report found that when teachers achieved high skills then tight controls became counterproductive.** Instead, school collaboration and flexibility became drivers for innovation that the centre could share with other schools (Mourshed et al, 2011).

*“The successful systems actively foster the development of the next generation of system leadership from within ensuring that there is a continuity of purpose and vision”*  
(Fullan, 2011)

**Good to Great Journey's emphasize shaping the Professional** (Mourshed et al., 2011)

Theme	Description
Raising calibre of entering teachers and principals	<ul style="list-style-type: none"> <li>▪ <b>Recruiting:</b> The system raises the entry bar for new teacher candidates</li> <li>▪ <b>Preparation and induction:</b> The system raises pre-service training quality and certification requirements</li> </ul>
Raising calibre of existing teachers and principals	<ul style="list-style-type: none"> <li>▪ <b>Professional development:</b> The system raises professional development requirements and provides more opportunities for self-, peer-, and center-led learning and development</li> <li>▪ <b>Coaching on practice:</b> Instructional coaches work with teachers to strengthen their skills in areas such as lesson planning, student data analysis, and in-class pedagogy</li> <li>▪ <b>Career pathways:</b> The system creates teacher and leadership specializations through career pathways, raising expectations with each successive pathway rung and increasing pay accordingly</li> </ul>

Currently in Australia, 71 per cent of principals are over the age of 50 (Willett et al., *National teaching workforce dataset*, 2014 cited in AITSL 2015). This indicates an urgent need to ensure a pipeline of leaders ready to fill the gaps left when the ageing workforce reaches retirement. With one-third of school leaders seeing principal and deputy principal positions as 'unattractive' or 'very unattractive' to qualified applicants (ACER, *Staff in Australia's schools 2013* - cited in AITSL, 2015), the desirability of the role and how it is perceived threaten the capacity to fill these vacancies as they arise. In fact,

*"50% of current deputies do not intend to apply for a principal position in the next 3 years"*  
(AITSL, 2015)

*There is a need to look closely at demographic data to consider trends, anticipate where shortages will be most pronounced and consider strategies to encourage a strong and vibrant pipeline of well-prepared aspirant leaders, eager to take on the leadership challenge. Supply is also determined by principal readiness. For this increasingly complex and challenging role it is effective professional preparation that will have a true impact on the capacity, quality and availability of high-potential aspiring principals. However, evidence suggests a coherent and widespread strategy to ensure principal preparedness is currently lacking. (AITSL, 2015).*

Recommendation C from the Australian Principal Occupational Health, Safety and Wellbeing Survey (Riley, 2014) proposes a review of the work practices of Principals and deputy/assistant principals in light of the Job Demands-Resources Model of organizational health. A review such as this that could provide a framework for the work of a principal. This analysis of the Work of the Role (WOR) can be used to understand the work that exists for all principals and the work that is required for different schools, geographic locations etc... The information can then be used to form a development plan around the Australian Professional Standards for Principals. This tool can also be used in identifying future talent and selection for positions.

When McKinsey and Co (Mourshed et al., 2011) studied school systems (countries, states, provinces) that had success in going from good to great and were sustaining their effectiveness, they found three factors that were critical to greater longevity of high performance:

1. The establishment of collaborative practices;
2. The development of a supportive infrastructure that can provide continuous development and monitoring; and
3. 'Architecting tomorrow's leadership'

The most tangible results for student achievement (OECD, TALIS, 2014) are likely to come from specific principal preparation programs and training in school administration and instructional leadership that is targeted to the needs of principals prior to and on taking up the position.


Gordon (2013) provides a critique of the standard way most systems select and develop people for principal positions.



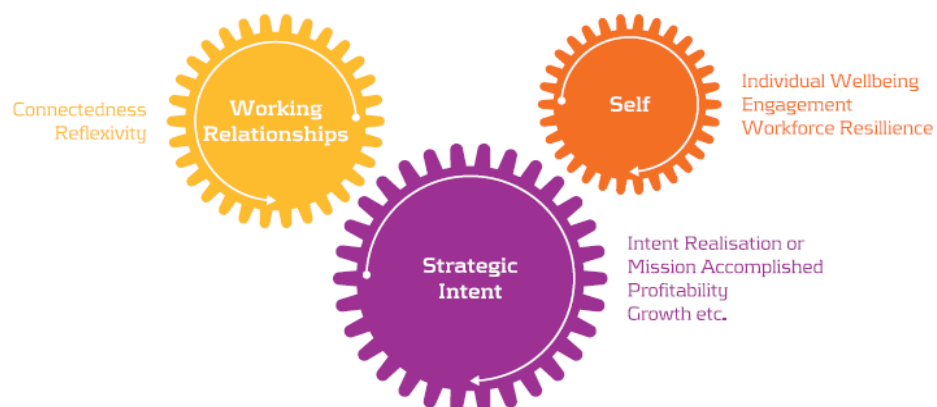
*Every high-performing system studied by the McKinsey group combined policies to attract and develop high quality teaching force along with strategies and incentives for leaders and peers to work together. Successful countries did not get that good just by attracting different people to the profession. They also and simultaneously changed the profession on the ground by building collaborative cultures focused on developing educator commitment and competence, thereby obtaining better outcomes for all. Many leadership-driven solutions suffer from the same individualistic flaw. (Mourshed et al, 2011).*

**The best-performing countries in the various studies are successful because they focus on developing the entire profession rather than individuals.** While the notion of feedback to improve teaching is correct (Hattie, cited in Fullan, 2011) it is only useful if it sits within a culture where feedback is valued for improvement rather than seen as performance management-oriented. Fullan cites a study by a business professor at the University of Pittsburgh, Carrie Leana (2011) on the importance of social capital in developing great teachers. Human Capital refers to their pedagogical skills, whilst social capital refers to interactions between teachers that were focussed on instruction and based on feelings of trust. She found that a combination of both human capital and social capital were needed for quality teachers. The work conditions (school culture) are an important enabler to ensure that social capital could occur.

As with accountability there is a developmental sequence here.

	<ul style="list-style-type: none"> <li>» If the teaching force has low capacity more directive support will be required at the beginning; not heavy-handed accountability but direct development of teachers through professional learning of effective instructional practices.</li> <li>» As teacher and leader capacity become stronger, peers become the greater driving force. By mobilising peers, leaders accelerate whole system reform and establish conditions for sustainability. (Mourshed et al., 2011)</li> </ul> <p style="text-align: center;"><b>As a system moves from good to great then leaders and teachers need to be trusted to implement change and improvement. This trust can happen if talent development has been deliberate and sustained.</b></p> <p><i>See Appendix 7: The Numbers Speak for Themselves for a pictorial representation of AITSL's 2015 report "Preparing future leaders: Effective preparation for aspiring school principals."</i></p> <p><i>See Appendix 8: Leadership Development (Singapore &amp; Ontario)</i></p>
<p><b>3.6 Principal and Staff wellbeing are linked closely with student engagement and achievement.</b></p>	<p>For many schools, including those that seem to be performing well, the neglected teaching and learning climate inhibits student achievement and international competitiveness. In A Place Called School, John Goodlad summarised the findings for schools with low teacher and student satisfaction, saying,</p> <p style="text-align: center;"><i>"They are not healthy organisms. They simply are not good candidates for tackling the difficult tasks of curricular and pedagogical reform."</i></p> <p>That is, we can expect minimal results from reform efforts until the environment becomes healthier for students and teachers (Gordon, 2013).</p> <p>Schools with high levels of engagement tended to have comparably high levels of performance. A study by John Willms discovered a strong relationship between the engagement measures and student performance in reading, mathematics, and science. (Gordon, 2013)</p> <div style="text-align: center;">  <pre> graph LR     A[Principal Leadership] --&gt; B[Teacher Engagement]     B --&gt; C[Student Engagement]     C --&gt; D[Student Achievement] </pre> </div> <p><i>"Systematic attention also needs to be paid to the professional learning of principals and deputy/assistant principals, and presumably teachers, in the emotional aspects of their roles and the emotional investment of parents in their children, which may underlie the high rate of violence and threats principals and deputy/assistant principals are experiencing. In-service provision of education on the emotional aspects of teaching, learning, organizational function, emotional labour, dealing with difficulties and conflicts in the workplace, employee assistance programs, debriefing self and others appears to be urgently needed"</i> (Riley, 2014)</p>

**A Holistic Wellbeing Framework for School Leaders and their staff (Kaya View on Wellbeing)**

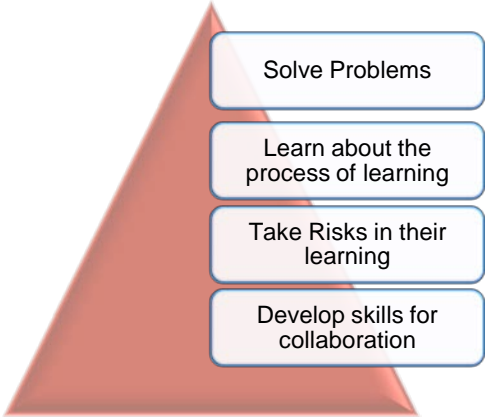


*“The bottom line is simply this: Without a great workplace for teachers, we will never build a great learning place for students...and it all starts with the Principal”*  
(Gordon, 2013)

## 4. Preparing students for the future of work

Observation	What the Research Says
<p><b>4.1</b>  <b>Preparing students for the future of the work requires a paradigm shift in what makes for an effective education.</b></p>	<p><i>“Education for the knowledge-based economy has become a buzz phrase in education policy discourse throughout the developed world and the transition economies but also increasingly in developing countries. However, it has rarely been transformed into operational strategies or reform programs for education systems or educators”</i>  (Sahlberg, 2006)</p> <p>21<sup>st</sup> century skills (i.e. collaboration, problem solving, entrepreneurship, critical communication) have been talked about for a number of years but there seems to be limited traction in this space. These skills need to be operationalised and even modelled at the school and district level for students (and staff) to be engaged in them (In Conversations, 2012).  <b><i>In order to prepare students for their future a different mindset about what teachers are and how schools are structured is needed.</i></b></p> <p>Students need to have a stronger focus on learning how to learn and how to understand the process rather than recall of knowledge and how to learn as part of a collective process. A re-conception of knowledge requires skills in acquiring, utilising, diffusing and creating knowledge rather than reproducing what is already known. Collaborative practice and collective learning requires a high level of emotional intelligence (Sahlberg, 2006).</p> <p>While there is an appeal to the education sector to improve its output of creative and innovative students it has been argued that the drivers of the education system tend to be built around either a model of education as the production of knowledge and skills for predetermined vocations (economic model) or a model where intelligence can be measured to determine progress (intellectual model) are counterproductive to this.</p> <p><i>“The economic model is outdated and the intellectual model is inadequate for a knowledge society”</i>  (Robinson, 2001 cited in Sahlberg, 2009)</p> <p>Most education reform is based around these models and so extends time allocated to numeracy and literacy, and allocates more computers and the like in an attempt to raise standards and produce creative innovative students.</p> <p>Preparing students for this future requires an environment that encourages and enables students to</p>



	 <p>It is argued that the test-based accountability seen in many systems narrows curriculum, promotes teacher centred pedagogies and promotes the finding of the correct answer. While this is important, preparedness to be wrong is the cornerstone of creative advances (Sahlberg, 2009).</p>
<p><b>4.2</b> <b>Literacy and numeracy must still be a priority.</b></p>	<p>Australia is on the pathway to being a knowledge intensive economy with a capacity for innovation, supporting productivity and ensuring environmental sustainability. There appears to be a widening gap between the expected supply of higher level skills and industry demand (<i>Future Focus: 2013 National Workforce Development Strategy</i>).</p> <p>The above report commissioned by the Australian Workforce and Productivity Agency (now Department of Industry), claims that by 2025 Australia could be 2.8million people short of the requisite high-skilled qualifications that industry will demand. The report also highlights that about half of adult Australians have the necessary literacy or numeracy skills to meet the complex workplace demands that exist. Appropriately equipping Australians with literacy and numeracy skills for full participation is therefore seen as necessary to enhance workforce development within Australia.</p> <p><i>Closing the gap between high and low-performing students is needed. This is done by providing adequate and appropriate resources for those underperforming rather than restricting high-performing students. This means that a localised response to the issues is important. Disadvantaged students often require an accelerated development in literacy and numeracy skills to redress the accumulated gaps in understanding and skills (Gonski, 2011).</i></p>
<p><b>4.3</b> <b>There is an understanding that the future of work is changing. While we may not be able to identify what the jobs of the future, there is some idea of the types of future</b></p>	<p>The changing nature of work poses a new set of challenges for the future;</p> <ul style="list-style-type: none"> <li>» with an exponential growth in technologies,</li> <li>» a growing focus on digitisation and</li> <li>» a demand for flexibility (<i>Future Focus: 2013 National Workforce Development Strategy</i>).</li> </ul> <p><i>“In the countries of advanced innovation and technological cultures, it is important to give teachers in schools and universities sufficient</i></p>



<p><b>work skills that will be needed.</b></p>	<p><i>autonomy to maintain creative and open cultures of learning for their students. Competitive businesses need first and foremost individuals who are creative, who are capable and willing to take risks and who can use these skills both working independently and together in teams”</i> (Sahlberg, 2006).</p> <p>Research conducted by the Institute for the Future (Davies, Fidler &amp; Gorbis, 2011) identified ten skills that will be critical for success in the future workplaces.</p> <p>See <i>Appendix 9: Workforce Skills Required for Success</i></p> <div data-bbox="563 683 866 887" data-label="Image"> </div> <p>The Teaching of 21<sup>st</sup> Century skills project found that 21<sup>st</sup> century learners needed certain ways of thinking; creativity and innovation, critical thinking, problem solving, decision making and metacognition. They needed both information literacy and ICT literacy as tools and the skills to communicate and collaborate in working together. The 21<sup>st</sup> century learner needed to be able to thrive in a world that was global, took into account a life and career and one where personal and social responsibility including cultural awareness and competence were important (<a href="http://www.atc21s.org/">http://www.atc21s.org/</a>).</p> <p>The authors of the <i>Future Work Skills</i> report (Davies, Fidler &amp; Gorbis, 2011) make the observation that the landscape has changed and educational institutions should consider how to adapt quickly in response. Some directions of change might include:</p> <ul style="list-style-type: none"> <li>» Placing additional emphasis on developing skills such as critical thinking, insight, and analysis capabilities</li> <li>» Integrating new-media literacy into education programs</li> <li>» Including experiential learning that gives prominence to soft skills—such as the ability to collaborate, work in groups, read social cues, and respond adaptively</li> <li>» Broadening the learning constituency beyond teens and young adults through to adulthood</li> <li>» Integrating interdisciplinary training that allows students to develop skills and knowledge in a range of subjects</li> </ul> <p><i>“There was a time when a good academic qualification guaranteed a job for a lifetime, but not anymore. Most people will have to learn for new professions and adapt to several careers in the course of their lifetimes. Most employers today – and certainly in the future – want to recruit people who can work with ideas and see connections, are innovative, communicate and work well with others, and are good problem-solvers. Although the inflation of formal qualifications and degrees will continue, confident and creative individuals will always be in demand in the future”</i> (Sahlberg, 2009)</p>
--	--

<p><b>4.4</b></p> <p><b>There is an understanding of the importance of the Asian market.</b></p>	<p>Currently Australia's biggest export is its services sector (41% of our total export earnings) and this is expected to continue growing in the future. Currently this is weighted in favour with our historical trading partners such as USA and UK while the focus on Asian markets is our commodities exports. With the ongoing Asian economic transformation and as Australia seeks to increase its exports of services to this region it is vital that Australia continue to develop an Asia-capable and an internationally-oriented workforce (<i>Australia's Job's Future</i>, 2015).</p> <p>While the Australian system has looked at the Finnish system as one to copy it may be that we have more in common with Asia. It may therefore make sense to look at what is happening in Asian systems such as Shanghai as the need to increase our engagement and interaction with Asian markets is important (Hargreaves makes this argument for the UK system as well. Hargreaves, 2012).</p>
--	--

## Appendix 1: Interventions used at various performance stages (Mourshed et al., 2011)

Improvement journey	Poor to fair	Fair to good	Good to great	Great to excellent
Theme	<i>Achieving the basics of literacy and numeracy</i>	<i>Getting the foundations in place</i>	<i>Shaping the professional</i>	<i>Improving through peers and innovation</i>
Intervention cluster <sup>1</sup>	<ul style="list-style-type: none"> <li>• Providing motivation and scaffolding for low skill teachers               <ul style="list-style-type: none"> <li>– Scripted teaching materials</li> <li>– Coaching on curriculum</li> <li>– Instructional time on task</li> <li>– School visits by center</li> <li>– Incentives for high performance</li> </ul> </li> <li>• Getting all schools to a minimum quality level               <ul style="list-style-type: none"> <li>– Outcome targets</li> <li>– Additional support for low performing schools</li> <li>– School infrastructure improvement</li> <li>– Provision of textbooks</li> </ul> </li> <li>• Getting students in seats               <ul style="list-style-type: none"> <li>– Expand school seats</li> <li>– Fulfil students' basic needs to raise attendance</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Data and accountability foundation               <ul style="list-style-type: none"> <li>– Transparency to schools and/or public on school performance</li> <li>– School inspections and inspections institutions</li> </ul> </li> <li>• Financial and organisational foundation               <ul style="list-style-type: none"> <li>– Optimization of school and teacher volumes</li> <li>– Decentralizing financial and administrative rights</li> <li>– Increasing funding</li> <li>– Funding allocation model</li> <li>– Organizational redesign</li> </ul> </li> <li>• Pedagogical foundation               <ul style="list-style-type: none"> <li>– School model/streaming</li> <li>– Language of instruction</li> <li>– Language of instruction</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Raising calibre of entering teachers and principals               <ul style="list-style-type: none"> <li>– Recruiting programs</li> <li>– Pre-service training</li> <li>– Certification requirements</li> </ul> </li> <li>• Raising calibre of existing teachers and principals               <ul style="list-style-type: none"> <li>– In-service training programs</li> <li>– Coaching on practice</li> <li>– Career tracks</li> <li>– Teacher and community forums</li> </ul> </li> <li>• School-based decision-making               <ul style="list-style-type: none"> <li>– Self-evaluation</li> <li>– Independent and specialized schools</li> </ul> </li> </ul>	<ul style="list-style-type: none"> <li>• Cultivating peer-led learning for teachers and principals               <ul style="list-style-type: none"> <li>– Collaborative practice</li> <li>– Decentralizing pedagogical rights to schools &amp; teachers</li> <li>– Rotation and secondment programs</li> </ul> </li> <li>• Creating additional support mechanisms for professionals               <ul style="list-style-type: none"> <li>– Release professionals from admin burden by providing additional administrative staff</li> </ul> </li> <li>• System-sponsored experimentation/innovation across schools               <ul style="list-style-type: none"> <li>– Providing additional funding for innovation</li> <li>– Sharing innovation from front-line to all schools</li> </ul> </li> </ul>
Common across all journeys	Six interventions: [1] Revising curriculum and standards; [2] Reviewing reward and remunerations structure; [3] Building technical skills of teachers and principals, often through group or cascaded training; [4] Assessing student learning; [5] Utilizing student data to guide delivery, and [ 6] Establishing policy documents and education laws			

1 Total number of interventions in each phase: poor to fair, n=103, fair to good, n=226, good to great, n=150, great to excellent, n=94

Source: McKinsey & Company interventions database

## Appendix 2: A Singaporean Case Study (Mourshed et al., 2011)

Singapore provides an example of how a system shifts in emphasis as it goes through the various stages of the entire improvement journey, from *poor* to *great*, as Singapore has done over the past forty years. During this time it has decreased central guidance on teaching and learning as its system performance has risen. Singapore system leaders describe their system as having gone through three phases: 'Survival-driven' (1959-78), 'Efficiency-driven' (1979-96), and 'Ability-driven' (1997-present).

Singapore's Survival phase was primarily focused on enrolment and ensuring that every child had a school seat. This resulted in schools being built at the rate of one per month and the teaching force doubling, from 10,500 in 1959 to over 19,000 by 1968. By the end of this period, Singapore had achieved near universal primary education. However, almost thirty percent of primary school pupils did not progress to secondary school, and English language proficiency was low and educational wastage high (in terms of failing to achieve the expected standards and leaving school prematurely).

The *Efficiency* phase focused on reducing performance variation across the school system.

*"Our challenge was how to achieve above average outcomes from below average inputs,"*

recalls one Singaporean leader. Students were streamed into different tracks based on their aptitude, not only to reduce dropout rates, but just as importantly, to ease the burden on teachers so that they only taught classes of students with similar capability levels. Simultaneously, Singapore created the Curriculum Development Institute of Singapore (CDIS) in 1980 in order to develop a suite of supporting teaching materials that could be used off-the-shelf by less-experienced and less-skilled teachers. A Singaporean system leader recalls,

*"For each lesson, we created the lesson plan, the teacher manual, the student workbook, and the activity or experiment or video that would open the lesson."*

Each classroom in the same grade and subject level received exactly the same resources, and CDIS held workshops with teachers to explain how to use the materials effectively. Moreover, teachers had to keep a record book of their classroom activities, which were submitted to the principal every Monday. Regular student assessments enabled the Ministry of Education to monitor student outcome progress. As one system leader noted,

*"We were highly prescriptive in our teaching and had a mass production mindset ... We were textbook-bound and examination-driven."*

Through the 1980s and 1990s, Singapore raised the floor of performance in the system significantly, and narrowed the achievement gap across its ethnic groups.

Singapore moved from rigid prescription to greater flexibility as it embarked on its *good to great* improvement journey. By the end of the 1980s, Singapore had introduced school formats that had greater autonomy, including establishing Independent Schools in 1988 and Autonomous Schools in 1994. By 1995, Singapore's school system was among the top-performing systems in the world, topping TIMSS rankings in both math and science that year. The Curriculum Development Institute of Singapore closed its doors in 1996 because "it was no longer needed." Then, in 1997, Singapore launched "Thinking Schools, Learning Nation" (TSLN), marking the start of its *Ability* phase and emphasising a shift in focus toward enabling each student to reach the maximum of his or her potential. This focus on student ability required schools to be given much greater flexibility and responsibility for how they should teach and manage their students. TSLN gave teachers greater freedom in classroom practice, and gave principals decision rights on school management matters. It introduced school clusters to create a peer-based forum for school leadership development and the

sharing of effective teaching and learning practices across schools. It also changed its school inspection model, replacing the previous highly centralized model with a more collaborative one focused on self-assessment and quality assurance.

Throughout the latter period, Singapore worked intensively on strengthening the calibre of its teachers and principals so that they could make the best use of their greater freedoms. It established a system that accommodated three career tracks (Leadership, Teaching, and Senior Specialist), narrowed recruitment into teaching to the top one-third of each graduating cohort, expanded professional development to one hundred hours per year, and creating mentorship pairings for school leaders. More recently it has focused on strengthening the networks of Professional Learning Communities (PLCs) in schools that encourage teachers to collaborate with one other in reviewing and improving their classroom practice. In the words of one system leader,

*“As the skills of our educators rose, we needed to change our approach in how we managed them. We could no longer prescribe what they did, we had to treat them like professionals who had good judgment, knew their students well, and who could make their own decisions.”*

As with any improving system it is important to understand the journey of the Education system in Singapore within the broader national journey.

### Appendix 3: Case study of Ontario system (Fullan, 2011)

Ontario built its system reform strategy on action-feedback in 2003 when it started down the path of system transformation of the public school system. The government arm's-length agency, the Education Quality and Accountability Office (EQAO) had an information system based on testing students. The problem was that the EQAO system was detached from action, and as such was suspect among teachers and principals.

Two things were changed—and the sequence is crucial.

1. First the government stated that it would begin to form partnerships with districts and schools based on respect for the teaching profession and identification of effective instructional practices (in this case, in literacy and numeracy). Action and related data would drive implementation. Three years were spent developing this on the ground, which meant that (1) more trust was established, and (2) good practices were identified and developed, and thus there were more valuable things to share.
2. Second, three years later the government established a usable and transparent assessment system called Statistical Neighbours, which organised and made the information available on all six scores (reading, writing, and mathematics in grades 3 and 6)—first to the education sector and second to the public at large. The strategy called for a careful organisation of the data so that schools were grouped according to similar demographic and socioeconomic (hence, statistical neighbours).

As part of the same evolution the strategy entailed developing capacities in schools and districts to (1) diagnose student learning needs on an individualised ongoing basis, (2) link these needs to specific instructional improvements designed to address the learning needs, and (3) track improvements according to annual EQAO results. Successful schools and districts, that is, those showing the cumulative achievement in literacy and numeracy, also showed the greatest capacity gains in their ability to use data.



## Appendix 4: Obama Wants To Limit Class Time Devoted to Standardized Testing

By Josh Lederman and Jennifer Kerr

Posted: 10/24/2015 12:13 PM EDT | Edited: 10/24/2015 05:26 PM EDT

Retrieved from Huffington Post [http://www.huffingtonpost.com/entry/obama-standardized-tests\\_562bac7ae4b0aac0b8fd1c4a](http://www.huffingtonpost.com/entry/obama-standardized-tests_562bac7ae4b0aac0b8fd1c4a) 26th October 2015

WASHINGTON (AP) — Targeting one of education's most divisive issues, President Barack Obama on Saturday called for capping standardized testing at 2 percent of classroom time and said the government shares responsibility for turning tests into the be-all and end-all of American schools.

Students spend about 20 to 25 hours a school year taking standardized tests, according to a study of the nation's 66 largest school districts that was released Saturday by the Council of Great City Schools. But it's not known how much class time students spend preparing for tests that became mandatory, starting in third grade, under the George W. Bush-era No Child Left Behind law and are a flashpoint in the debate over the Common Core academic standards.

*"Learning is about so much more than just filling in the right bubble," Obama said in a video released on Facebook. "So we're going to work with states, school districts, teachers, and parents to make sure that we're not obsessing about testing."*

To drive the point home, Obama and Education Secretary Arne Duncan plan an Oval Office meeting Monday with teachers and school officials working to reduce testing time.

In all, between pre-K and 12th grade, students take about 112 standardized exams, according to the council report. It said testing amounts to 2.3 percent of classroom time for the average 8th-grader.

*"How much constitutes too much time is really difficult to answer," said Michael Casserly, the council's Executive Director.*

Obama cannot force states or districts to limit testing, which has drawn consternation from parents and teachers. But Obama directed the Education Department to make it easier for states to satisfy federal testing mandates and he urged states and districts to use factors beyond testing to assess student performance.

The Obama administration said it still supports standardized tests as a necessary assessment tool, and there are no signs they are going away soon.

Both the House and Senate versions of an update to No Child Left Behind would preserve annual reading and math exams, although the House version would diminish their significance in determining whether schools are up to par. The legislation is in limbo while House and Senate negotiators figure out how to reconcile the competing versions.

Administration officials said that in many cases, testing is redundant, poorly aligned with curriculum or simply overkill. They said the administration supports legislative proposals to cap testing time on a federal level, but wanted to offer states a model for how to cut down on testing absent congressional action.

"There's just a lot of testing going on, and it's not always terribly useful,

*"Cecilia Munoz, the director of the White House's Domestic Policy Council, said in an interview. "In the worst case, it can sap the joy and fun out of the classroom for students and for teachers."*

Casserly said his group found examples of testing redundancy that could be cut to create more instructional time. For example, some states and school districts were requiring both end-of-year tests and end-of-course tests in the same subjects in the same grade.

To ease the testing burden, the administration will provide states with guidance about how they can satisfy federal testing requirements in less time or in more creative ways, including federal waivers to No Child Left Behind that the Education Department readily has handed out. For example, some 8th-grade students who take high school-level coursework currently take both 8th-grade and high school assessments, but the administration will allow them to opt out of the 8th-grade tests.

The value of standardized tests taps into the national debate about the federal government's role in local schools; both political parties generally support scaling back Washington's reach.

Central to that debate is Common Core, a set of universal, college-ready academic standards in reading and math developed by state education officials. The federal government doesn't require Common Core, but the administration has backed it with financial incentives. About 12 million students last spring took tests based on the curriculum.

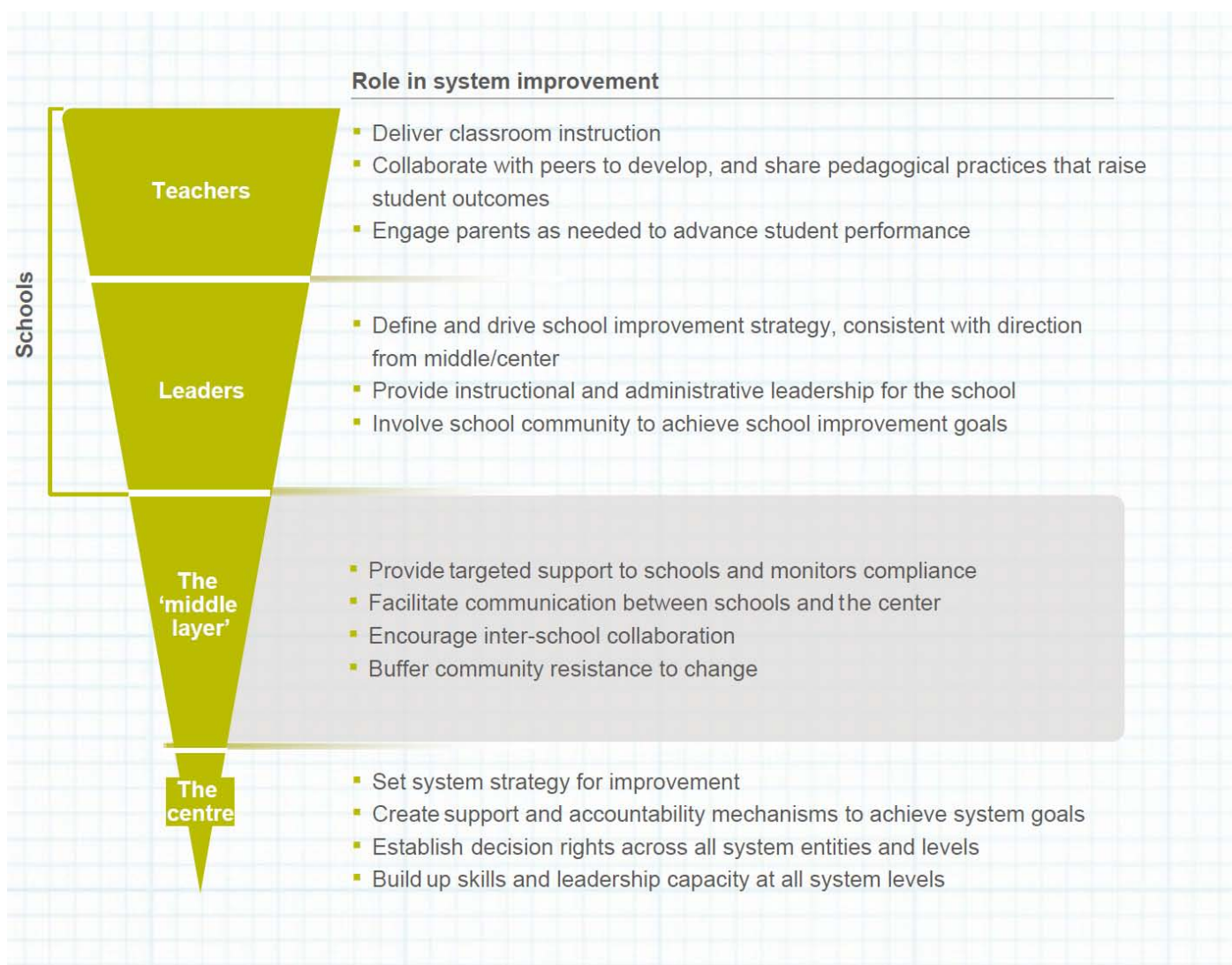
Teachers' unions have fought hard against one-size-fits-all tests for students being tied to their teachers' performance evaluations. Among parents with children in public schools, 63 percent were opposed to linking teacher evaluations to their students' test scores in a recent Gallup Poll.

Among other findings in the council report:

- The most tests were required in 8th and 10th grade; the fewest were in pre-K, kindergarten and 1st grade.
- Four in 10 districts report having to wait between two months and four months before getting state test results.
- Some pockets of the country had substantial numbers of students opting out of standardized tests. But the overall opt-out rate was usually less than 1 percent.



## Appendix 5: System Improvement requires integration across every level (Mourshed et al., 2011)



## Appendix 6: Joint professional development in Mount Street Academy, Lincoln (Hargreaves, 2012)

In 2011, Mount Street Academy (infant and nursery) became a national support school and the headteacher began a one-year deployment as an NLE (National Leader of Education) in a nearby voluntary-controlled primary school, which had previously been in an Ofsted category. A new leadership structure, consisting of an executive headteacher (Catherine Paine), Business Manager and two associate headteachers, one from each school, was designed to signify from the outset the mutually beneficial relationship between the schools.

Staff meetings and in-service training days at the recipient school began in earnest. The executive headteacher emphasised to staff that this partnership would provide opportunities for both schools to share best practice through joint staff meetings and that staff at Mount Street had plenty to learn from colleagues in the partner school. However, with the traditional format of weekly staff meetings and infrequent inset days, it became increasingly obvious that such a design was flawed, especially as it failed to avert the 'done to' approach that caused staff morale in the partner school to plummet further and gave every impression of a rescue mission, not a partnership.

A radically different solution was required: to unite teachers and teaching assistants in small, cross-school teams with a pedagogical focus, and to give staff from both schools a sense of journeying into new territory, genuinely learning from each other to discover what makes great learning for children. Thus were born IMPact teams: improving my practice through action (Grouped around a team leader often an outstanding teacher from one or other school, but crucially including a number of staff from the recipient school). A small group of teachers and teaching assistants began work on JPD. Team leaders meet every six weeks led by the associate head (an outstanding teacher) from the partner school. Teams reflect on their practice and crucially look at published research, which encourages them to push themselves to the next level. Then they lead their own team into action research. All staff aware that they are building something bigger and better than either school could achieve alone.

As a result of the partnership approach to improving practice, staff at the recipient school no longer feel demoralised. Next year, inset days will be replaced by 20 IMPact team twilight and bespoke training sessions. The challenge for Mount Street Academy, as a designated teaching school, is to explore how this JPD approach can work across the alliance.

## Appendix 7: The numbers speak for themselves (AITSL, 2015)

there are **7783** principals in Australia



**71%** of principals are **over 50**, reflecting an ageing demographic.



**50%** of current deputy principals **do not** intend to apply for a principal position in the next three years.



**35%** of Australian principals have had **no** school administration or principal training.



**3%** primary  
**4%** secondary

principals view the job as being **very attractive to potential applicants**.

The **average length of teaching experience** of principals, by country:

**27** YEARS  
AUSTRALIA



**21** YEARS  
OECD AVERAGE



**17** YEARS  
FINLAND



**14** YEARS  
SINGAPORE



of principals would choose the role again if given the chance.



Aspirant principals will need to be capable of performing these **managerial functions**:

- contracting and budgetary and finance processes
- building and technology infrastructure requirements
- understanding governance protocols and practices
- human resource procedures
- government regulatory requirements

less than **1 in 10** principals intended to be a school leader **when they started teaching**.

**1 in 3** principals had decided to seek out a leadership post **within their first few years** of becoming a teacher.

## Appendix 8: Leadership Development

### Singapore

The Singapore system systematically identifies and develops talented educators for leadership positions from within the school system. All educational leadership positions up to the level of Director-General Education are considered professional positions and are part of the teaching career structure. All promising teachers are put onto this career track, thereby developing a pipeline of school leaders.

Teachers with the potential to become principals are identified at an early stage and appointed to middle-leadership positions in schools, as subject or level heads or as heads of department. To better prepare them for their management responsibilities, they attend a fulltime four-month milestone program (Management and Leadership in Schools) at Singapore's National Institute for Education.

Educators considered ready for the next level of leadership appointment are interviewed for appointment as vice-principals. Vice-principals attend a six-month *Leaders in Education* program, which has an executive orientation, similar in scope and intensity to executive courses in business schools, but with a focus on education.

Since the 1980s, Singapore has paid particular attention to the professional development of principals and continues to evolve the support and apprenticeship they receive. Newly-appointed principals are paired with more experienced ones under a mentoring scheme started in 2007. They also receive 'CEO-style' development programs. Experienced principals are given sabbatical opportunities, and top principals can become Cluster Superintendents, as a first step to system leadership.

### Ontario, Canada

22/10/2015

Leadership Development: Ontario Leadership Strategy



#### Leadership Development: Ontario Leadership Strategy

##### Ontario Leadership Strategy

##### Three-year Timeline 2008-2011

###### Year 1: 2008-09

- Launched the strategy and the Premier's Leader-to-Leader
- Rolled out Mentoring for Newly Appointed School Leaders and Principal Performance Appraisal
- Held first session of the Principal Congress
- Continued meetings with the Minister's Principal Reference Group
- Continued tri-level collaboration through the Institute for Education Leadership
- Promoted the Leadership Framework and the Leadership Self-Review Tool to guide the development and support of leaders
- Disseminated succession planning research and tools to attract aspiring leaders
- Shared the Framework of effective practices on terms and conditions of employment (PDF, 50 KB) across the province
- Provided executive development supports for supervisory officers and directors of education
- Expanded field test of Mentoring for New System Leaders

###### Year 2: 2009-10

- Succession plans in place in every school board
- Develop and share case studies on effective school and board leadership
- Provide ongoing support for school and system leaders through strategy initiatives, boards, associations and the Institute for Education Leadership

###### Year 3: 2010-11

- Leadership development strategy in place in every school board
- Provide ongoing support for school and system leaders through strategy initiatives, boards, associations and the Institute for Education Leadership.





# Critical Skills for Workforce 2020

The Institute for the Future teamed up with the University of Phoenix Research Institute to identify the following skills, in light of several current economic drivers, that will be needed to thrive in the workplace in the year 2020.

- 1 Sense-making:** Determining the deeper meaning or significance of what's being expressed
- 2 Social intelligence:** Connecting to others and sensing and stimulating reactions
- 3 Novel and adaptive thinking:** Thinking and coming up with creative solutions
- 4 Cross-cultural competency:** Operating in different cultural settings
- 5 Computational thinking:** Translating vast amounts of data into abstract concepts and understanding data-based reasoning
- 6 New media literacy:** Leveraging, critically assessing, and developing content using new media forms
- 7 Transdisciplinarity:** Understanding concepts across multiple disciplines
- 8 Design mindset:** Representing and developing tasks and work processes for desired outcomes
- 9 Cognitive load management:** Discriminating and filtering for important information and mastering new tools to manage it
- 10 Virtual collaboration:** Working productively, driving engagement, and being present as a member of a virtual team

<http://www.iff.org/our-work/global-landscape/work/future-work-skills-2020/>

## References

- AITSL (2015) Preparing future leaders – Effective preparation for aspiring school principals, Australian Institute for Teaching and School Leadership
- Andreas, S. (Ed.). (2012). *International Summit on the Teaching Profession Preparing Teachers and Developing School Leaders for the 21st Century Lessons from around the World: Lessons from around the World*. OECD Publishing
- Auguste, B. G., Kihn, P., & Miller, M. (2010). *Closing the talent gap: Attracting and retaining top-third graduates to careers in teaching: An international and market research-based perspective*. McKinsey.
- AUSTRALIA'S JOBS FUTURE (2015). The rise of Asia and the services opportunity, Published in Australia by ANZ Banking Group, PwC Australia, and Asialink Business
- Barr, A., Gillard, J., Firth, V., Scrymgour, M., Welford, R., Lomax-Smith, J., ... & Constable, E. (2008). *Melbourne Declaration on Educational Goals for Young Australians*. Ministerial Council on Education, Employment, Training and Youth Affairs. PO Box 202 Carlton South Victoria, 3053, Australia.
- Barber, M., & Mourshed, M. (2007). *How the world's best-performing schools systems come out on top*. McKinsey & Company.
- 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 and Company*.
- Bunt, L., & Harris, M. (2010). *Mass Localism: A Way to Help Small Communities Solve Big Social Challenges: Discussion Paper*. NESTA.
- Connor, R., & Mackenzie-Smith, P. (2003). The Leadership Jigsaw—Finding the Missing Piece. *Business Strategy Review*, 14(1), 59-66.
- Davies, A., Fidler, D., and Gorbis, M. (2011). Future work skills 2020 (SR-1382A). *Institute for the Future for Apollo Research Institute*, Palo Alto, California
- Doering, C. (2015). Obama plan limits standardized testing to no more than 2% of class time. USA Today. Retrieved from <http://www.usatoday.com/story/news/2015/10/24/obama-schools-test/74536886/> 26 October 2015.
- Fullan, M. (2009). *Motion leadership: The skinny on becoming change savvy*. Corwin Press.
- Fullan, M. (2011). *Change leader: Learning to do what matters most*. John Wiley & Sons.
- Fullan, M. (2011b). Choosing the wrong drivers for whole school reform. In *Seminar Series* (Vol. 204). Gonski, 2011: Department of Education, Employment and Workplace Relations, & Gonski, D. M. (2011). *Review of funding for schooling: final report*. Australia. Department of Education, Employment and Workplace Relations. Review of Funding for Schooling.
- Gordon, G (2013) School Leadership linked to engagement and student achievement, Gallup

- Hargreaves, D H, 2010, *Creating a self-improving school system*, Nottingham, National College for School Leadership
- Hargreaves, D H, 2011, *Leading a self-improving school system*, Nottingham, National College for School Leadership
- Hargreaves, D. H. (2012). A self-improving system in international context, *Nottingham, United Kingdom: National College for School Leadership*.
- Hargreaves, D. H. (2012b). A self-improving school system: towards maturity, Nottingham, National College for School Leadership
- Hargreaves, A., & Fullan, M. (2013). The power of professional capital. In *Learning Forwards Annual Conference* <http://store.learningforward.org> (Vol. 34, pp. 36-39).
- Harris, A. (2012). Leading system-wide improvement. *International journal of leadership in education*, 15(3), 395-401.
- Hattie, J. (2003). *Teachers make a difference: what is the research evidence?* (p. 4). Melbourne: Australian Council for Educational Research.
- Hopkins, D. (2013). Exploding the myths of school reform. *School Leadership & Management*, 33(4), 304-321.
- In Conversation (2012) 21<sup>st</sup> Century Leadership: Looking Forward An Interview with Michael Fullan and Ken Leithwood, 4(1).
- Lamb, S., & Teese, R. (Eds.). (2012). *Development of a School Funding Model for Western Australian Public Schools: Report on Funding and Options*. Department of Education, Western Australia.
- Leadbeater, C., & Wong, A. (2010). Learning from the extremes.
- Leithwood, K., Fullan, M., & Watson, N. (2003). The schools we need: A new blueprint for Ontario.
- Leithwood, K. (2012). The Ontario leadership framework 2012. *The Institute for Educational Leadership*. Retrieved from [http://iel.immix.ca/storage/6/1345688978/Final\\_Research\\_Report\\_-\\_EN.pdf](http://iel.immix.ca/storage/6/1345688978/Final_Research_Report_-_EN.pdf).
- Levin, B., & Fullan, M. (2008). Learning about system renewal. *Educational management administration & leadership*, 36(2), 289-303.
- Mourshed, M., Chijioke, C., & Barber, M. (2011). How the worlds most improved school systems keep getting better. *Educational Studies*, (1), 7-25.
- OECD, P. (2010). results: What makes a school successful. *Resources, policies and practices*, 4, 50.
- OECD, P. (2011). PISA 2009 results: Students on line: Digital technologies and performance (Vol. VI).
- Riley, P. (2014). Australian Principal Occupational Health, Safety and Wellbeing Survey: 2011-2014 data.



Rogers, A. (2014). PISA, Power and Policy: the emergence of global educational governance. *International Review of Education*, 60(4), 591-596.

Sahlberg, P. (2006). Education reform for raising economic competitiveness. *Journal of Educational Change*, 7(4), 259-287.

Sahlberg, P. (2009). lifelong learning. *Lifelong learning in Europe*, 1, 53.

Sahlberg, P. (2012). A Model Lesson: Finland Shows Us What Equal Opportunity Looks Like. *American Educator*, 36(1), 20.

Sahlberg, P. (2012). Quality and Equity in Finnish Schools. *School Administrator*, 69(8), 27-30.

Spillane, J.P. and Coldren, A.F. (2011), *Diagnosis and Design for School Improvement*, Teachers College Press, New York, NY

Statutory guidance on the roles and responsibilities of the Director of Children's Services and the Lead Member for Children's Services (2013) Department of Education, England.

Workforce, A. (2013). *Future Focus: 2013 National Workforce Development Strategy*. AWP.