

Australian Education Review

The Leadership Challenge: Improving learning in schools

Bill Mulford

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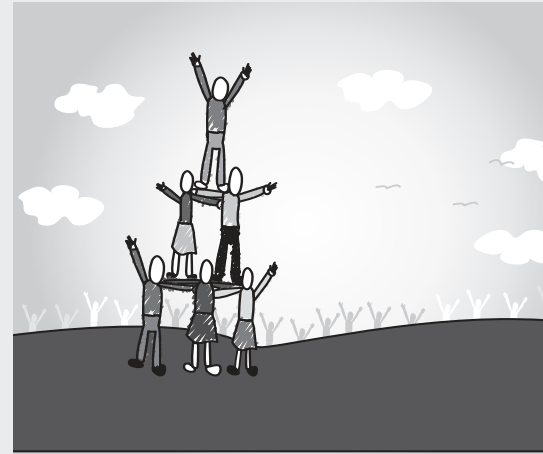
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Foreword



Without doubt this is an important review which Professor Bill Mulford has produced. It is insightful, stimulating and should generate a lot of reflection. In this foreword I want to share not only what I think about the review, but what it prompted me to consider. As John Berger, the art critic once said: 'a line in a drawing is not so much interesting for what it describes, as for what it makes us go on to see'. The same is true of Bill Mulford's review. It is a valuable record of some of the key issues facing school leaders today, but it is equally significant for what it makes us go on to think about and consider.

One of the merits of this review is its scope. It takes a relatively wide perspective and offers us a broad sweep of the issues facing school leaders today and tomorrow. Expressed another way, it is refreshing for its lack of narrowness. In a world saturated by information and knowledge, many respond by dealing with issues in a singular fashion. Indeed, there is rather a lot of 'single issue' lobbying and thinking today. Bill Mulford implies this with his critique of adjectival leadership since what the leadership adjectives do is offer a monocular view of leadership, by taking just one slice of what leaders do and implying that this is the whole of leadership.

By contrast, Mulford offers a relatively broad sweep of the issues which face school leaders today and tomorrow and he is right to attempt this. Some will criticise his choice of issues; others will no doubt be disappointed that their favourites do not figure here or not with the prominence they believe their concerns warrant. It is right that we debate the breadth of any one writer's purview, but researchers and academics must not forget that whilst they can focus on some things, without trying to investigate everything all at once, school leaders themselves have to face, every day, the full range of issues that together create the gravitational pull of their schools and communities. In this review Bill Mulford reminds us of this and avoids particularity.

Leadership in practice

It is also important to recognise, as this review does, that leadership is all about human behaviour. Too much leadership writing is purely conceptual. Of course, there is nothing inherently wrong with conceptual thinking, it is the mainstay of analysis, but the important thing to keep in view is that when we consider school leadership we are actually concerned with leadership practice – with how it is exercised and transacted. 'Leadership' is both a noun and a verb, although there may be too much of the former and too little of the latter in much of the writing about it. If we think about what it means to lead then often, in my experience, the discourse changes. Throughout this review Mulford demonstrates that leadership is about behaviour, action and practice.

School leaders take on their roles because they want to make a difference to children's and young person's lives and learning. Mulford rightly implies that leadership is not an end in itself, rather, it is a means to enabling children and young people to learn, achieve and develop. From this perspective his concern about how schools are held accountable is entirely understandable. He repeatedly calls for a 'broadening of what counts for good schooling' and wants to see a wider range of measures adopted to encompass excellence and equity, cognitive and non-cognitive and personal and social skills. Leaders who make a difference to the pupils they serve invariably attend to all of these skill areas, but their schools are only evaluated on a narrow set of cognitive learning outcome measures. Mulford wants this to change. He is right to call for such change, since there is good evidence that children and young people learn better when they experience a broad curriculum as against one which is limited by the 'backwash' effect of narrow measures. The 'backwash' is created because organisations tend to value what they measure rather than measure what they value. This is a well-known trend in accountability driven systems, although it is by no means automatic and we should strive to avoid such determinism.

However, finding a better balance in how schools are evaluated and what they are held accountable for is not straight forward. One reason for this is that developing a range of accurate/ effective measures has eluded many school systems. Another reason is that the argument for more evaluation is predicated on notions of breadth and balance, neither of which is as straightforward as they appear. For example, balance is usually held to be a 'once and for all' settlement, when it is more likely to be dynamic, as societal and political values change over time. As for breadth, this is always contested as subject specialists and individual interest groups' fight for time and place in the curriculum. The case against how we hold schools accountable today is clear and cogently argued; the case for what needs to take its place is more cloudy and uncertain.

Emerging models of leadership

In Section 4 Mulford concentrates on leaders and here he focuses on three of the 'big' ideas which have occupied leadership thinking and development for some time – instructional leadership, transformational leadership and distributed leadership. These are key concepts and it is helpful to have them set out, since separately and together they show that leadership is multi-faceted. Mulford's antipathy to the 'one size fits all approach' to leadership is most prominent in this section. As the discussion develops he covers some important topics including:

- how today we see leadership as more nuanced than ever before
- that leadership succession and retention are issues we must tackle or face losing many able principals without a strategy for replacing them
- that there are models of school leadership emerging which suggest there will be more diverse approaches to school organisation and leadership than previously.

The second and third of these three points are consistent with work at the National College for School Leadership (NCSL) in England. Our work on leadership succession is showing that it is a national challenge which needs all schools to respond to it. Whereas in the 20th century we could rely on just a limited number of schools producing enough individuals to aspire to principalship, in the 21st century, to meet both the challenge of succession and the scale of distributed leadership, all schools must play their part in developing tomorrow's leaders today. NCSL's evidence is showing we need more systematic and explicit forms of professional and talent management than ever before.

As for the models of leadership now emerging across the system, these are exciting developments. They show that many schools are prepared to experiment, and be innovative. And in England we are thinking of these not just as ‘interesting’ forms but as potential examples of next practice. They may well prove to be the shape of things to come.

In Section 4 Bill Mulford does two other things. First, he offers a stern critique of the quality of the research evidence base. He is critical and challenging in what he says and this is a sub-section which all involved in research should dwell upon and consider. Second, in summarising the lessons from the research he has been involved with and directed he shows how he has contributed to our knowledge of school leadership. One of the ways he has added to our understanding is through his critical path analyses. His work was amongst the first to try to untangle the ways in which leaders make a difference. The diagrams presented on this are not only distinctive, they also show Mulford’s distinguished contribution to our thinking about school leadership.

The pathways of leadership influence

Measuring leadership impact and how leaders make a difference is one of the biggest challenges facing the field today. If the belief in leadership is currently high then all involved in the study and practice of leadership should prepare to explain how they know leadership is so influential. At the NCSL we have been working on this issue for some time. We have been guided by Mulford’s thinking and work, but so too that of others. In England our government has commissioned, in partnership with NCSL, a team of researchers to address this topic. We know that leaders’ effects tend to be indirect rather than direct because they work with and through their staff, in particular teachers. Teachers have the greatest effect on pupils’ learning, followed by leadership. Not only do we need to know the pathways by which leaders’ influence others, but also how they influence the quality of teaching. These are not easy matters to unravel – as Mulford’s work here demonstrates. But of all the school leadership issues this is perhaps the most important issue we face and the one the research community must address.

A Golden age?

The review begins with the claim that this is the ‘golden age’ of school leadership. If this grabs our attention it also raises a question – for whom is it ‘golden’? Principals and other school leaders feel under the spotlight. Finding the next generation of leaders to succeed those soon to retire is proving a challenge, not only because of the demographics, but because there are some who do not like the look of the leadership pressures. If today is a golden age, is the future going to be a dark (or darker) age?

What is golden about the current period is that we now know so much more about school leadership than we did. This review demonstrates that and contributes to pulling together a lot of valuable material. As a collation of what we know this review is significant and successful. Moreover, what we know is that leadership matters and so too does the quality of teaching, and parental engagement in their children’s learning. Indeed, in order of their relative effect size, parental engagement is the most important, followed by quality of teaching and then leadership. However, this is not to push leadership into third place and only award it a bronze medal. For me, if these are the top three things that matter for a child’s learning, then only one of them can bring them all together, in harmony, and that is leadership.

The new work of leaders is to ensure that schools provide high quality teaching, that parents are engaged with the school and their child’s learning and progress and that, at all levels, there is excellent leadership. If leaders can enable such a synergy between these three factors then children, their parents and teachers will together create a golden age for learning and schooling.

Further Research??

I want to end with the idea that leadership needs to be exercised at all levels. If we seriously think that it is leadership which matters, rather than the leader, and that leadership is distributed and shared rather than centred on one person then, as this review implies, we must encourage not only a team-based approach to leadership, as we can see in many schools today, but also a greater appreciation of what team-based leadership adds up to. What matters in schools is what the whole team of leaders do. We should now be asking what is the sum total of leadership in any given school and how might this be enhanced? This is a new question as we move away from heroic constructs of leadership. It is also one of the questions this review highlighted for me and I am sure it will raise similarly important questions for those who read it.

Professor Geoff Southworth OBE is Deputy CEO and Strategic Director of Research and Policy at the National College for School Leadership (NCSL) in England. He has been a school teacher, principal and, as an academic, worked at the Universities of Cambridge and Reading. His role at NCSL brings together his experience of school leadership practice, research and policy-making.

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Three interrelated elements of leadership

1

Internationally, this is the 'golden age' of school leadership (Anderson et al., 2007; Day & Leithwood (Eds.), 2007; Mulford, McKenzie & Anderson, 2007 ACER Research Conference paper).

Reformers widely agree that leadership is central to the degree of success with which their favourite solutions actually work in schools ... Many parents have come to believe that unless they have the ear of the principal, concerns about their child's schooling will fall through the cracks. Members of the business community, long enamoured by the 'romance of leadership', assume that the shortcomings of schools are coincident with shortcomings in their leadership. And the research community has, at long last, produced a sufficient body of empirical evidence to persuade even the most sceptical that school leadership matters ... Nothing aborts an ambitious school improvement effort, we now know, faster than a change in school leadership.

Governments and foundations around the world are devoting unparalleled resources to the development of aspiring school leaders, as well as those already in the role. While England's National College for School Leadership is the most visible example of this investment, virtually all developed countries are in the midst of unprecedented, if less dramatic, efforts to improve the quality of existing programs and to launch fresh initiatives in leadership ... it is no coincidence that these efforts are taking place in the face of tremendous pressure for public schools to be more publicly accountable.

(Day & Leithwood (Eds.), 2007, p. 1)

The press surrounding advances in science and technology, changes in demography – including the nature of work – in globalisation, and in the environmental pressures of climate change has seen a national political response that seeks greater and greater control. Similar pressures in education have seen:

an alignment in the position of those with neo-liberal, neo-conservative and new right ideologies about the job to be done in education. Their aligned position, with minor variations, is now largely adhered to by political parties of all stripes. It is a position, sometimes called 'new managerialism' ... which embraces managerial efficiency and effectiveness as a key lever for reforming public institutions.

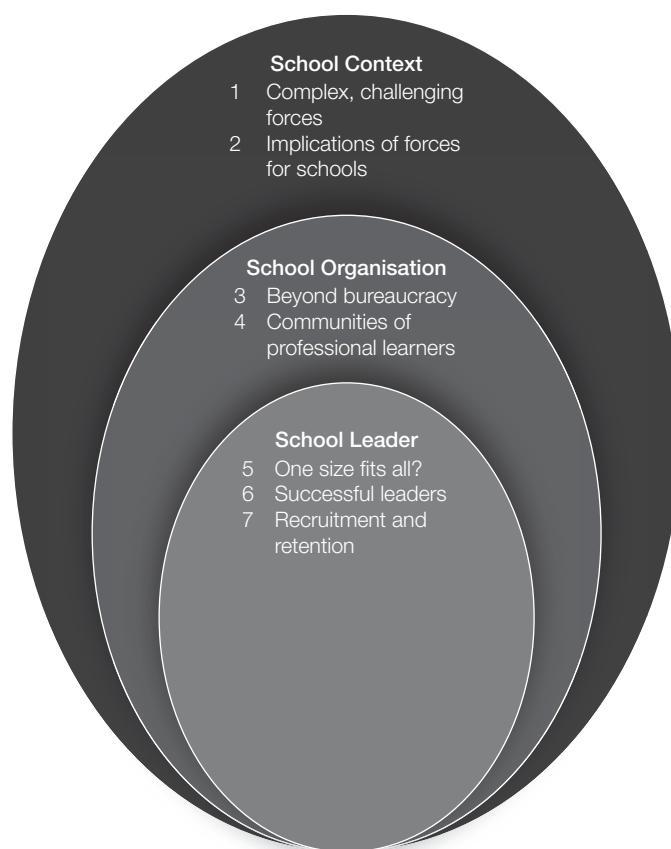
(Day & Leithwood (Eds.), 2007, p. 1)

This position has created a working context for school leaders which is very different from the context in which many of them ‘grew up’ professionally. So, given all the above, efforts to better understand the consequences of the working context for the organisation of schools and the work of school leaders are ‘quite crucial’ (Day & Leithwood (Eds.), 2007, p. 2).

This review aims to demonstrate that a great deal of a school’s success depends on which areas of school life the educational leader chooses to spend time and attention on. Because a single input by a leader can have multiple outcomes, a leader needs to be able to see and act on the whole, as well as on the individual elements and the relationships between them (National College for School Leadership (NCSL), 2005c, p. 7). To be successful on all these fronts is the biggest current leadership challenge.

In order to help with an understanding of the elements and their interrelationships, this review is organised into three main sections. The sections of the review explain the nested relationships shown in Figure 1. Understanding Section 1 is a prerequisite for understanding Section 2, which, in turn, is a prerequisite for understanding Section 3. Figure 1 represents the three key elements of school leadership by its nested ‘Russian dolls’ pictorialisation, revealing the interrelationships between the elements as clearly embedded within each other. These three elements represent the three key challenges and are referenced throughout the text.

Figure 1: The three interrelated elements of leadership



The ACER Research Conference ‘The Leadership Challenge: Improving learning in schools’, held in Melbourne in August 2007, was significant in that it identified leadership as an area of interest to school leaders requiring explicit policy development at both a school and system level. This paper is not a report on the conference, but a review paper in which the author will draw on many contemporary sources within the leadership research literature as well as the conference papers (which are listed separately at the end of the review text), to address and provide a focus for the issues raised at the conference.

The review goes through the three nested elements of Figure 1, from the outside into the core. Section 2 focuses on the school context, with reference to the forces currently pressing on schools and the implications of these forces for schools and their leaders. Section 3 examines school organisations with a focus on evolving models that move us beyond the outmoded bureaucratic model to communities of professional learners. Section 4 targets the school leader, first questioning whether one type, or 'size', of leadership fits all and subsequently what it means to be a successful leader. Section 4 also examines the following: the issue of leader recruitment and retention, including succession planning; leadership in pre-retirement; leadership in small schools and schools in high-poverty communities; leader autonomy and responsibility; leader professional learning and standards, and new shared models of leadership. Most of the explicit references to the conference papers occur in Section 4. Section 5 brings together the key issues and challenges from the earlier sections and makes a number of policy recommendations.

2

Context and implications

Australian schools have always been seen as central to the project of nation building. However, since the start of the 21st century, the purposes of Australian schools have been placed even more directly under the microscope due to the impact of a number of trends, influences or 'forces', such as technological change, the increasing diversity of the Australian population, the growth of a knowledge-based society and the globalisation of the economy and cultures.

A complex, changing, challenging landscape

Taken together, these forces are challenging the very nature of schooling (Australian Council of Deans of Education (ACDE), 2004). They are causing educational organisations and systems around the world to broaden and personalise curricula (e.g., DfES, 2005; Leadbeater, 2004a, 2004b, & 2005) and to rethink school structures (Marginson, 1997; OECD, 2001a; Hartley, 1997; Levin & Riffel, 1997). In Australia there has been a flurry of activity designed to broaden the curricula by foregrounding generic skills and capabilities (e.g., Government of South Australia, 2006; Tasmanian Department of Education, 2005). And yet this activity is proceeding in the absence of an ongoing conversation that joins together this context, its implications for the organisation of schools and the implications of both for school leaders.

School leaders should be part of this conversation – and to be so engaged is their first challenge. While none of us can know what the future holds, we can work to shape that future, to make sure that, as far as possible, what happens is what we want to have happen. Occasionally school leaders need to position themselves so that they are able to see 'the bigger picture'; to detach themselves from the hurly-burly of the moment, gain a more distant view of issues that are close by and pressing (Heifetz & Linsky, 2002). But care is needed. When lost on a highway, a road map is very useful; but when one is lost in a world where the topography, such as that provided by the education systems and structures that serve it, is constantly changing, a road map is of little help. A simple compass, something that indicates the general direction to be taken, is helpful, however. Section 2 aims to provide just such a compass. It identifies and examines some cardinal points, or forces relevant to the terrain, and analyses implications of each for schools and their leaders.

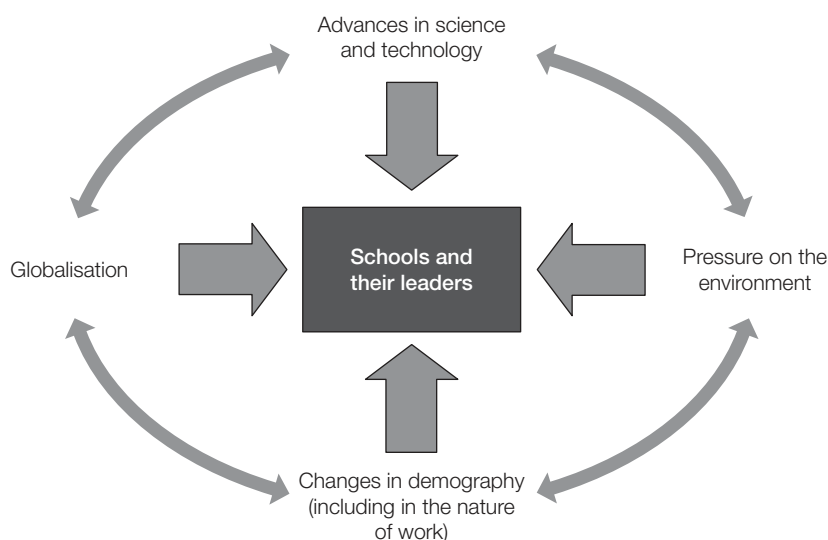
The forces

What are the forces that will shape the world in which we will live, work and provide education? They are forces such as technological innovation, globalisation, mass communication, mass

culture and rising consumer expectations. The speed with which all of these changes are taking place is seen by some (Sturgess, 2006) as inevitable. The question is not how they might be avoided, but what we must do to adapt. What are the chances that all or some combination of these forces will converge in ways that create a future fundamentally different from our past experiences and current realities? What will be the effect of these forces on schools and their leaders?

In an attempt to introduce some structure to the plethora of literature in the area, this section will first examine two ‘determining’ forces (the ‘north’ and ‘south’ points of the compass as represented in Figure 2: that is the advances in science and technology and changes in demography (including change in the nature of work). These two forces are followed by two others (the ‘east’ and ‘west’ points): that is, globalisation and pressures on the environment. Although they are examined independently of each other, it is clear that these forces are interrelated. For example, advances in contraception have led to a lowering of fertility rates, and advances in medicine have led to increased life expectancy; both have had a major impact on demographic trends. Faster and cheaper communication and travel have impacted on globalisation. More people and the concomitant increased demand for fossil fuels has contributed to global warming, which, in turn, has had a major impact on the world’s environment.

Figure 2: The contextual forces



Advances in science and technology

Throughout history, technological innovations have redistributed power, enabling a tribe, a people or a nation to vie for and gain dominance over other groups. Fire, ferrous metal, farming and firearms are all historic discoveries that transformed nations and facilitated the transference of power. Modern examples include internal combustion engines, interchangeable parts, electrical energy and electronic components. Ever more efficient transport and communications, greater automation, the use of computers and even the wide-scale availability of medical discoveries, continue to impact massively on the world around us (Mulford, 1994).

The links between scientific and technological change and our world view have become increasingly clear. Automation and computers have facilitated data storage and retrieval at a very fast pace. Communication and transport systems allow us to be less time or place bound. Ease of travel facilitates greater immigration (including illegal). There are shifts in the demography of populations as a result of the combined effects of advances in, and growing acceptance of, contraceptives, work opportunities (rural/urban) and longevity. Education, scientific research on the brain has led to educational research into learning styles indicates a need for a much more varied approach to teaching than the standard teacher-focused format (Harris, 2006).

The pace of technological change has and will continue to increase exponentially. For example, increases in bandwidth will lead to a rise in Internet-based services. Access to video and television (Gilbert, 2006) will increase. Costs associated with hardware, software and data storage will decrease, resulting in the opportunity for near-universal access to personal, multi-functional devices, smarter software integrated with global standards and increasing amounts of information being available to search online (using everything from Google and Yahoo to the more recent developments of Wikipedia, Blogger, YouTube, MySpace, SecondLife, and del.icio.us). Wikipedia's founder, Jimmy Wales, has defined Wikipedia as 'a world in which every single person ... is given free access to the sum of all human knowledge.' (Harris, 2006, p. 10).

These developments mean there will be far greater access to, and reliance on, technology as a means of conducting daily interactions and transactions, including in schools (Margo et al., 2006). Beare demonstrates the point:

A powerful indicator of the new wave of change is the hand-held mobile telephone. It is now an all-purpose device with multiple functions, and it is revolutionising thinking and interaction patterns across the world. It is soon to become a powerful teaching and educational device which will outdo, in its significance, what the computer has been for the previous generation.

(Beare, 2007, p. 38)

How might these changes play out for and in education?

What will be some of the results of these advances in science and technology for school leaders? People will expect and demand immediate responses, customised solutions and access to information. Technology will enable customised learning to occur any time, any place. It expands the options and choices individuals and families have in all aspects of their lives, including education. Information and digital technologies will increasingly move the control of learning away from educational institutions and towards individual students (McREL, 2005). There will be less need to systematically acquire 'authorised' knowledge from, and sequenced and packaged by, experts. Knowledge/evidence will be increasingly constructed socially and in a non-linear fashion.

The mediated world outside the classroom may, in fact, be changing faster and have a richer interface than the world inside the classroom.

When every child [in United States of America] over age 8 is presented with a fire hose of information emanating from 350 channels of television, an infinite internet of exploding websites and real-time, up-to-date information via cell phone, how should children be taught?

(Harris, 2006, pp. 2-3)

In such circumstances, Beare suggests that generally accepted views of how classes and classrooms operate will be superseded:

The days of the one-best-way solution, the one-best-method, are gone. Diversity is with us ... the best educators will have portfolio careers ... many will not want to be tied necessarily to one school, to functions which they think other people could perform better than they could, or which do not make direct use of their developed expertise ... The assumption ... that it is appropriate to cluster students by age and teach them a lot of pre-determined, content-rich, age-related material, that the curriculum and knowledge are stable notions ... will have been superseded.

(Beare, 2007, p. 39)

Advances in science and technology have resulted in pressures on both individuals and their organisations. These pressures have particular implications for schools and their leaders. Answers to several key questions need to be sought.

While the beauty of the Internet is that it connects people, will it remain free and publicly accessible? Will the 'digital divide' persist, thus ensuring the underprivileged in our society continue to miss out (the issue of equity)? Or will the 'digital divide' dissolve, ensuring underprivileged societies no longer miss out?

Attitudes and skills need to be taught to assist people to make wise choices in handling changes. Hyman (2005) provides an increasingly common form of dysfunctionality in schools:

The latest craze ... is hitting someone or abusing them and then using the new video facility on expensive mobile phones to record the student's reactions, and then texting the video images to a friend in another class as a trophy of the dastardly deed.

(Hyman, 2005, p. 166)

Anonymous information, like that contained within Wikipedia, is faux-authoritative and anti-contextual. The risk is in the aggregator (YouTube, Wikipedia, and search engines such as Google) becoming more important than the aggregated information, which lacks verification. There is also a blurring of boundaries between reality and unreality; for example, increasingly sophisticated computer games, reality TV and talk shows blur the distinction between entertainment and real life. Critical skills and attitudes and knowledge of the appropriate level of credence to be given to the increasing waves of available information are required here.

With the move to greater individualisation, fanned by technological advances such as mobile phones and MP3 players, will communities become more fragmented? For example, what will the impact of advances in technology be on our sense of security – will we feel more secure or more vulnerable to hackers, criminals and terrorists? An elementary level of trust is necessary for community. Where can such trust be established, if not in our homes and schools? How can schools act to support the development of trust?

Changes in demography and changes in the nature of work

Changes in demography, including changes in the nature of work, are leading to an increase in the proportion of elderly and urban dwellers in the population. Developing country populations are increasing at a much more dramatic rate than developed country populations. Commentators have argued that the evolution of a massively increased urban/suburban landscape and populations in developing and developed countries has promoted a growing separation between people by income, class, and, to a lesser extent, race (Harris, 2006). There will be a more ethnically and socially diverse society and a different generation will move into positions of authority and power. Worldwide, the change of generation will further exacerbate changes in the nature of work.

The Australian Government's Department of Treasury Intergenerational Report (Costello, 2007) outlines the challenges Australia faces as our population inevitably and irreversibly ages. By 2047, the population will reach 28.5 million and 25 per cent will be aged 65 and over, and those aged 15 to 64 are projected to represent less than 60 per cent of the population, down 8 per cent from 2007. The proportion of the population of working age will therefore decrease. After 2010, the dependence ratio – that is the ratio of children and older people to people of working age – is expected to increase even more rapidly, as baby boomers reach aged pension age.

The Intergenerational Report (Costello, 2007) highlighted the need for:

- developing policies which make it easier for families to have children, such as workplace flexibility and support for families
- a better skilled and educated population that can adapt to new circumstances and opportunities

- increased engagement in the workforce of those who are marginalised, to increase participation and improve their self-esteem.

For Australia, these demographic changes, when combined with the increasing ease with which people can move about the globe and Australia's broadening immigration policies are also likely to result in:

- increased diversity in culture, language and ability
- greater ethnic diversity, with further concentrations of minority ethnic groups, including Indigenous, in particular geographic areas (Costello, 2007).

Change in the nature of work has also become pervasive (Rankin, 2005), especially with the marketplace becoming the arbiter. The move to the service and information sectors as trade in manufactures is following agricultural commodities down the path of ever-reducing relative importance. It could be suggested that Australia will not succeed in the 21st century by focusing largely on exported goods, when more than 50 per cent of world trade is in services (including tourism and education). Added to this is the fact that the majority of Australia's exports will be to the most populous and fastest growing region of the world, the Asia-Pacific region. This is a region where some countries have leap-frogged right over the industrial period and are now operating in an information economy, where the most important resources do not come from the ground but from people. In these circumstances, the ability to work well with others, including those from other cultures, is the fundamental competency.

How might these changes play out for and in education?

Some of the implications for schools, which derive directly from these demographic changes, are as follows:

- High levels of retirement among teachers and school leaders is leading to shortages in supply.
- The teaching profession, on average, is likely to be younger than currently, less experienced and not representative of the broad ethnic composition of the population. In fact, the demographics of the current pool of teachers compared to the pool of students indicate the potential for cultural disconnection. Also, career advancement processes are likely to lead to the best and most experienced teachers migrating to the most privileged environments (Harris, 2006). With greater globalisation this migration could also increasingly be interstate and/or overseas.
- The concentrations of minority groups in particular areas and schools is making it more difficult to ensure respect for the worth and dignity of individuals and their cultural traditions.
- Pressures exist to educate for a better skilled, engaged, adaptable and willing to relocate workforce.

The demographic changes to the population outlined above will mean that a different generation, those born from the 1980s onwards, the New Millennial Learner (NML), will populate our schools – as students and, increasingly, as staff. Linking demographic and technical forces, the Millennials are the first generation to grow up surrounded by digital media, and much of their activity involving peer-to-peer communication and knowledge management is mediated by these technologies (Howe & Strauss, 2000). Also called 'Homo Zappiens' (Veen, 2003), they are skilled at multitasking and controlling simultaneously different sources of digital information in a world where ubiquitous and immediate connections (for example, mobile phones and texting) are taken for granted. The changing ways that members of this generation can learn, communicate and entertain themselves may be the primary reasons behind the growing popularity of socially oriented technologies such as blogs, wikis, tagging and instant messaging. It is the first generation since the invention of television to have reduced its time watching television, due to the attention it devotes to other digital media, particularly the Internet. Among 13- to 17-year-olds in the United States of America, time watching television averages 3.1 hours per day compared with 3.5 hours per day using digital media (Pedro, 2006).

New Millennial Learner (NML) consumption of digital media is less controllable by parents or teachers than other older forms of media. It reinforces physical isolation and downgrades text in favour of multimedia, although writing, texting and talking are becoming increasingly important. As the OECD's project in the area has argued, there are clear implications here for traditional teaching and learning activities in schools with a need to move to more active individual participation (Pedro, 2006). New sets of personal and social values and attitudes may also be linked to these emerging practices. By questioning the prevailing design of the knowledge society and, indeed, by already putting into practice an alternative one, it might be, as Pedro (2006) points out:

that NMLs are currently experiencing what it is to live in a networked society without necessarily realising the potential of a true knowledge society.

(Pedro, 2006, p. 15)

As well, NMLs may be less willing to subscribe to the notion held by earlier generations that citizenship is a matter of duty and obligation (Bennett, 2007). NMLs favour loose networks of community action to address issues, including the use of interactive information technologies such as blogging, gaming and MySpace (Bennett, 2007). This situation raises a challenge for schools as they seek to achieve their purposes. As an OECD expert in the area points out, will schools allow NMLs:

to more fully explore, experience and expand democracy, or will they continue to force them to try and fit into an earlier model that is ill suited to the networked societies of the digital age?

(Bennett, 2007, p. 8)

The demographic changes to the population will also mean that a different generation, by many accounts those born between 1961 and 1981, or 'Generation X', will move into the workforce positions of power and authority. Generation X is seen to be more practical, sceptical and non-institutional than previous generations (McREL, 2005).

Research on the new generation of teachers who are entering the workforce in the 21st century by Moore Johnson (2004) identified key differences between them and their predecessors. Moore Johnson found that, in comparison with previous generations of teachers the Generation X teachers are less accepting of top-down hierarchy and fixed channels of communication; less respectful of conventional organisations; generally more entrepreneurial than their predecessors; want a more varied experience, including outside the classroom; less likely to want to work alone; seek more frequent feedback about their performance; and are less intimidated by distinguishing themselves or taking charge and, more likely to expect (differentiated) salaries to reflect, in some fair way, their growth and success as teachers. It was also found that if systems and schools are not responsive to their talents and needs (for variety, responsibility and influence), they are likely to leave their school and the profession without concern.

A new work mode for professional educators is likely to involve greater mixing and matching of skills and the taking on of a set of projects or assignments, or a 'portfolio career' (Beare, 2007). In this situation the disposition and capacity to be flexible and continually learn becomes crucial. Education will become truly lifelong and 'lifewide'.

As with advances in technology, several key questions need to be answered:

- How can we ensure a better skilled, flexible, adaptable population, especially in a digital age?
- How can we ensure increased engagement of the marginalised? It is worrying, for example, that deeper analysis of the first round of PISA (Programme for International Student Assessment) revealed that disparities among students in reading, mathematical and science literacy were wider in Australia than in many other nations, favouring girls over

boys, urban over rural, high socioeconomic over low socioeconomic, and non-Indigenous over Indigenous (Lokan, Greenwood & Creswell, 2001).

- How can we engender respect for the worth and dignity of individuals and their cultural traditions? For example, how can we understand and live harmoniously with ideological and religious differences? The 'war on terror' has not only changed the way people travel but also the way some people of the world look at, and treat, people who look or act differently.
- How can we ensure the teaching force is representative of the population, especially from and in disadvantaged communities?
- How can we best develop attitudes and skills that will enable people to work in less hierarchical workplaces, to operate well with others, including in the technological networks of the digital age, and to be flexible and continually learning?
- It is easier to access informed judgements now than at any time in human history, but without the appropriate attitude, energy and ability to go out and explore, present-day students and teachers will not be successful. Will employers in education seek those who are interested in constantly wanting to absorb, make judgements about, and wisely use new knowledge?

Globalisation

The world changes and Australia changes with it. Ideas about what exists elsewhere, what is possible, what is right and wrong, and about who does what to whom are no longer restricted to a geographic locality or a narrowly defined region. A global community is being constructed electronically and the availability of rapid and inexpensive transportation is reinforcing this condition on a personal basis. Increasingly there is nowhere to hide. Drinking cappuccino and Perrier water, eating sushi, or listening to American or British rock on an iPod while driving the Toyota over to McDonald's dressed in our known-brand jeans are increasingly common worldwide activities. We are enthusiastically travelling the world and indulging ourselves in international food, music and fashion.

As the global influence of certain countries increases, issues facing these countries will also be issues for all, including for Australians and their schools. For example, India is the world's youngest country with 50 per cent of its people under the age of 25; by 2015 it will have 550 million teenagers. But India currently has 40 per cent of the world's poor, including a third of the world's malnourished children. It has the world's largest population of people with HIV/AIDS (more than 5.7 million). It has mass unemployment from the high proportion of its population who were engaged in now redundant rural farming practices. It has a severe water crisis. With 17 per cent of the world's population, India has only 4 per cent of the world's fresh water. Global warming is shrinking glaciers in the Himalayas, placing this water and the rainfall patterns on which agriculture depends at risk (Kamdar, 2007). Global citizenship will mean that those in schools will need to be increasingly aware of and part of the solution to such issues.

Globalisation has resulted in increased political intensification and simplification. Some suggest this intensification and simplification is a desperate attempt to retain control. For example, Barry Jones (2006) has recently written about the 'new normalcy' in the United States of America:

In the United States, writers are now adopting, and some promoting, the term the 'new normal'. In this view the 'old normal', where decisions might have been based on evidence, analysis, reason and judgement ... has come to an end on 9/11. The 'new normal' depends on instant decisions based on 'gut', 'instincts' and 'faith'. Increasingly, policies have to be 'faith based'...

(Jones, 2006, pp. 502-3)

Jones (2006, p. 503) points out that the 'crux of the issue here is that evidence, the rule of law, justice, and intellectual detachment are being overridden ... those involved with this trend never ask, "What if I am wrong?"' Quality schools and their leadership have a role not only in asking such questions but also being aware of the limitations of political intensification and simplification.

On the other hand, and partly in response to globalisation, economic reform has sought to make us less dependent on states and governments and more dependent on economies, markets, prices and money – in brief, more directly dependent upon ourselves. A productive and competitive society is said to need a more subtle, flexible, responsive workforce (i.e., to better meet the demands of an internationally competitive economy) and a reduction in costs of both labour and taxation to business and industry (see Mulford (2003a) for an elaboration). However some researchers disagree. Based on his research with 400 randomly selected middle Australians from five capital cities who shared their experiences of work, family and community, Pusey (2003) argues that these trends raise serious social, quality-of-life and family issues. These are all issues which can impact on schools and their leaders.

The result of the commodification of everything has been an undermining of other more fundamental social resources for personal happiness, such as tension-free leisure, autonomy, effective personal communication, domestic felicity, good health, inter-generational relationships, meaningful work and friendships. Cooperation and collective action also have been undermined by, for example, competition and multi-skilling reduces interaction. Yet it is quality of life rather than material (money) income which people say matters most.

Another result is that families and middle Australia are the big losers. Families are caught in the middle: between the structural economic pressures of reform on the one side, and cultural norms and inherited family values on the other. The lived experience of increasing dependence on a market has left middle Australians with ever less capacity to save, buy houses, provide for their own, and their children's education and medical expenses, and secure their retirement incomes. Middle Australians are saying that there are too few winners, that the relative gains of the winners are too large or that too great a proportion of the winnings are sweated from the losers. They are increasingly angry.

(Pusey, 2003, p. 107)

How might these changes play out for and in education?

Some believe the global influence of the cultures of certain countries other than the United States of America will increase, with clear implications for all those in schools.

The world's population centre of gravity is ... moving inexorably to China and India, and to Central Africa. The twenty-first century will see the development of a non-European cultural orientation, dominated by black and pre-dominantly non-Christian countries. This generation of school children, wherever they live, will be forced to succeed in a multi-cultural, multi-faith, and multi-lingual world.

(Beare, 2007, p. 37)

Beare suggests that some of the educational consequences of living in a borderless world in which trade, interaction patterns, a huge number of enterprises, and social contracts are being internationalised are that patterns of:

schooling, curricula, assessment methods, learning programs, student achievement data are in the process of becoming international and interchangeable too.

(Beare, 2007, p. 38)

This phenomenon is clearly seen in the increasing decontextualised international comparisons of academic performance in limited areas of the curriculum through programs such as the Third International Mathematics and Science Study (TIMSS) and PISA.

Issues that have implications for Australian schools and their leaders, and questions requiring answers and in which the role of schools have yet to be clarified, remain. These issues include identity, living with differences, a move from evidence, the rule of law, justice, intellectual detachment, social capital, quality of life and family.

- Globalisation pushes at concepts such as identity (personal, community, national) sometimes resulting in a push in the opposite direction, that is, to the local. A term has been coined for this phenomenon, 'glocalisation'.
- While globalisation results in ever-increasing exposure to ideological and religious difference, the challenge of how to live with these issues (including terrorism) is a vexed one.
- In many communities, especially in rural locations, religious, banking, sporting and other institutions have disappeared – often leaving the school as the last remaining institution for the development of community social capital. This point is expanded upon later in this and subsequent sections.

Pressures on the environment

The pressures on the environment have been well documented. Factors such as the demand for fossil fuels and/or alternative sources of energy have led to a heightened awareness of threats to the environment and the need for responsible, decisive action to counter them. This awareness is resulting in a sharper focus on sustainability, the role of individuals within their communities and their impact on the environment (Margo & Dixon with Pearce & Reed, 2006).

The Australian Government's Intergenerational Report (Costello, 2007) highlights the fact that the country faces significant economic and quality-of-life problems from global warming, water shortages, desertification and soil salination. As the then Treasurer emphasised at the launch of the report, 'We must steward our environment between generations just as we steward finances.' But time may be limited. As Beare (2007, pp. 37–38) indicates, 'many commentators have pointed out [that] unless there is urgent action among the present generation on earth, we may be in the end-time of the planet, or of human civilization.'

How might these changes play out for and in education?

These major environmental issues have implications for schools and their leaders:

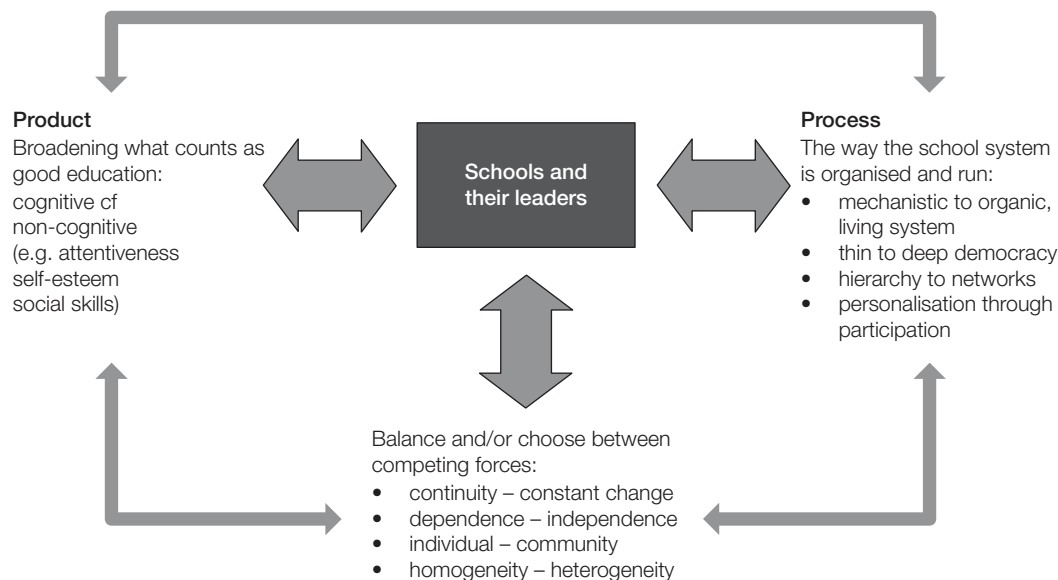
- How can we learn quickly how to be responsible citizens of the globe, including being sustainable?
- What is the role of individuals within their community and their impact on, and stewardship of, the environment?
- How can we best encourage, develop and maintain sustainable leadership?

Implications of the forces for schools and their leaders

Section 1 of this review paper suggested that the four interrelated forces have implications for schools and their leaders. It was suggested they are causing education organisations and systems to broaden and personalise their curriculum and rethink school structures. This second part of Section 2 will explore these implications in greater depth through the interrelated outcomes, which are summarised in Figure 3. It indicates that schools need to: broaden 'what counts'; achieve a better balance, or make a choice between competing forces; and, ensure that school processes are more organic, democratic and networked. It is further argued that in

order to achieve the best results in our schools, the 'what' (products such as broadening what counts and achieving balance and/or making choices) and 'how' (school processes) need to be consistent with each other. This position is based on research that indicates, for example, that how school leaders treat teachers is closely related to how teachers treat their students and, in turn, student learning outcomes (Mulford, Silins & Leithwood, 2004).

Figure 3: Outcomes of the contextual forces for schools and their leaders



Achieving balance and choosing between competing forces

The first outcome relates to the need to achieve balance or choose between competing forces. It is examined under the broader headings of continuity and constant change, dependence and independence, individualism and community, and homogeneity and heterogeneity. It will be argued that there is a need for schools and their leaders to either provide balance between these competing factors or sometimes to take a stance in favour of one of the competing factors over another (Mulford, 2003b).

Continuity and/or constant change

One element of recent times has been the constant change directed at schools: a stream of new movements, new programs and new directions. Unfortunately, some at all levels in education seem to be forever rushing to catch the next bandwagon that hits the scene. It is unfortunate because there is increasing evidence that many a school and school system and its students have been badly disillusioned by those selling the new movements (including ever-changing Ministers of Education and/or Departmental officials).

There is a view held by authors such as Peters (1987) that the main challenge in such a situation, a world of massive and constant change, is how to foster enough internal stability in people and the organisation in which they work and study in order to encourage the pursuit of change. Stability for change, moving ahead without losing our roots, is the challenge.

However, it is quite incorrect to assume that a school is effective only if it is undergoing change. Change may be in an inappropriate direction, for example, towards a facade of orderly purposefulness (Sergiovanni, 1990). Change may also involve the use of inappropriate measures of success, especially when they are merely procedural illusions of effectiveness (Meyer & Rowan, 1978). The difficulty of providing output measures by which education's success can be measured has often led to the elevation in importance of 'approved' management processes. These processes include program planning, budgeting systems, school-based management, charters/partnership agreements, strategic plans, and so on. Such processes contribute an illusion of effectiveness and become desired outputs in themselves, thus deceiving outside

observers and many of those in schools as well. Such deception should have no place in good education.

In a changing world, it might be more helpful to remember Noah's principle: one survives not by predicting rain (or change) but by building arks. Amid uncertain, continually changing conditions, many schools are constructing arks comprising of their collective capacity to learn. They are striving to become intelligent, or learning, organisations (Mulford, 2003c).

Dependence and/or independence

A second fundamental issue relates to the imbalance between the competing factors of dependence and independence with the current situation favouring dependence. This situation is most easily seen in the overdependence many of those in schools place on 'leaders'. This view is frequently engendered by the overconfidence the 'leaders' have in their own abilities or importance.

Given the large number of recent Australian educational commissions, reviews, reports, position statements and so on, and the prominence of educational matters in the national media, there are a lot of people who want to tell those in schools what to do. This situation is unfortunate because many of those doing the telling do not seem to want to accept responsibility for their advice, are not around long enough to take responsibility for their directions and may even seek to prevent fair and open assessment of the changes they promulgate.

We cannot avoid change, indeed we may wish to seek, embrace and even thrive on it. Education is an integral part of our society and we must anticipate change as being one of the constants it will face. Whether these changes result in Frankensteins, or gentle, functional, collaborative and sustainable butterflies, depends largely on the response of those in schools. School leaders can continue to be on the receiving end, to be dependent, or they can choose to make a stand together, to be empowered, to be professional, and to be leaders of democratic institutions proud to be serving their agreed purposes (see later sections).

Peter Hyman (2005), who left 10 Downing Street after many years as speech writer and advisor to the Prime Minister to work as an assistant to the headteacher at London's Islington Green School, relates his reflection on the same point:

Perhaps the biggest eye-opener for me on my journey has been how the approach I had been part of creating, to deal with 24-hour media and to demonstrate a decisive government, was entirely the wrong one for convincing frontline professionals, or indeed for ensuring successful delivery. Our approach to political strategy has been based on three things: momentum, conflict and novelty, whereas the frontline requires empowerment, partnership and consistency.

(Hyman, 2005, p. 384)

Individualism and/or community

It is said ours is a time when religious institutions no longer attract or have an impact on the young, families fall apart more often than ever before, some children are malnourished, drug addiction is a scourge and prime-time television programs are vacuous and educationally bankrupt. It is a time when advertisers and their clients have succeeded in not only rushing children through their developmental stages into a false sense of maturity but have also managed to link identity and status to brand names; and gang members, athletes, and narcissistic celebrities are the admired adolescent role models (Goodlad, 1994). It may be unreasonable to expect the schools to pick up the slack in such situations but if the family cannot and the school does not pick up the responsibility for our young, then who will? Who will counter, for example, the pressure inherent in much of our 'modern' society to act alone rather than with, or for, the community? We need to be reminded that change for the sake of change, including technological change, is not necessarily good; it must be tempered with wisdom, compassion and justice.

In the world described above, a skills crisis would indeed be bad enough but a values crisis would be devastating. The nine values for Australian schooling (care and compassion, doing your best, fair go, freedom, honesty and trustworthiness, integrity, respect, responsibility, and understanding, tolerance and inclusion (DEST, 2005)) clearly need greater practical exposure. For example, turning back the tide of a 'virtual' existence, with its emphasis on individualism and encouragement to dissociate oneself from an increasingly challenging world, is vital for our future survival. For, as Peck (1987) has reminded us, a community is a place where conflict can be resolved without physical or emotional bloodshed and with wisdom as well as grace. A community is a group that 'fights gracefully'.

A generation that is unable to feel for others is incapable of creating the social trust that is so essential to maintain culture. And, as it is in the broader culture, so it is in schools. For example, it has been demonstrated that where teachers' trust in principals is undermined by perceptions of principal co-option of top-down system change initiatives, especially when unsupported by teachers, it results in teacher alienation and feelings of disempowerment, which can result in teacher resistance (Bishop & Mulford, 1999). Engagement in decision-making processes creates a sense of ownership in stakeholders and preparedness to compromise and act within the agreed parameters within the community.

Homogeneity and/or heterogeneity

In looking for common denominators in successful schools (an exploration of which will be undertaken in Section 3), one strong indicator is the encouragement offered to the staff and students to do something radical, to take the initiative, to take risks. If a system is too tight for this, there will be no search and no development, and without a developmental approach there can be no learning.

One lesson here is that reductionist approaches in education should not go unchallenged. Uniformity for schools and education systems in aims, in standards, and in methods of assessment is a complexity-reducing mechanism. While it may be far tidier administratively to have a single set of aims for all, a single curriculum for all, a single set of standards for all, and a single array of tests for all than it is to have locally developed approaches to school improvement, such homogeneity creates severe limitations to growth for schools.

Indeed research indicates that attempts to achieve homogeneity may backfire in terms of student attitudes to school. International research (OECD, 2004) shows, for example, that approximately a quarter of 15-year-old students across 32 countries 'agree' or 'strongly agree' that school is a place where they do not want to go. In countries such as Belgium, France and Hungary, where there is a high level of homogeneity in the education system, the proportion ranges from 35 to 42 per cent while in countries such as Denmark, Mexico, Portugal and Sweden, where there is less homogeneity, the figure is less than 20 per cent.

National researchers from the United Kingdom are:

beginning to encounter students expressing doubts about the genuineness of their school's interest in their progress and well-being as persons, as distinct from their contributions to their school's league table position. [The result is that] contract replaces community as the bond of human association.

(Fielding, 1999, p. 286)

Another UK study found Year 10 and 11 students' attitudes towards school to be uniformly negative. Most worrying in this study, however, was that teachers were beginning to be seen by their students as only representing other people's wills as they sought out the best means to adapt to the homogenising requirements of academic achievement, results and inspection:

every effort that a teacher makes to cajole the pupils into more work is interpreted as a sign of the teacher's selfish insecurity ... all appears to be done for the sake of the external powers.

(Cullingford, 2001, p.7)

Broadening what counts as good schooling

The forces and factors increasingly permeating our schools show that in order to achieve their expressed purposes, it is critical to clarify what counts as 'good' schooling. From the earlier analysis, the research literature said that these purposes included:

For individuals:

- developing identity and quality of life
- developing attitudes and skills for handling the speed of change, including change through digital media which promotes multitasking and simultaneously controlling different sources of information through ubiquitous and immediate connections
- making wise choices from and judgements about the amount of information available
- being better skilled, flexible and adaptable and to be able to continually learn.

For groups:

- developing identity and quality of interaction
- preventing the fragmentation of community, including through the building of social capital, families and ensuring equity of access
- being better at understanding, living and working with differences and others
- understanding how to harness the popularity of socially oriented technologies and digitally networked societies
- countering a move from evidence, the rule of law, justice, and intellectual detachment
- learning to be responsible citizens of the globe, including being sustainable.

Cognitive and non-cognitive (including social capital)

Measures of successful student achievement in a knowledge society are increasingly being seen as wider than the cognitive/academic; it is more personalised and involves achieving both excellence and equity (DfES, 2005; Leadbeater, 2004a; OECD, 2001b; World Bank, 2005). If we emphasise only scientific and technological knowledge, or only literacy and numeracy, we could languish in other areas, including physically, aesthetically, morally and spiritually. Additionally, as we try to maintain curriculum relevancy and plan for the future, as educators we should never lose historical perspective; otherwise, there is no guarantee that we will not repeat the mistakes of the past.

Howard Gardner understood the need to broaden what counts for good schooling with his conceptualisation of multiple intelligences. His most recent work (Gardner, 2007) extends this understanding by defining the abilities that will be needed in times of vast change as his five 'minds for the future'; that is, disciplinary, synthesising, creating, respectful and ethical minds. In linking this broadening to school leadership, Leo (2007) conference paper points out that:

a key question for school leadership is how to develop more imaginative approaches to educational assessment that illuminate how schools develop capabilities such as motivation and creativity and to ensure that these are among the outcomes of education for all students.

(Leo, 2007, p. 10)

Consistent with this argument for the need to broaden what counts in education is a range of impressive research using data from the British Cohort Study. This data base followed all children born in the United Kingdom in the first week of April 1970 and surveyed them again in 1975, 1980, 1986, 1991 and 1996. At aged 10, in 1980, over 12,000 children were tested for mathematics and reading ability and the psychological attributes of self-esteem and locus of control. The children's teachers were questioned about their behavioural attributes of conduct disorder, peer relations, attentiveness and extraversion. In 1996, at age 26, information was collected on highest qualification attained, earnings and periods of unemployment.

The economist author of one of these studies, Leon Feinstein, summarises his findings as follows:

attentiveness in school has been shown to be a key aspect of human capital production, also influencing female wages even conditioning on qualifications. Boys with high levels of conduct disorder are much more likely to experience unemployment but higher self-esteem will both reduce the likelihood of that unemployment lasting more than a year and, for all males, increase wages. The locus of control measure ... is an important predictor of female wages ... Good peer relations are important in the labour market, particularly for girls, reducing the probability of unemployment and increasing female wages ...

[These results] suggest strongly that more attention might be paid to the non-academic behaviour and development of children as a means of identifying future difficulties and labour market opportunities. It also suggests that schooling ought not to be assessed solely on the basis of the production of reading and maths ability.

(Feinstein, 2000, pp. 22 & 20)

Carneiro, Crawford and Goodman (2006) analysed the determinants and consequences of cognitive skills and one aspect of non-cognitive skills, namely social adjustment, using data from the National Child Development Survey (NCDS). The NCDS comprises detailed longitudinal records for all children born in UK in a single week in March 1958 and for whom follow-ups have occurred at ages 7 (N = 12,787), 11 (N = 10,927), 16 (N = 8,509), 23 (N = 7,740), 33 and 42 (N = 7,735). Carneiro et al. (2006) make use of background characteristics for both the child and the family at birth, and ages 7 and 11, social and cognitive test results at 7 and 11, and various schooling, behavioural and labour market outcomes at ages 16, 33 and 42.

Carneiro et al. (2006) found that 7- and 11-year-old children who exhibited social maladjustment:

- 'were less likely to stay on at school post-16 (after taking into account cognitive ability and other family background factors)' (p. 10)
- did less well in terms 'of performance in higher education' (p. 11)
- were more likely to display 'negative adolescent outcomes', such as trouble with the police by age 16 and teenage motherhood (p. 11)
- 'even conditioning on schooling outcomes' were more likely to have 'both lower employment probabilities and lower wages at age 42 (also at age 33)' (p. 13).

The Institute for Public Policy Research (Margo et al., 2006) also followed young people born in the United Kingdom in 1958 and 1970 and showed that 'in just over a decade, personal and social skills became 33 times more important than at the start of the decade in determining relative life chances' in terms of employment and wage levels. The research also found that:

young people from less affluent backgrounds became less likely than their more fortunate peers to develop these skills. For those born in 1958, the connection between family background, personal and social skills, and success in later life was barely discernable. But for a significant proportion of those born in 1970, social immobility – the passing on of disadvantage through families – was clearly due to the connection between family background and personal and social skills.

(Margo et al., 2006, p. viii)

The Institute for Public Policy Research (Margo et al., 2006) documents the increasing importance of non-cognitive factors in determining outcomes, from educational attainment to employment prospects, and in securing greater social cohesion. But this report, titled *Freedom's orphans*, also highlights evidence that:

- Some children are less likely than others to have access to experiences that will help them develop these skills and attitudes.
- The national curriculum gives non-cognitive factors relatively little weight and they are measured, recorded and reported inadequately by national tests and public examinations.
- As a result, non-cognitive factors are in danger of being neglected by teachers and undervalued by pupils and their parents (and the education systems/jurisdictions) at a time when in reality they matter more than ever.

In addition, Carneiro et al. (2006) believe their findings are consistent with the research of Cunha, Heckman, Lochner & Masterov (2005) which shows that non-cognitive skills are more malleable than cognitive skills. This finding suggests that schools can have a greater effect on students' non-cognitive outcomes than on their cognitive outcomes. They state that, 'the regressions reveal a stronger correlation (conditional on other background factors) between cognitive skills over time than between social skills over time' (p. 7). Further, they suggest that as:

disadvantaged children tend to be more socially maladjusted ... education interventions targeted at disadvantaged children are also likely to be more effective if they consider explicitly the formation of social skills.

(Carneiro et al., 2006, p. 16)

Cunha et al. (2005, p. 1) remind us that 'remediation of inadequate early investments [in such areas of social skills] is difficult and very costly'.

Surveys of 5150 Year 8 and 10 students from all three school sectors in Tasmania (Hogan & Donovan, 2005) found significant relationships exist between students' subjective agency and academic outcomes (based on student grades in all subjects at the end of Years 8 and 10), as well as a range of social capital outcomes such as sociability, trust in others, collaboration, and participation in community groups. Consistent with the argument being developed here, these researchers believe that not measuring such broader outcomes of schooling will result in:

underestimates [of] the net contribution that schools make to individual wellbeing and aggregate social utility and permits a highly stratified and limited measure of school performance, academic achievement, to monopolise the 'allocation' of students into social division of labour.

(Hogan & Donovan, 2005, p. 100)

They conclude that this situation is neither sensible, nor efficient, nor defensible on social justice grounds.

The ways schools are organised and run

The way schools are organised and run needs to be consistent with the broadening outcomes and the balance of, or selection between, the forces on them. Schools and their leaders will need to move from the bureaucratic and mechanistic to organic living systems, from thin to deep democracy, from mass education to personalisation through participation, and from hierarchies to networks. In brief, they will need to develop and operate in and as communities of professional learners. These organisational matters are developed in Section 3.

Concluding comments on school context

A number of powerful contextual forces are challenging the very nature of schooling. These forces include advances in science and technology, changes in demography, increased globalisation and pressures on the environment.

Advances in science and technology have enabled customised learning to occur any time, any place, which expands the options and choices individuals and families have and moves

the control of learning away from institutions and towards individuals. There is less need to systematically acquire 'authorised' knowledge from, and sequenced and packaged by, experts. In such circumstances, the idea of classes and classrooms are being superseded. But these developments raise a number of issues that need to be resolved, including equity of access and developing attitudes and skills for handling the speed of change, making wise choices from the amount of information available and preventing community fragmentation.

Changes in demography, including the nature of work, will see retirements among, and then shortages in the supply of, teachers and school leaders; a younger, less experienced, ethnically representative teaching profession; and migration of the most experienced teachers to the most privileged environments. A different generation, 'Generation X', will move into the workforce positions of power and authority. Generation X are regarded as more practical, sceptical and non-institutional than previous generations. A new work mode for professional educators will involve greater mixing and matching of skills and the taking on of a set of projects or assignments, or a 'portfolio career'. In this situation, the abilities to be flexible and continually learn become crucial. Education will become truly lifelong and 'lifewide'. Also, a different generation of students, those born from the 1980s on, or 'New Millenials', the first generation to grow up surrounded by less controllable digital media, will populate our schools. These demographic and work changes raise a number of issues in need of resolution, including staff and students who are better skilled, flexible and adaptable; better at understanding, living and working with differences and others; better at achieving an ability to continually learn; and better at developing access to judgments about, and wise use of, knowledge.

An increasingly global community is being constructed electronically and the availability of rapid and inexpensive transportation is reinforcing this condition on a personal basis. The current generation of school children, wherever they live, will need to succeed in a multi-cultural, multi-faith and multi-lingual world. Also, schooling, curricula, assessment methods, learning programs, student achievement data are increasingly international and interchangeable. Issues raised by increased globalisation include those of identity, living with differences, social capital, quality of life and family, and countering a growing move from evidence, the rule of law, justice and intellectual detachment.

Pressures on the environment, such as global warming, water and fossil fuel shortages, desertification and soil salination, mean that the current generation has to learn quickly to be responsible citizens of the globe. There is a need for a sharper focus on sustainability and stewardship, the role of individuals within their communities and their impact on the environment.

Taken together, these contextual forces imply that schools and their leaders need to broaden 'what counts' to include the non-cognitive outcomes of schooling. They need to achieve a better balance, or make a choice between competing forces (favouring stability on which to build change, independence rather than dependence, community rather than individualism, and heterogeneity rather than homogeneity).

3

Organisation: Schools of the future

Schooling has developed over a long period of time with specific sets of organisational arrangements. This organisation has in many instances undergone so little change that it has become ossified, deeply rooted in already existing social, cultural and economic patterns (OECD, 2006). Because of the depth of these roots, schools and school systems can be difficult to change. But as we have seen in Section 2, there are strong forces challenging the very nature of schooling. Section 3 of this review focuses on the second key embedded element depicted in Figure 1.

Which pathways can schools employ in their journey to meet these forces? What will schools look like in the future? A helpful way to answer these questions is to examine possible scenarios for schooling over the next 10 to 20 years. The first part of Section 3 describes six scenarios for schools of the future developed by the OECD. Results are provided from surveys of Australian educational leaders on the likelihood and desirability of each of these six scenarios.

Scenarios are descriptive pictures or stories that help in understanding a complex, changing, challenging landscape. They reflect trends and forces we see at work today, translated into imagined, probable futures. Thus they can play a significant role in professional development of leaders. Scenarios have the potential to help us see the familiar in new ways. By standing in someone's shoes and walking around in an imagined, probable future, we may understand more about our current direction of travel and our values and principles. We may imagine the preferred future we hope to shape together.

The OECD scenarios

The OECD 'Schooling for Tomorrow' project (OECD, 2001b) developed six scenarios, grouped in sets by type, which describe options for schooling in 2020. Each scenario has clear and different implications for schools and their leaders. Viewed as a group, they represent a range of positioning, from the status quo, through re-schooling to de-schooling.

Status quo

Scenario 1: Bureaucracy

This scenario is built on the continuation of powerfully bureaucratic systems, strong pressures towards uniformity and resistance to radical change. Priority is given to schools' administration

and their capacity to handle accountability pressures, with strong emphasis on efficiency. Schools are knitted together into systems within complex, hierarchical administrative arrangements. Even where decentralisation to districts and/or schools occurs, this goes hand-in-hand with centralisation of budgeting and/or curriculum.

Leadership in Scenario 1 calls for strong administrative capacities to handle the bureaucratic demands. Accountability pressures are strong and occupy a great deal of leaders' time and energy. Leadership in Scenario 1 involves abilities to manage competing vested interests in a situation where there are limited new resources but new expectations are continually added to the remit of schools.

Re-schooling

Scenario 2: Social centres

In this scenario, there is a strong social agenda with schools acting as a bulwark against social, family and community fragmentation. There are extensive, shared responsibilities between schools and other community bodies but also a strong core of high-status teaching professionals. Schools enjoy widespread recognition and generous financial support. There is a wide range of organisational forms and settings, such as schools in shopping malls and community centres. The focus of learning broadens with more explicit attention given to non-cognitive outcomes and strong emphasis on non-formal learning.

Leadership in this scenario is complex, distributed and often collective, local decision making is strong, and there is wide use of networks. The school would be the centre for a dynamic interplay of community groups and players, with open doors and low walls.

Scenario 3: Learning organisations

In this scenario, the school is revitalised around a strong knowledge rather than social agenda in a culture of high-quality experimentation, diversity and innovation. Information and Communication Technologies (ICT) is used extensively alongside other learning media, traditional and new. Knowledge management moves to the fore and equality of opportunity is the norm and not in conflict with the quality agenda.

With knowledge moving to the fore, leadership is characterised by flat hierarchy structures, using teams, networks, diverse sources of expertise, the use of evidence and continuous professional development. Decision making is rooted within schools and the profession, including through new forms of evaluation and competence assessment based on quality.

De-schooling

Scenario 4: ICT networks

In this scenario, dissatisfaction with institutional provision and diversified demand leads to an abandonment of schools as formal structures in favour of a multitude of learning networks provisioned by powerful, inexpensive ICT. Authority becomes widely diffused, there is a substantial reduction in public facilities and institutional premises and the demarcations between teacher and student and parent diminish. Various cultural, religious and community voices come to the fore in the socialisation and learning arrangements for children, some local in character; others national and international, using distance and cross-border networking.

With schooling assured through interlocking networks, authority becomes widely diffused. There is a substantial reduction of existing patterns of governance and leadership. Far from simplifying the leadership of education, it becomes diversified and extremely complex. Leaders would need to be able to operate in 'mini-systems' capable of teaching, facilitating, organising community resources, engaging in professional learning, managing infrastructure and finance, and so forth.

Scenario 5: Market

In this scenario, existing market features in education are significantly extended, as governments encourage diversification in a broader environment of market-led change. This scenario is fuelled by dissatisfaction of 'strategic consumers' in cultures where schooling is commonly viewed as a private as well as a public good. Many new providers are stimulated to come into the learning market, encouraged by reforms of funding structures, incentives and regulation.

Indicators, measures and accreditation arrangements start to displace direct public monitoring and curriculum regulation. Important roles are played by leaders in supplying information, guidance services and indicators of competence that help consumers make market choices. However, there is a substantially reduced role for public education authorities. Entrepreneurial leadership modes are prominent.

Scenario 6: Meltdown

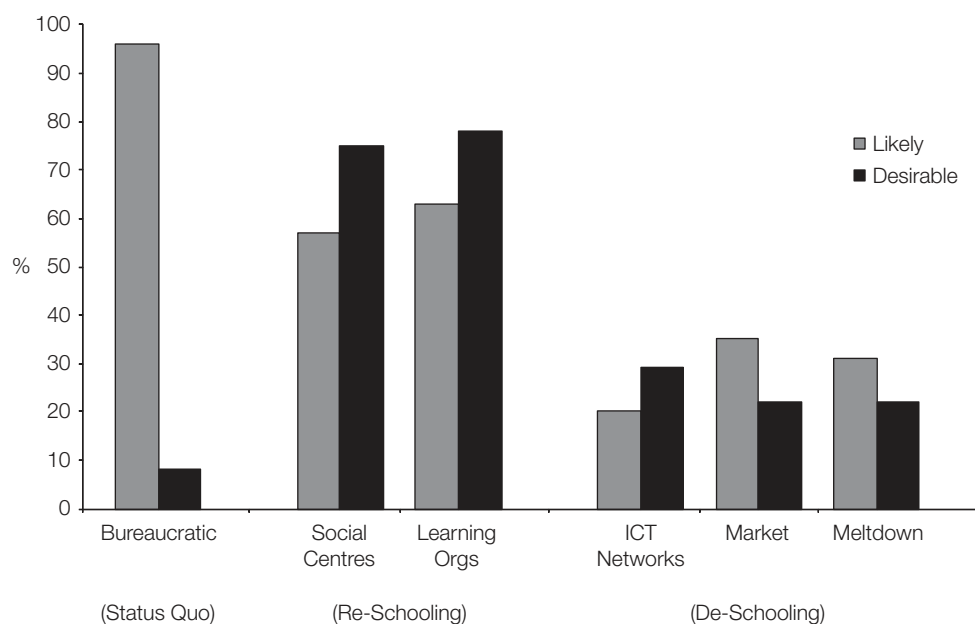
In this scenario, there would be a major crisis in schools due to teacher shortages. It is triggered by a rapidly ageing profession, exacerbated by low teacher morale and buoyant opportunities in more attractive jobs. The large size of the teaching force makes improvements costly, with long lead times for measures to show tangible results. Very different outcomes could follow in different socioeconomic areas: at one extreme, a vicious circle of retrenchment and conflict; at the other, emergency strategies spur radical innovation and collective change.

Leadership in this scenario can be summed up as 'crisis management'. In some areas, there will be shortages among those willing to take on the job. A fortress mentality would be widespread.

Likelihood and desirability of the scenarios

How do school leaders rate the likelihood and desirability of each of these scenarios being the Australian reality in the next five to ten years? Over 200 Australian educational leaders involved in professional learning courses conducted by the author over the last seven years were asked to respond to both of these questions on each of the six scenarios. Figure 4 displays the levels of support as to the likelihood and desirability of the six scenarios for Australia that education leaders believed most appropriate.

Figure 4: Australian education leaders' views on the OECD scenarios



Source: Mulford, ACER 2000 Research Conference Paper

Figure 4 shows that 96 per cent of respondents believed powerful bureaucratic systems would continue to have a role in schooling organisation within the following decade. This was followed by 63 per cent believing the learning organisations scenarios were likely; 57 per cent supported the social centres scenario; 35 per cent for the market scenario, 31 per cent the meltdown scenario; and only 20 per cent the ICT networks scenario.

In terms of desirability 78 per cent of the Australian educational leaders favoured learning organisations; with a comparable 75 per cent favouring the social centres scenario; 29 per cent ICT networks; 22 per cent markets; and 22 per cent thought the meltdown scenario likely. A mere 8 per cent thought the bureaucracy scenario was desirable.

Note needs to be taken of the high scores and close match between the likelihood and desirability of the social centre and learning organisation scenarios. Of particular note is the huge gap between the likelihood (very high) and desirability (very low) of the bureaucratic system scenario. The findings shown in Figure 4 indicate a current serious internal conflict in, and about, our schools. They point to a confusion between the current 'golden age' of school leadership described in the opening to this review and the 'new public management' accountability press on the leadership of our schools (see Section 1). The findings shown in Figure 4 and the confusion about schools' purposes and the way forward they indicate should be of great concern (Mulford, 2003a & d). Overcoming this gap, that is, moving from what might be perceived as a dependence on, or feelings of the inevitability of, powerfully bureaucratic systems to scenarios that are more reflective of social centres and learning organisations, will be a major leadership challenge. Write large, the challenge is for school leaders to ensure that what happens is what they want to have happen.

More appropriate models

A number of more appropriate models for organising schools of the future exist. Some examples are consistent with both the need to broaden outcomes and to balance the forces and the preference of Australian educational leaders for schools as social centres and learning organisations. The focus of the next part of Section 3 will be the description and discussion of four such models, which show schools moving along a series of continua. Knowing and being able to act on these evolving and preferred organisational models is the school leader's second challenge and is the focus of Section 3 of this review.

Model 1: From mechanistic to organic, living systems

Wheatley (2005) employs two competing metaphors – 'organisations as machines' and 'organisations as living systems' – as explanation for both organisations and leadership that differ radically in their functioning and outcomes.

The 'machine' metaphor encourages a view of organisation as a fixed structure of some sort, a structure consisting of parts that need to be 'oiled' if they are to function together smoothly. From this view, organisations require effortful monitoring, coordination and direction by someone, typically a 'leader'. Wheatley notes that:

in the past few years, ever since uncertainty became our insistent twenty-first century companion, leadership strategies have taken a great leap backward to the familiar territory of command and control.

(Wheatley, 2005, p. 4)

Such leadership, aiming to increase employees' certainty about their work (and increase the school's level of accountability to government and the public) is mostly transactional. This means that, in the case of school organisations, teachers are assumed to be motivated by the promise of extrinsic, positive rewards such as money and status and by extrinsic, negative impacts such as school reconstitution and public shaming through the publication of league tables.

Transactional, command and control forms of leadership on the part of principals further manifests itself in the close supervision of teachers, specification of 'the one best model of instruction' which all teachers must use, centralised decisions about how time in the classroom is to be used, together with very long lists of curriculum standards or expectations which teachers are required to cover with students. Teachers are allowed little autonomy over their work in classrooms; their voices are, at best, heard weakly in school-wide decision making and yet they are held almost entirely accountable for student achievement (Day & Leithwood (Eds.), 2007).

Conversely the organic, or 'living systems' metaphor encourages a view of organisation as a process, one of constant adaptation, growth and becoming that occurs naturally and inevitably in response to a strong desire for learning and survival. As Wheatley describes it:

the process of organizing involves developing relationships from a shared sense of purpose, exchanging and creating information, learning constantly, paying attention to the results of our efforts, co-adapting, co-evolving, developing wisdom as we learn, staying clear about our purpose, being alert to changes from all directions.

(Wheatley, 2005, p. 27)

Terms which are illustrative of 'organisations as living systems' are characterised as 'self-improving' and 'self-sustaining'. These terms lie at the heart of the reform agenda of public service reforms in the United Kingdom (Sturges, 2006). Descriptions of organisation-as-living-system bear a strong resemblance to accounts of organisational learning in schools (Silins & Mulford, 2002a; Mulford et al., 2004), to descriptions of work in professional learning communities (Stoll et al., 2006) and the OECD (2001b, 2006) scenarios for future schools as social centres and learning organisations.

Research arising from an ongoing eight-country research project, the International Successful School Principals' Project, was published in an addition of the Journal of Educational Administration (43(6) 2005), dedicated to that project. The fundings there and in Day & Leithwood (Eds.) (2007) strongly suggest that successful principals thought of their organisations as living systems, not machines:

One of the more remarkable results of our research was that even in the highly accountable policy contexts intended to deal with such uncertainty, successful principals assiduously avoided a command and control form of leadership. Even the two principals in Shanghai, working in a culture which supported and expected command and control, nonetheless frequently acted with compassion and considerable sensitivity to the human dilemmas faced by their students and staff. Our successful principals, on the whole, appeared to hold a deep, if tacit, conception of their organisations as organic, living systems, rather than as machines. So what they believed was required of them as leaders, we infer from our evidence, was the provision of help to their colleagues in finding meaningful direction for their work, protection from the harsher elements of the schools' wider environments, nurturance, attention, excitement and stimulation. If the organisation needed 'oiling', it was increased mutual trust, not more policy and regulation that was applied. ... Our principals, we imagine, would deeply appreciate Wheatley's claim that 'Life seeks organisation, but it uses messes to get there'.

(Day & Leithwood (Eds.), 2007, p. 1).

Model 2: From thin to deep democracy

Furman and Shields (2003) argue that there is a need to move our schools from 'thin' conceptions of democracy, based on the values of classical liberalism and its concern with the right of the

individual to pursue his or her self-interest plus the resolution of conflict through ‘democratic’ majority voting, to a notion of ‘deep’ democracy. Dewey (in Furman & Shields, 2003) saw ‘deep’ democracy as involving respect for the worth and dignity of individuals and their cultural traditions, reverence for, and the proactive facilitation of, free and open inquiry and critique, recognition of interdependence in working for the common good, the responsibility of individuals to participate in free and open inquiry and the importance of collective choices and actions in the interest of the common good.

Furman and Shields (2003) state that ‘deep’ democracy needs to be practised in schools. However, as a consequence of risk of chaos and loss of control from the forces on schools, the typical pattern they perceive is that students:

are expected to conform to hierarchically imposed decisions about what they study and teach and when, what the outcomes of instruction should be, how to behave and talk, and even how they look ... [In fact,] learning democracy may be one of the least experiential aspects of K–12 curricula.

(Furman & Shields, 2003, p. 10)

The results of a recent analysis of school principal training in Tasmania (Mulford, 2004) that compared policy documents with the actual experience of the Tasmanian Principals’ Institute (Banfield, 2005) questions whether the same could also be said about the adults in schools within bureaucratically designed systems. ‘Deep’ democracy needs to be practised by them, but according to studies by practising school principals such as Banfield (2005) and Bennett (2002) it may be the least experienced aspect of their working world, especially when it comes to their own professional development.

Model 3: Personalisation through participation

A major debate currently taking place in the United Kingdom about the future shape of public services picks up on the confused contextual situation for those in schools. This debate is pitched into the chasm between the way public institutions work and how users experience them. For example, in the education sector it has been argued that efficiency measures based on new public management as reflected in:

[t]argets, league tables and inspection regimes may have improved aspects of performance in public services. Yet the cost has been to make public services seem more machine-like, more like a production line producing standardised goods. [And, I would add, increasingly create dependence on the system.] ... It is ... clear that the State cannot deliver collective solutions from on high. It is too cumbersome and distant. The State can only help create public goods – such as better education – by encouraging them to emerge from within society ... That is, to shift from a model in which the centre controls, initiates, plans, instructs and serves, to one in which the centre governs through promoting collaborative, critical and honest self-evaluation and self-improvement.

(Leadbeater, 2004a, pp. 81, 83 & 90)

Beare (2007) proposes the following:

There will always be machinery either nationally or provincially, but the key policy thrusts need to be taken by a unit close enough to families. The key policy-creating mechanism needs to be small enough to ensure that every single child is given an education which is the most appropriate for him or her. It has something to do with social size rather than geographical size, with how well people can communicate and interact.

(Beare, 2007, pp. 39–40)

It can be further argued that public services can be improved by focusing on what is called 'personalisation through participation' (Leadbeater, 2004a, 2004b, & 2005). The 'pay-off' of personalisation is believed to be increased levels of knowledge, participation, commitment, responsibility and productivity. Thus, personalisation can be seen to be both a process and an outcome of effective public organisations, including schools.

A personalised public service is seen in the literature as having four different meanings:

- 1 providing people with a more customer-friendly interface with existing services
- 2 giving users more say in navigating their way through services once they have access to them
- 3 giving users more direct say over how the money is spent
- 4 seeing users not just as consumers but as co-designers and co-producers of a service.

Across these four meanings, dependent users become consumers and commissioners then co-designers, co-producers and solution assemblers. In schools, learners (students and staff) become actively and continually engaged in setting their own targets, devising their own learning plan and goals, and choosing from among a range of different ways to learn. Additionally, across the four meanings, the professional's role changes from providing solutions for dependent users to designing environments, networks and platforms through which people can together devise their own independent and interdependent solutions.

Model 4: From hierarchy to networks

Leadbeater (2005) believes that personalised learning will only become reality when schools become much more networked, collaborating not only with other schools, but with families, community groups and other public agencies. Arguably one of the best funded and continuous school networks is the Network Learning Group (NLG) with its hub at the UK's National College for School Leadership (NCSL). Its research findings about the advantages of networks over traditional hierarchically designed organisations can be summarised as follows: they engender greater degrees of sharing, diversity, flexibility, creativity and risk-taking; a broadening of teacher expertise; more learning opportunities available to pupils; and they result in improved teaching and student attainment (NCSL, 2005b). The NLG research indicates that while there is no blueprint for an effective network, it is possible to identify the factors that successful networks have in common. They:

- design the network around a compelling idea or aspirational purpose and an appropriate form and structure
- focus on pupil learning
- create new opportunities for adult learning
- plan and have dedicated leadership and management.

Leadbeater warns, however, that the collaboration needed for effective networks:

can be held back by regulation, inspection and funding regimes that encourage schools to think of themselves as autonomous, stand alone units.

Leadbeater (2005, p. 22)

Levin agrees, pointing out that there:

are inevitable tensions between the idea of learning networks, which are based on ideas of capacity building as a key to reform, and ... reform through central policy mandate.

(Levin in NCSL, 2005b, p. 6)

Edith Rusch (2005) concludes that networks cannot be controlled by a formal system. She questions the role of the system in effective school networks, describing what is likely to be

required by networks, as opposed to what is required by the system, as ‘competing institutional scripts’. She characterises the differences as follows:

- Structures are seen as malleable in networks, but fixed and hierarchical in the system.
- Conflict is open and valued in networks, while it tends to be hidden and feared in the system.
- Communication is open and unbounded in networks, but controlled and closed in the system.
- Leadership tends to be fluid in networks, while it is hierarchical and assigned in the system.
- Relationships are egalitarian in networks, but meritocratic in the system.
- Knowledge and power based on inquiry and learning is valued in networks, while expertise and knowing is valued in the system.

The current situation is one in which there remains a need to reconcile networks and central policy and that:

Central policy and learning networks could actually complement each other by bringing together different and equally necessary strengths while curbing each other's excesses.

(Levin in NCSL, 2005b, pp. 7–8)

Networks need to guard against ‘whining or self-congratulations rather than action’ by demonstrating publicly that their work is connected to the key objectives of central policy and that they are making a meaningful difference through evidence-based student outcomes (in their broadest sense). On the other hand, Levin urges central policy managers need to work with networks:

as a way of generating local capacity and commitment to educational improvement ... to provide a sufficient degree of local autonomy and flexibility in policy implementation to allow learning networks to become important allies on key priorities.

(Levin in NCSL, 2005b, pp. 7–8)

In essence, networks need to be able to be critical of central policy directions.

Social capital and communities of professional learners

Arguably, the two organisational concepts that underpin schools as social centres and learning organisations are social capital and communities of professional learners. These two concepts will be examined in some depth in the remainder of this section.

Social capital as an idea has enjoyed a remarkable rise to prominence in recent decades. By treating social relationships as a form of capital, it proposes that they are a resource, which people can then draw on to achieve their goals. It also serves alongside other forms of capital (such as economic, human, cultural, identity and intellectual) as one possible resource and accepted contributor to our individual, community and national well-being. International bodies such as UNESCO, OECD and the World Bank have engaged in extensive conceptual, empirical and policy related work in the area and a number of web sites are devoted entirely to the area (<http://www.socialcapitalgateway.org/>).

In a recent analysis of contemporary academic literature in the area, the World Bank found that social capital has been discussed in two related but different ways (Grootaert, Narayan, Jones & Woolcock, 2004). The first approach was subjective or cognitive in nature and referred to the resources (such as information, ideas and support) that individuals were able to procure

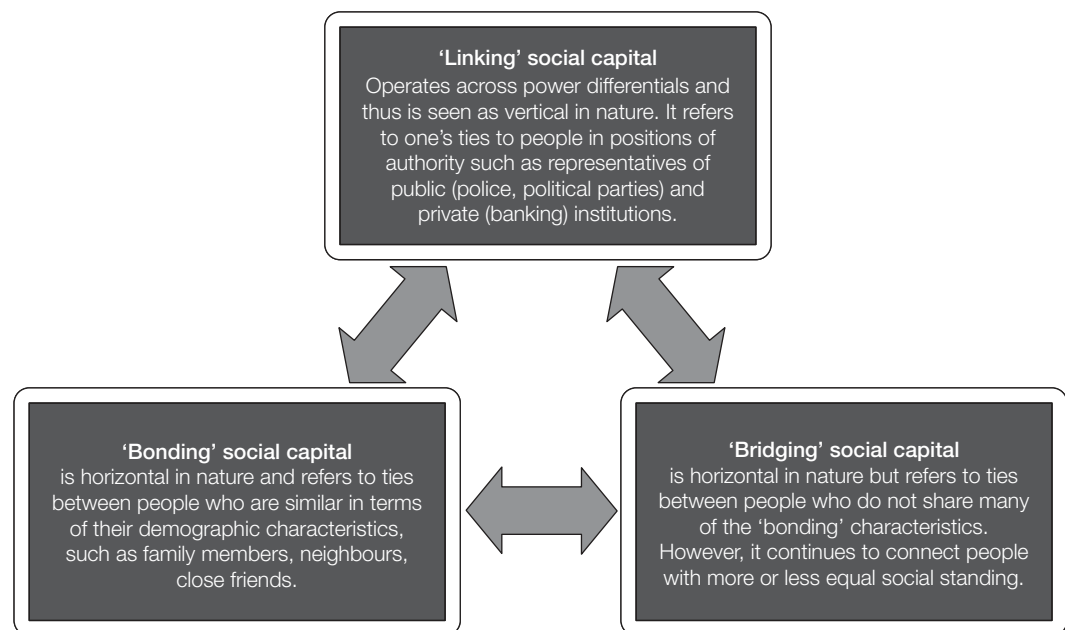
by virtue of their relationships with other people. The second approach was structural in nature and referred to the type and extent of one's involvement in various informal networks and formal civic organisations. Despite these differences, the World Bank concluded that social capital:

is most frequently defined in terms of the groups, networks, norms, and trust that people have available to them for productive purposes.

(Grootaert, et al., 2004, p. 3)

As well as this generally accepted definition, Grootaert et al. (2004, p. 4) point out that common distinctions are made among 'bonding', 'bridging' and 'linking' forms of social capital. These distinctions are summarised in Figure 5.

Figure 5: Three forms of social capital



(Mulford, based on Grootaert et al., 2004.)

Knowing the definition of social capital and its different forms is helpful, but it does little to assist leaders in dealing with the challenges in building social capital in schools. In addressing this task, the next part of Section 3 concentrates on the three different forms of social capital, their importance and the challenges involved in achieving each. The discussion of social capital concludes with a summary of the importance of, and leadership challenges in developing, the three forms of social capital and, arising from this material, a way forward. This way forward involves those in schools seeing their task as developmental, starting with the building of social capital in communities of professional learners.

Three forms of social capital

Bonding social capital: Within schools

Bonding social capital is interpreted as social capital that occurs among work colleagues within schools. It is the most developed area in the research literature. Being a valued part of a group is important for all those in schools. A review of research that examines the importance and challenges of being a valued part of a school (bonding social capital) for students and teachers follows.

Building upon the seminal work of Coleman (1994) on educational attainment, cognitive development and self-identity in American ghettos, the OECD (2004) has concluded that a

general sense of belonging at school is so important for students' educational, economic, social, health, and well-being success that it should be treated as equally important an outcome of schooling as academic results. Recent research supports this argument. In the rare large-scale longitudinal study reported earlier, Feinstein (2000) found that students' peer relations, locus of control and self-concept were related to later life successes, such as employment and earnings. At a more general level, Field (2005) found that people's social relationships play a vital role in their capacity for learning.

Research also links within-school bonding social capital to student academic results. The OECD's (2004) PISA study linked student-teacher relations and performance in mathematics. Beatty and Brew (2005) found that the impact of teacher support on academic engagement worked via student confidence in school and a sense of belonging. In other words, students' sense of relatedness with school mediated their academic engagement. And, as also reported earlier, Hogan and Donovan (2005) found significant relationships between students' subjective agency and academic outcomes (based on student grades in all subjects at the end of Years 8 and 11). They also found significant relationships existed between students' subjective agency and academic outcomes and a range of social capital outcomes such as sociability, trust in others, collaboration, having a commitment to school norms, and participation in community groups.

In brief, then, research makes clear how important groups, networks, norms, and trust (in other words, bonding social capital) can be, not only for students' feelings of self-worth, day-by-day enjoyment of school and academic results, but also for their later life chances. The research identifies ways in which this might be achieved by encouraging teachers to work on student confidence in school, student sense of belonging, locus of control and peer relations, as well as students' relationships with other students. The research also identifies some of the challenges involved, including the system's preoccupation with a highly stratified and limited measure of school performance, that is, academic achievement, performance outcomes and test focused teaching (see the earlier section on 'Broadening what counts as good schooling').

To succeed in a rapidly changing and increasingly complex world, it is vital that schools grow, develop, adapt and take charge of change so that they can control their own futures (Sweetland & Hoy, 2000). Stoll, Fink and Earl (2003) argue that teachers and schools that are able to take charge, to be empowered rather than be controlled by what is going on around them, have been shown to be more effective and to improve more rapidly than ones that do not. Other research has shown that teacher empowerment increases not only the quality of school decisions, teachers' work lives, their commitment and instructional practice (Somech, 2002), but it also impacts on students' academic achievement (Marks & Louis, 1997).

Several studies have documented a strong link between collective teacher efficacy (CTE), the shared beliefs of capability that the efforts of staff as a whole will have a positive effect on students, and differences in student achievement (Mawhinney, Hass & Wood, 2005; Ross, Hegaboam & Gray, 2004). Bandura (1983) and Goddard, Hoy and Woolfolk Hoy (2004) have even demonstrated that the effects of CTE on student achievement were stronger than the direct link between socio-economic status (SES) and student achievement. These are powerful findings that contradict conventional 'wisdom' in our field.

Goddard (2002) found that where teachers have the opportunity to influence important school decisions, they have stronger beliefs in the co-joint capability of their fellow staff. Louis, Febey and Schroeder's research on teacher collective sense making, in a time of increased regulation of the curriculum, found that it:

was directly related to their willingness and propensity to change ... [and] involved developing an understanding or interpretation of the meaning of professional control and responsibility.

(Louis, Febey & Schroeder, 2005, p. 198).

Further support for group development

In the first study of its kind, Wheelan and Tilin (1999) examined relationships between teacher perceptions of staff group effectiveness and development and actual levels of productivity. A survey was employed to measure group development and data was gathered on student grades, standardised test scores and degree of parental involvement. The survey instrument contained four scales designed to correspond to the first four stages of group development: dependency (forming), conflict (storming), trust (norming) and work (performing). They found:

significant relationships between ... group development level and maths rank, reading rank and total achievement rank (a combination of maths and reading).

(Wheelan & Tilin, 1999, p.77)

Staff in schools classified as high in reading and total rank had significantly lower scores on conflict and significantly higher scores on trust and structure and work. In addition, those high on trust and structure and work also reported higher levels of parental involvement.

This finding raises the relevance of other research on the stages of group (staff) development. Research by Mulford et al. (2004) found that at the first or 'forming stage' of group development, group members are polite, they avoid conflict, and they are concerned about being accepted or rejected. At the second stage, 'storming', group members become involved in conflict because of concern about status, power and organisation. The third stage, 'norming', sees more cohesion between members, as there is more affection, open-mindedness and a willingness to share. However, pressures to conform to the group (known as 'groupthink') may detract from the task at hand. Next comes the 'performing' stage, or 'work' stage. It is characterised by an increase in task orientation and an open exchange of feedback. The fifth and final stage is known as 'transforming'. This stage represents a refinement of the performing stage. It indicates that the group does not just continue performing the same tasks well, that it learns from feedback about those tasks and how they are undertaking them and, if necessary, changes the tasks and/or the methods of achieving them.

These five stages have their own constraints, insofar as there are limitations to when certain actions are not appropriate. For example, here is no point in a school leader conducting brainstorming on the school's mission or priorities when the staff is still 'forming' or 'storming'. Similarly, there is no point in continuing with getting-to-know-you ice-breaking exercises when the staff is at the 'performing' or 'transforming' stage.

There can also be a 'dorming' stage that interacts with the 'performing' and 'transforming' stages. It is the time for resting and recuperating, for letting the momentum of success carry the group forward, allowing the group to 'coast'. 'Dorming' helps to prevent group and/or individual burnout. Finally, there is the 'mourning' stage, triggered by the impending dissolution of the group, for any of a number of different reasons which can occur after whichever of the stages the group has reached. In this stage, members reassert their independence from the group and start to disengage from it and from some or all members of the group.

Unfortunately, if left to their own devices, the school staff may not progress beyond the earlier, less productive, stages of 'forming', 'storming', and 'norming'. The effective school leader clearly needs the skills to assist them to move through to the more effective later stages of 'performing', and especially 'transforming'. Understanding and being able to act in a targeted way on the stages of group development can help school leaders better understand the intricacies involved in moving a school, or part of a school, from where it is now to becoming truly effective and meeting its full potential.

Mawhinney et al. (2005) sought to better understand how, under the pressures of accountability, school districts in the United States of America are undertaking research to support their development of strategic actions to foster organisational learning in schools. The researchers also examined districts' interest in the relationships among perceived conditions of professional learning, teachers' collective efficacy beliefs and student achievement. The researchers found collective efficacy, or group development, preceded professional learning communities. This finding clearly reinforces the importance of group development, or bonding

social capital, as a first step in effective schools and their leadership, no matter what the contextual pressures.

Supporting group development implementation

When implementing group development, care and goal integrity are paramount. Not all schools and their teaching staffs may benefit. Blasé and Blasé (1999) argue that as schools become more collaborative, collegial and democratic, they become more political. Blackmore (1995) agrees, viewing discourses of collaboration as little more than rhetoric, given constraining practices of hierarchically organised education systems. O'Neill (2000) maintains that while teacher collaboration is accepted as uncontroversial and likely to attract universal endorsement, in effect it may be employed by secondary school heads of department to get staff 'to do things they really don't want to do' (p. 19). This is what Hargreaves (1991) termed 'contrived congeniality'. Achinstein (2002) warns that when teachers enact collaborative reforms in the name of 'community', what emerges is often conflict. But he also argues that conflict is central to an effective community. How teachers manage conflicts, whether they suppress or embrace their differences, may help define the community borders and ultimately the potential for organisational learning and change.

Johnson (2003) found over 85 per cent of teachers in his comparative case study of two primary and two secondary schools that had received support to implement collaborative work arrangements, as part of the Australian National Schools Network, reported working collaboratively in teams to 'some extent' or a 'great deal'. The perceived advantages of collaboration were seen to be increased moral support, morale and teacher learning. However, a minority of teachers were found to be negative about the new teaming arrangements, claiming that the changes had led to an increase in their workloads, a loss of professional autonomy, and the emergence of damaging competition between teams for resources, recognition and power. Johnson concludes that:

The study offers a timely reminder that even with school reforms which seem benevolently 'good' and almost universally accepted, it is likely that some groups and individuals will be silenced and marginalised, and that their professional standing will be compromised.

(Johnson, 2003, p. 349)

The impact of group development in reducing within-school variation

Despite these challenges to group development, or bonding social capital, in schools, we need to take note of the research indicating that variation in performance within schools is four times as great as variation in performance between schools (OECD, 2000). Given this finding, it makes sense to ensure that the practice of the most effective teachers is used to support and develop the work of others. Twenty-four UK schools belonging to the NCSL's Leadership Network (Connor, 2005) have explored this issue. As the project progressed, four themes emerged that schools were applying as a means of reducing variation, themes that can be seen to include facets of bonding social capital:

- the collection, analysis, interpretation and use of school-wide data
- the development of strategies that focus on teacher learning through, for example, the focused observation of specific aspects of practice
- proposals for curriculum reform, especially to relate it more closely to the interests of learners and their learning preferences
- a focus on the development of middle leaders (e.g. heads of departments and deputy principals) and learning from the innovative practice of others in the school.

Within-school variation, as the recent OECD (2005) report 'Teachers Matter' pointed out, can contribute to growing teacher shortages. Some of these shortages are a result of the high drop-out of teachers in the first few years in the job (up to 50 per cent over the first three years).

Researchers have started to explore why this might be so and what might be done to improve the situation. For example, Moore Johnson (2004) found that the successful schools hire staff through an information-rich process that ensures a good match, and purposefully engage new teachers in the culture and practices of the school, beginning with their first encounter and continuing in induction. The successful school also provides ongoing curricular and collegial support and acknowledgement.

The importance of bonding social capital for teachers has clearly been illustrated. Collective efficacy has even been shown to be a precursor to a professional learning community. However, a number of factors have also been found to challenge the development of groups; that is the facilitating or supporting of bonding social capital. These factors are: professional autonomy, the inevitability of conflict, the fact that not everyone benefits, its use for political purposes, the stage of staff development and the possibility of groupthink, the accountability press and a lack of school ownership or control over its actions. The type of school (especially high-poverty and secondary schools) and the pressure of high stakes testing could also act as challenges to the development of bonding social capital.

Bridging social capital: Among and between schools

Bridging social capital is social capital that occurs among and between schools. This is a recent but growing area in the research literature, especially in the area of networking (see the previous subsection) where an example of this research was provided (p29).

As was pointed out in an earlier section, Leadbeater (2005) argues that personalised learning will only become reality when schools become much more networked but that collaboration can be held back by regulation, inspection and system funding regimes. Hopkins (NCSL, 2005b) argues that:

traditional levers for improvement, such as tests and targets, are reaching the limits of their potential and the next phase of education reform will require new ways of delivering excellence and equity [and that] networks [among schools] are perhaps the best way we have at present to create and support this expectation.

(Hopkins, NCSL, 2005b, p. 7)

In a worldwide research study summarising the findings from productive private sector network arrangements, Kanter (1994) identified three fundamental aspects of such network alliances:

- 1 They must yield benefits for the partners, but they must also have significance beyond corporate advantage.
- 2 Networks that partners ultimately deem successful involve collaboration.
- 3 They cannot be 'controlled' by the formal system.

As mentioned earlier in this review, similar results have also been reported to operate in schools. Two NLG developers, Holmes and Johns-Shepherd (NCSL, 2005b) have examined how school networks have grown and changed over time. The five key activities of courting, aligning, connecting, embedding and re-focusing were found to characterise the network to varying degrees as it developed from its early days, to an emerging, mature and disengaged or renewed network.

Holmes and Johns-Shepherd (NCSL, 2005b) found that in the early days of network development courting and aligning activities dominated and then, as the network emerged, the focus shifted to aligning and connecting. Courting involved getting people on board, building consensus and trust around a compelling idea and securing commitment. Aligning involved using the established trust to set parameters for collaboration, establishing working groups and securing resources. Connecting involved creating a critical mass of enthusiasts to participate fully in the network. Modelling some of the processes, uniting the senior leaders around the purposes, and encouraging low-risk created quick successes at the start.

Such research underscores the importance of bridging social capital. But, again, the advice is that the social capital constitutes the starting point, a necessary but insufficient condition for effective networks. There is a need to use it to develop an agreed set of priorities, a plan and a structure to sustain the network. Challenges to networks being effectively introduced include the hard work and commitment involved, achieving the required base of relationships and shared values and naturally occurring variances such as changes in leaders, the shifting focus as networks develop, and external pressures.

Linking social capital: Between the school and its community

Linking social capital is social capital that occurs between a school and its community. While there is a long research tradition in the school–community area, it tends to be unidirectional, concentrating on what the community can do for the school, rather than examining and reflecting on its multidirectional character. An example of research examining schools’ contribution to the social capital of their wider communities is outlined.

Schools play a vital role in strengthening linkages within their communities by providing opportunities for interaction and networking, which, in turn, contribute to the community’s well-being and social cohesion. The close links between the survival and development of schools and their communities have been demonstrated by a number of researchers. One example provided as evidence for this relates to the way in which many rural communities have failed to remain viable after losing their school (Jolly & Deloney, 1996).

One Australian research project, conducted for the Rural Industries Research and Development Corporation, confirms this relationship between school and community and its importance to both parties. The project examined through case studies the extent and nature of the contribution of rural schools to their communities’ development, beyond offering traditional forms of education to its young people, in five best-practice schools in diverse rural communities across Australia. It also examined the ways in which leadership influenced the process. Kilpatrick et al. (2001) found that rural school – community partnerships delivered a variety of positive outcomes for youth and for the community, including the provision of training that met both student and community needs, an improved school and community retention, plus positive environmental, cultural, recreational and economic outcomes. While these tangible outcomes are important to the sustainability of many small rural communities, the potentially more valuable outcome from the partnerships was the increase in individual and community capacity to influence their own futures.

Effective leadership for school–community partnerships was found to be a collective process consisting of five stages: trigger, initiation, development, maintenance and sustainability. Additionally, Kilpatrick et al. (2001) identified 12 indicators of effective school community partnerships (see Figure 6). Underscoring all these indicators was the importance of collective learning activities including teamwork and network building; in other words, linking social capital. The indicators are largely sequential in that later indicators build on earlier ones. The similarities with the lessons learned in the NLG are worth noting.

Figure 6: The 12 indicators of effective school–community partnerships

- | | |
|---|--|
| 1 | School Principals are committed to fostering increased integration between school and community. |
| 2 | School has in-depth knowledge of the community and resources available. |
| 3 | School actively seeks opportunities to involve all sectors of the community, including boundary crossers, and those who would not normally have contact with the school. |
| 4 | School has a high level of awareness of the value and importance to school–community partnerships of good public relations. |
| 5 | School Principals display a transformational leadership style which empowers others within the school and community and facilitates collective visioning. |
| 6 | School and community have access to and utilise extensive internal and external networks. |
| 7 | School and community share a vision for the future, centred on their youth. |

continued...

- 8 School and community are open to new ideas, willing to take risks and willing to mould opportunities to match their vision.
- 9 School and community together play an active, meaningful and purposeful role in school decision making.
- 10 School and community value the skills of all in contributing to the learning of all.
- 11 Leadership for school–community partnerships is seen as the collective responsibility of school and community.
- 12 School and community both view the school as a learning centre for the whole community, which brings together physical, human and social capital resources.

(Kilpatrick et al., 2001, p. 125)

The importance of linking social capital from the school with its community is high, especially where it results in an enhancement of that community’s capacity to influence its own future. But, as with the bonding and bridging social capital, there are challenges. These challenges include moving from a looser structure and more informal relationships in the earlier stages to a tighter structure and more formalised relationships in later planning and delivery, the need for different leadership roles at different stages and for leadership to become increasingly distributed. Due to the diversity of leadership role required, as Henton, Melville and Walesh (1997) pointed out, it seems unlikely one person would be skilled in all roles. These issues will be examined in detail in Section 4 of this review paper.

The research evidence reviewed in this subsection has been clear in its strong support for all three forms of social capital. The outcomes are impressive, not least of which are improved student engagement and academic performance, plus improved later life chances, improved teaching and learning, reduced within-school variation, increased retention of teachers in the profession, and an increased capacity of individuals and communities to influence their own futures.

Meeting the challenges to social capital development in schools

There are many challenges to social capital development at the contextual, organisational and individual levels. These include overcoming the current generic accountability demands, especially the system’s preoccupation with a limited number of academic performance outcomes; the micro politics of schools, such as contrived collegiality, groupthink and conflict avoidance; the differences between policy development and its implementation; dedicated leadership; large, secondary, high-poverty schools; and professional autonomy. These challenges are summarised in Figure 7.

Figure 7: Contextual, organisational and individual challenges of social capital development

<p>Context</p> <ul style="list-style-type: none"> • accountability, especially system preoccupation with a limited number of academic performance outcomes • systems with fixed structures, hiding of conflict, control of communication, and preference for hierarchical leadership, meritocratic relationships and knowledge and expertise • changes in leaders, circumstances, priorities <p>Organisation</p> <ul style="list-style-type: none"> • micropolitics of schools e.g., contrived collegiality, conflict avoidance • differences between policy development and implementation e.g., effective change only occurs in domains in which the school has discretion/control over its direction • need for compelling idea/aspirational purpose, critical mass of supporters, conscious planning and dedicated leadership • large, secondary, high-poverty, high-stakes testing schools <p>Individual</p> <ul style="list-style-type: none"> • professional autonomy/freedom

Mulford, 2007d

Communities of professional learners

Where do we take this research evidence on the importance of, and challenges to, social capital? This review paper, and many of the papers at the ACER Research Conference, argue that the way forward lies in seeing the ‘solution’ as establishing communities of professional learners (CPL). The solution was seen as developmental, *starting* with the building of social capital.

A message arising from the research in this subsection is that school staffs must learn how to lose time in order to gain time. By this is meant that an awareness of, and skill development in group and organisational processes is a first step in any effective change. Instead of others trying to insert something new into a school’s (or community’s) culture, the school, schools or school and community, and especially the leadership, should first analyse what it already has. They should first spend time trying to help that culture develop an awareness of and responsiveness to *itself* (Scribner, Hager & Warne, 2002).

Development can be seen throughout much of the research reviewed in this review paper and is summarised in Figure 8. This research shows:

- teacher collective efficacy preceding communities of professional learners as well as the forming, storming, norming, performing, transforming, dorming and mourning stages of staff development (see column 2 in Figure 8)
- the trusting and collaborative climate, shared and monitored mission and taking initiatives and risks stages of organisational learning (column 3)
- the establishment, emerging, mature and disengagement or renewal stages of school networks (column 4)
- the trigger, initiation, development, maintenance, and sustainability stages of school community partnerships (column 5).

On the left-hand half of Figure 8 the factors that make up school principal transformational leadership (see Section 4) are conceptualised as sequential with individual support, culture (including promoting an atmosphere of caring and trust among staff and setting the tone for respectful interaction with students), and structure (including participative decision making, delegation and distributive leadership), preceding vision and goals and performance expectations which, in turn, precede intellectual stimulation (Mulford, 2007d).

In brief, the position taken identifies three major, sequential and embedded elements in successful school reform. It takes the two elements in the definition of social capital, ‘groups, networks, norms and trust’ and ‘for productive purposes’, and extends them to include a third element of learning.

The first element in the sequence relates to community. It relates to the community in terms of ‘How?’; how people are communicated with and treated. Success is more likely where people act rather than are always reacting, are empowered, involved in decision making through a transparent, facilitative and supportive structure, and are trusted, respected, encouraged and valued (see nested oval I in the Figure 8). It is a waste of time moving to the second element until such a community is established.

The second element concerns a community of professionals with a shared and monitored mission. A community of professionals involves shared norms and values including valuing differences and diversity, a focus on implementation and continuous enhancement of quality learning for all students, de-privatisation of practice, collaboration, and critical reflective dialogue, especially that based on performance data (oval II).

But a community of professionals can be static, continuing to do the same or similar thing well. The final element relates to the presence of a capacity for change, learning and innovation, in other words, a community of professional learners (oval III).

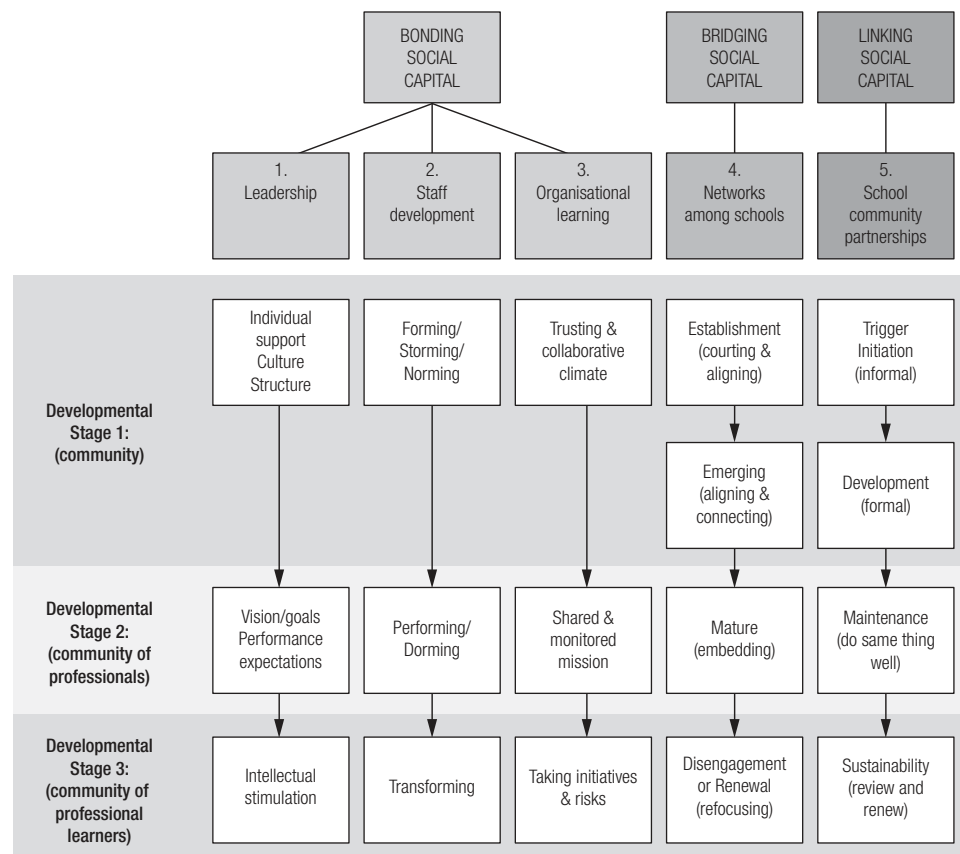
Each element of a CPL, and each transition between them, can be facilitated by appropriate leadership and ongoing, optimistic, caring, nurturing professional development programs. Also, each element is a prerequisite for the other – as the diagram implies, they are embedded within each other with only the emphasis changing. For example, when learning is occurring,

there is still a need to revisit the social community and the professional community, especially where there has been a change of personnel and/or a new governmental direction has been announced.

Using this analysis of bonding, bridging and linking social capital to understand the importance of, challenges to and developmental nature of professional learning communities can also assist in better translating the research into policy and practice. It can help us:

- understand better and be able to take action on the intricacies involved in moving a school, or part of a school, from where it is now to becoming truly a place of ongoing excellence and equity without those in schools being 'bowled over' by the demands for change that surround them
- target appropriate interventions to ensure more effective progression through the stages. In targeting interventions recognition will need to be given to the fact that it is a journey and that actions at one stage may be inappropriate, or even counterproductive, at another stage
- support the position that a school will need to be evaluated differently depending on the stage it has reached.

Figure 8: Developing communities of professional learners



Mulford 2007d

Concluding comments

Peter Hyman's (2005) comparison of the world of politics and schools in the United Kingdom reinforces much of the evidence in this review in respect of the dysfunctionality of bureaucracy, its 'faddiness', its demands for quick delivery and one-size-fits-all approaches to education and its leadership. On the last point he writes:

The biggest constraints on a school's creativity are the national curriculum and the timetable. The rigidity of both, one serving the other, leads to a school experience that is too formulaic. We want to end one-size-fits-all public services, yet we try to achieve this with one-size-fits-all policy-making. (p. 385)

(Hyman, 2005)

Changing the organisation of, and leading schools and school systems, so they become communities of professional learners is not for the faint of heart. It requires schools and their leaders to radically rethink how they operate. Many of the basic building blocks of traditional education, the school, the year group, the class, the lesson, the whiteboard and the teacher standing in front of a class of 30 children, could be seen as obstacles to the creation of communities of professional learners. All the resources available for learning – teachers, parents, assistants, peers, technology, time and buildings – will have to be deployed more flexibly than in the past (Leadbeater, 2005).

In order to achieve the 'what', or desirable products of schooling, many of which link closely to the school's purposes, the 'how', or processes, need to be consistent and they need to move schools from old to new paradigms. Unfortunately, as Leadbeater (2005) points out, some current education systems and schools may not be well placed to meet these new demands:

Our vast secondary schools are among the last great Fordist institutions, where people in large numbers go at the same time, to work in the same place, to a centrally devised schedule announced by the sound of a bell. In most of the rest of the economy people work at different times, in different places, often remotely and through networked organisations. In the last two decades private sector organisations have become more porous, management hierarchies have flattened, working practices have become more flexible, job descriptions more open and relationships between organisations, as suppliers and partners, more intense. The bounded, stand alone school, as a factory of learning, will become a glaring anomaly in this organisational landscape.

(Leadbeater, 2005, p. 6)

In Section 4 of this review paper, the role of the leader, especially in moving a school from old to new paradigms, is considered.

This section will focus on the inner embedded elements, titled 'School Leader' in the nested diagram of Figure 1. Sections 2 and 3 have reviewed the research literature and arguments relating to the other two outer elements in the conceptualisation being advocated. Given the current context and its implications for schools as well as for how schools are best organised for the future, what is the role of school leaders? Section 4 will target school leaders, first questioning, then rejecting the view that one type, or 'size', of leadership fits all (Leithwood & Riehl, 2003; Leithwood et al., 2004 & 2006). It will then turn to Australian research evidence on what it means to be a successful leader. Finally, it examines the issues related to leader recruitment and retention. These sets of evidence provide direction for success in school leadership and as such constitute the third leadership challenge.

Adjectival leaderships and does one size fit all?

Despite the complex, changing and challenging landscape and the implications of this landscape for schools and their leaders, as well as the scenarios for future schools and the evolving models focusing on schools as social centres and learning organisations, heroism continues to have a stranglehold on how many people think about leadership. This emphasis reflects in part how the myth of individualism has captured our thinking (Spillane, 2006). Advocacy of 'strong leadership' runs through much of the educational literature, conjuring up images of charismatic figures striding through the corridors of their schools, making their presence felt and, when moving on, leaving a depth of imprint behind them (MacBeath, 2006).

Yet 'strength' in leadership may imply something entirely different to this dominant image. As Collins' (2006) studies of successful corporations and social sector organisations in United States of America illustrate, strength runs both wider and deeper. Leaders in the successful organisations were described as diligent, modest and self-effacing, surprised to be singled out as effective leaders. Leaders in the social services sector, in particular, were good at getting others to follow them when they had the freedom not to do so.

Within the literature on school leadership there also remains an overwhelming endorsement of one-style-fits-all leadership, often accompanied with varying degrees of evangelical zeal. Promoted are a range of adjectival leaderships: 'democratic' leadership, 'strategic' leadership, 'breakthrough' leadership, and so on. While we know that leadership does not automatically take on a new meaning simply when a new adjective precedes the term, there remains a predominant view that the 'right' leadership style, if found, practised and implemented, in a strong, unequivocal manner will make all the difference (Harris et al., 2007).

Over the past three decades, debate over what is the most suitable leadership role for school leaders has been dominated by the three conceptual models of instructional, transformational and distributed leadership, to which has recently been added 'sustainable' leadership. The research literature is thus similarly dominated by work on these forms of leadership. Therefore this part of Section 4 begins with an examination of these four models, with a view to indicating the relative merits of each, but eventually suggests that only a combination of elements of all four will suffice, and that flexibility in application is essential.

Instructional leadership

The popularity of instructional leadership arose in North America during the 1980s along with the effective schools movement. As the top-down emphasis on school reform gave way to a restructuring movement with its concomitant professionalisation of schools in the 1990s, instructional leadership ceased to be the model of choice. But, at the turn of the century with its emphasis on accountability and performance standards in educational systems and attempts to answer the question 'How can we bring more powerful methods of learning and teaching to bear on the practice of schools?', there has been a refocusing on instructional leadership (Hallinger, 2003).

Hallinger (2005, 2007) has arguably done more than any other researcher since the early 1980s to put instructional leadership on the map, and he describes it as a passing fancy that refuses to go away. His reviews of the literature in the area suggest that increasingly principals see themselves as accountable for instructional leadership, regardless of whether or not they feel competent to perform it.

Three dimensions with ten functions, are proposed by Hallinger (2003) as being inherent in instructional leadership. They are collected together in Figure 9.

Figure 9: Dimensions of instructional leadership

- Defining a school's mission, comprised of the two functions of:
 - framing the school's goals
 - communicating the school's goals
- Managing the instructional program, comprised of the three functions of:
 - supervising and evaluating instruction
 - coordinating curriculum
 - monitoring student progress
- Promoting a positive school learning climate, comprised of the five functions:
 - protecting instructional time
 - promoting professional development
 - maintaining high visibility
 - providing incentives for teachers
 - developing high expectations and standards, and providing incentives for learning.

(Hallinger, 2003)

In his 2003 review of research on instructional leadership, Hallinger found over 125 mainly North American studies between 1980 and 2000. This body of research:

yielded a wealth of findings concerning antecedents of instructional leadership behavior (school level, school size, school SES), the effects of the school context ... (e.g., gender, training, experience), as well as the effects of school leadership on the organisation (e.g., school mission and goals, expectations, curriculum, teaching, teacher engagement), and school outcomes (e.g., school effectiveness, student achievement).

(Hallinger, 2003, p. 333)

In an update of his 2003 review, Hallinger (2005) found a further 29 studies which had used his Principal Instructional Management Rating Scale (PIMRS). These studies moved from a focus on schools in North America to those in Asia, Australia and Europe. This later review concluded the following:

- The most influential avenue of effects concerns the principal's role in shaping the school mission.
- The school context has an effect on the type of instructional leadership – the type of leadership that is suitable to a certain context, or to a certain stage of school development, may become a limiting or even counterproductive force in another context or stage of development.
- Instructional leaders also influence the quality of school outcomes through the alignment of school structures and culture, especially a climate of continuous improvement and high expectations in the school and by modelling rather than through direct supervision and evaluation of teaching.
- Leadership must be conceptualised as a mutual influence process, rather than a one-way process in which the leader influences others – the leader's behaviours are shaped by others and the school context.

On the basis of her review of the quantitative research literature between 1985 and 2006, Robinson (2007; & Robinson et al. 2007) suggests that the impact of instructional leadership on student outcomes is considerably greater than that of transformational leadership. Five dimensions of instructional leadership were found to have a particularly powerful impact on students:

- 1 establishing goals and expectations
- 2 strategic resourcing
- 3 planning, coordinating and evaluating teaching and the curriculum
- 4 promoting and participating in teacher learning and development
- 5 ensuring an orderly and supportive environment.

Relationship skills were found to be embedded in each of these five leadership dimensions. This finding was confirmed in the experiences of Boris-Schacter (2007) and the conceptualisation by Dinham (2007) in their conference papers. Drawing on his own school leadership research and the parenting research of others, Dinham argued the need for two fundamental dimensions in relationships – 'responsiveness' (warmth and supportiveness) and 'demandingness' (high expectations and structural capacity). Dinham sees authoritative leadership as high on both 'responsiveness and demandingness building'.

Despite this support for relationship skills and instructional leadership, an independent study into school leadership in England and Wales (PricewaterhouseCoopers, 2007) found that while the behaviours of school leaders have a greater impact on student outcomes than school structures:

many may have not embraced the people agenda as fully as has been the case in other sectors, [and] are too involved in the operation and delivery matters ... for example, unblocking toilets, filling dishwashers and supervising pupils before and after school.

(PricewaterhouseCoopers, 2007, pp. 5–6)

Duke et al. (2003) believe that while true instructional leadership has been an aspiration of principals for many years, the demands of the job have made it a difficult goal to realise. Studies they reviewed dating back 20 years showed principals express a preference for spending more time on instructional leadership, but analyses of daily activities have consistently shown that the time dedicated to it is limited. Hallinger (2007) notes the absence of any empirical evidence that principals spend more time directly observing and supervising classroom instruction than they did 25 years ago. Australian research on eight Western Australian (Wildy & Dimmock,

1993) and 131 Tasmanian (Mulford et al., 2007b) schools found that principals do not assume instructional leadership responsibilities by themselves, nor do they assume a great degree of responsibility for instructional leadership, especially in secondary schools. In particular, principals are perceived as doing little monitoring of teaching performance or providing recognition for high-quality teaching. In other words, they do not adopt some of the key Robinson dimensions of instructional leadership. This situation is worrying, given the Queensland School Reform Longitudinal Study finding that improved student outcomes occur when pedagogies are a priority of the school within a culture of care (Hayes et al., 2004).

Hallinger (2005, 2007) suggests that instructional leadership seeks to influence first-order variables in the change process, conditions that directly impact the quality of instruction delivered to students in classrooms. To the extent that teachers perceive principals' instructional leadership behaviours to be appropriate, they grow in commitment, professional involvement and willingness to innovate. In this sense, instructional leadership can itself be transformational (see also Marks & Printy, 2004).

Hallinger (2007) argues that the substantive similarities between instructional and transformational leadership are more significant than the differences. Both models focus on:

- creating a shared sense of purpose in the school
- developing a climate of high expectations, innovation and improvement
- providing staff intellectual stimulation and continuous development
- the leader acting as a model.

Transformational leadership

Transformational leadership is thought to provide a more powerful way for thinking about school leadership than competing approaches because it leads to an investigation of all workplace conditions that contribute to all school outcomes, not just instructional strategies.

The essence of transformational leadership is the growth of staff and enhancing their commitment by elevating their goals. The roots of transformational leadership can be attributed to Burn's (1978) Pulitzer-winning book entitled simply *Leadership*. Burns argued for leadership that engaged with others to raise intrinsic motivation, rather than the more common view of the day which involved an exchange relationship (transactional leadership) based on followers' individual, typically monetary, extrinsic interests. Following Burns' lead, Bass' (1998) formulation and survey-based measure of transformational leadership became the focus of attention over several decades. For Bass, transformational leadership consisted of the four dimensions of charisma, inspirational motivation, individualised consideration and intellectual stimulation.

Building on this historical generic leadership base, Leithwood (Leithwood, in press; Leithwood, Jantzi & Steinbach, 1999 et al., 2004, 2006; Leithwood & Jantzi, 2000, 2005; Leithwood & Riehl, 2003) has done the most to conceptualise and collect research evidence on transformational leadership in schools. Leithwood's early conceptualisation in the area (Leithwood, et al., 1999) identified six dimensions of transformational leadership:

- vision and goals
- culture
- structure
- intellectual stimulation
- individual support
- performance expectation.

In recent times, Leithwood (in press) has redesigned his work to include four major dimensions of transformational leadership in schools, each of which includes three or four more specific sets of practices as follows.

Figure 10: Dimensions of transformational leadership

- Setting directions
 - Building a shared vision
 - Fostering acceptance of group goals
 - High performance expectations
- Developing people
 - Providing individual support and consideration
 - Intellectual stimulation
 - Providing an appropriate model
 - Redesigning the organisation
- Building collaborative cultures
 - Restructuring
 - Building productive relationships with families and communities
 - Connecting the school to its wider environment
 - Managing the instructional program
- Staffing the program
 - Providing instructional support
 - Monitoring school activity
 - Buffering staff from distractions to their work.

(Leithwood, in press)

Research by Leithwood and by others based on Leithwood's work has demonstrated that transformational leadership contributes to valued teacher and student outcomes. In contrast to instructional leadership, transformational leadership seeks to generate second-order effects. It seeks to increase the capacity of others in the school to produce first-order effects on learning. For example, teachers in schools characterised by transformational principal behaviour are more likely than teachers in other schools to express satisfaction with their principal, to report that they exert extra effort and are more committed to the school and to improving it (Leithwood et al., 1999). In a review of 32 studies, Leithwood and Jantzi (2005) found additional effects of transformational leadership existed: on changed classroom practices, collective teacher efficacy and organisational learning, and on pedagogical or instructional quality.

Another more recent example, which used data from 3074 teachers in 218 primary schools in two large Ontario (Canada) school districts (Ross & Gray, 2006), examined the mechanisms through which the influence of transformational leadership contributes to teacher outcomes. This study found that collective teacher efficacy was a powerful mediator of commitment to school–community partnerships and a partial mediator of commitment to school mission and to the school as a professional community. Collective teacher efficacy is a specific belief in collective capacity, that the efforts of the staff as a whole will have a positive effect on students (Goddard, Hoy & Hoy, 2000).

Based on a series of workshops on the self-managing school held in different parts of the world, Caldwell's conference paper (2007) identified a concern with the complexity of leadership in strengthening and aligning resources to achieve school transformation. He found that intellectual (knowledge and skill), social (partnerships and networks), spiritual (moral purpose and coherence), and financial (capital resources) were required for transformation to occur, and that these forms of capital needed to be aligned with each other.

In Australia, from a questionnaire completed by 19 Victorian government school principals and 192 of their raters (regional personnel, other principals, school council presidents, teachers, school office staff), Gurr (2002) confirmed principals display transformational leadership. Raters, but not principals themselves, were more likely to perceive women using transformational leadership than men, although there were no differences by type and level of school. In a questionnaire study of 124 teachers from 12 Sydney metropolitan secondary schools, Barnett, McCormick and Connors (2001) investigated the relationships between principal

transformational and transactional leadership behaviours and teacher and school learning culture outcomes. It was found that only the transformational characteristic of 'individual concern' was associated with teacher satisfaction, willingness to give extra effort and favourable perception of leader effectiveness.

On the other hand, 'vision/inspiration' was found to have a negative association with student learning culture and excellence in teaching. It is suggested that a visionary/inspirational principal may actually distract teachers from concentrating on teaching and learning. In a follow-up study, Barnett and McCormick (2003) conducted interviews with principals and 11 teachers from schools where the principal has been perceived by teachers to exhibit the transformational leadership characteristics of individual concern and vision. The findings reinforce the relative importance of principals beginning their leadership by building relationships and showing individual concern, as opposed to starting with trying to build vision for the school.

In a questionnaire study involving 96 South Australian and Tasmanian secondary schools, over 5000 students and 3700 teachers and their principals, Silins and Mulford (2002a) established a series of relationships. These were transformational leadership, distributed leadership (the teacher and administrative team) and organisational learning (made up of a trusting and collaborative climate, a shared and monitored mission, and taking initiatives and risks with ongoing, relevant professional development), and student outcome measures of academic self-concept and participation in and engagement with school. Both the principals' transformational leadership style and the schools' distributed leadership contribute to organisational learning. Additionally, the higher the teachers' rating of the school as a learning organisation, the more positively teachers' work was perceived in their classrooms by their students. In turn, teachers' work had a strong influence on student participation and engagement. It was concluded that both principal transformational and teacher distributed leadership were indirectly related to teachers' work and student outcomes. This study is elaborated in the next sub-section.

These findings link with those indicated in Section 3 on communities of professional learners, especially in the conceptualisation of Leithwood's dimensions of transformational leadership as developmental, starting with individual support, culture and structure and then moving to vision/goals and performance expectations and finally to intellectual stimulation.

Despite these encouraging research findings, dissatisfaction with the implied 'top-down', 'power of one', charismatic, and 'super-principal' notions of principal-led transformational reform, especially in response to growing accountability demands, has led to a search for 'post-heroic' understandings of school leadership. A major focus of this search has been on distributed leadership (Ingvarson et al., 2006).

Distributed leadership

Despite much writing to the contrary, there is still a tendency to equate school leadership with the actions of the principal. Though, principals do have significant responsibilities for school leadership, it is also clear from the research referenced in previous sections of this review that the task of leading a school is now too complex and demanding a job for one person. Instead, it requires more distributed forms of leadership (Day & Harris, 2002; Harris et al., 2007). Improved schooling over time requires the enhanced capacity, not just of one person, but of many (Ingvarson & Kleinhenz, 2006).

The concept of distributed leadership originated in the 1980s with the work of March (1984) and Sergiovanni (1984) who each highlighted the virtues in an organisation's leadership 'density'. In their review of the literature covering the years 1996 to 2002, Bennett, Wise and Woods (2003) suggested that distributed leadership involves:

Figure 11: Dimensions of distributed leadership

- seeing leadership as an outcome of the dynamics of interpersonal relationships rather than individual action
- trust and openness as a basis of interpersonal relationships
- 'letting go' by senior staff rather than simply delegating tasks
- extending the boundaries of leadership, not just within the teaching community but to other communities within the school, creating a team culture throughout the school
- not mandating leadership into existence but growing it
- recognising expertise rather than formal position as the basis of leadership roles within groups
- seeing leadership as fluid rather than located in specific formal roles or positions, blurring the distinction between 'leaders' and 'followers'.

Bennett, Wise and Woods

But taking a distributed leadership stance involves much more than acknowledging that multiple individuals take responsibility for leadership work. It also involves understanding how leadership practice unfolds in the collective interactions among leaders, between followers and their context. Across both these approaches the literature has identified a number of concerns about distributed leadership and its implementation.

Distributed leadership as teacher leadership

Teacher leadership is seen as:

the development, support, and nurturance of teachers who assume leadership in their schools. Teachers who formally or informally acquire leadership positions can make change happen.

(Lieberman & Miller, 2004, p. 154)

This is a role-based and normative approach to leadership. The belief embodied in this research 'school' is that the more distributed leadership we have, the better.

Some school reform research has studied successful teams of teachers who have been placed in strategically important positions of influence during the change process (Lieberman et al., 2007; Louis, Marks & Kruse, 1996). Cambrun, Rowan & Taylor (2003) studied three different models of school reform – Accelerated Schools, America's Choice, and Success for All – looking particularly at how leadership is distributed in the school. They found that, even though these models were sometimes clearly prescribed, they required leadership from multiple and diverse members of staff. Based on the experiences of two Victorian beginning teachers, Loughran et. al. (2001) found that although the teachers worried about a lack of familiarity with the school teaching experience, problems with creating and maintaining student interest and mixed-ability classrooms and a limited support network, both took on leadership roles and became important sources of innovation for their colleagues.

Unfortunately, however, much of the literature on teacher leadership is simply teacher advocacy, bemoaning the lack of leadership opportunities for teachers and the silencing of teachers' voices. But there is more to teacher leadership than giving more leadership roles to teachers. York-Barr and Duke (2004) found that egalitarian values among teachers, a fear of being ostracised by colleagues, top-down management structures, lack of trust among staff, and concerns about being away from their students could also all militate against teachers presenting themselves as leaders.

Leithwood and Jantzi's (2000) examination of teacher leadership research yielded disappointing results concerning the positive influence of teacher leadership on classrooms and students, on student engagement with school or on student participation in the school. In their synthesis of two decades of research on teacher leadership, York-Barr and Duke (2004) found only one qualitative study of three primary schools that indicated a positive effect on students' learning as a result of the influence teacher-leaders had on the instructional practices of their colleagues.

A further two quantitative studies, involving 1800 teachers and 16,390 students, reported no statistically significant relationship between teacher leadership and student engagement.

Distributed leadership as interactions in situations

The second main approach to defining and understanding distributed leadership argues that since leadership is always distributed in schools, research should focus on the description of distributed leadership in schools. Spillane (2006) argues that distributed leadership is an activity, a social practice that stretches across many people and includes the situation in which leadership activity takes place. He uses the metaphor of two people performing a dance – the Texas two-step. The actions of those involved in the dance are important, but pre-eminent is the interaction between individuals, that is, the practice, or the activity that is the dance. This is function-based and is descriptive, pointing to all the leadership that is already there.

In this guise, distributed leadership involves three essential components. Firstly, leadership practice is the central and anchoring concern. Secondly, leadership practice is generated through the interaction of leaders, followers and their situation. Thirdly, the situation both defines leadership practice and is defined in and by leadership practice. This third situational component of distributed leadership has similarities with Hallinger's (2003) conclusion from the review of the literature on instructional and transformational leadership that the suitability or effectiveness of a particular leadership model is linked to factors in the external environment and to the local context of a school.

Some concerns about distributed leadership

Concerns have been raised in the literature about distributed leadership. These concerns centre on the fact that it can become all things to all people, the crucial need for the principal's support, the tendency for principals to overestimate their success and/or feel there are barriers to distributed leadership, and the responsibility to develop distributed leadership rather than to assume it will just happen.

The superficial appeal of distributed leadership lies in the ease with which it can become all things to all people. Various versions of distributed leadership have been associated with collaborative, democratic and team leadership, and the terms are often used interchangeably. However, while collaborative leadership is by definition distributed, not all distributed leadership is collaborative. It depends on how it is implemented in the context. Similarly, a distributed leadership allows for democratic leadership or autocratic leadership and team or non-team leadership (Spillane, 2006).

Research clearly demonstrates that distributed leadership in either of its forms will not occur unless supported by the principal. School leadership and school principalship are not one and the same, and studies such as the UK study *Variation in teachers' work, lives and effectiveness* (VITEA), involving 100 schools over a four-year period, have found that the quality of principal leadership, as well as relationships with colleagues, were major factors which influenced – positively or negatively – teacher commitment and their motivation to remain at or leave a school (Day et al, 2006).

Dinham (2005) found the quality of school principalship to be a key factor in 50 successful school sites (departments and teams) in 38 New South Wales secondary schools. School success was based on standardised test results, public examinations, value added measures and nominations from various stakeholders. From observation, interviews and document analysis, a set of seven principal leadership attributes and practices emerged. Core to success was a focus on students, learning and teaching. Other categories included elements of distributed leadership. In-depth case studies in five successful Tasmanian and nine successful Victorian schools reported by Gurr, Drysdale and Mulford (2005) also highlight the importance and contribution of the principal to quality education. Success was based on the reputation of the schools, the acknowledged success of the principal by peers and evidence of improved student outcomes over time. Factors that need to be taken into consideration in successful school principalship were again found to include distributed leadership.

Bezzina's (2007) case studies in New South Wales Catholic schools demonstrated that in sharing moral purpose and leadership and in supporting teachers as they strived for authentic learning, principals need to be quite explicit and provide opportunities for discourse about moral purpose. In supporting research, Ainley, Frydenberg and Russell (2005) noted that:

Principals play a key role in establishing ... cultures that are professionally stimulating for teachers ... increase teachers' sense of efficacy – their belief they have the capacity to make a difference to student learning – and thus raise teacher expectations ... as teacher engagement increases, so too does student engagement. There is an upward spiral of engagement for both teachers and students.

(Ainley, Frydenberg & Russell, 2005, p. 12)

Principals are clearly seen in these studies as the ones to create the conditions for teacher-leaders' success. Principals can facilitate opportunities for teachers to work together and help build ongoing collaborative structures that encourage teachers to take leadership. Principals can create the environment, the time and the opportunities for leadership to arise. By sharing responsibility for making decisions and exercising leadership, principals let the teachers know that their voice is important and that they are partners in making the school a place where students and staff, parents and community members can thrive (Mulford, 2003d).

Unfortunately, principals can also overestimate their success at distributed leadership. Recent Tasmanian research (Mulford, 2007c) on successful school principalship found that principals overestimate the effectiveness of reforms, compared with their teachers. More specifically, the PricewaterhouseCoopers (2007) study of 3260 principals, senior support staff team members and governing body members in schools in England and Wales found that while the vast majority of school leaders felt that leadership responsibilities were distributed, many teachers and support staff did not feel engaged and involved in a way that was consistent with distributed leadership in schools. Barriers to distributing leadership included persistence of the traditional 'hero-principal' perception among principals themselves and their staff, coupled with parental and community expectations of an ever-present, ever-available principal. In addition, a number of legislative, accountability and resource-related barriers were identified.

Another contribution arising from the distributed leadership research literature is its conclusion that successful school leaders do not just distribute leadership, that is, put more influence in the hands of people with expertise. They also adopt an explicit active approach to their responsibility to develop leadership capacity in their staff (NCSL, 2007).

Sustainable leadership

The term 'sustainability' was first coined in the environmental field by Lester Brown, founder of the Worldwatch Institute, in the early 1980s (Suzuki, 2003). He saw a sustainable society as one that is able to satisfy its needs without diminishing the opportunities for future generations to meet their needs. The term has recently been taken up and applied to educational leadership by both Fullan (2005) and Hargreaves and Fink (2003, 2006).

To maintain and extend gains and at the same time go deeper into more fundamental reform in the education system as a whole, Fullan (2005) argues the need for sustainable leadership, or what he calls 'system thinkers in action'. These are leaders who work intensively in their own schools and at the same time connect with and participate in the 'bigger picture' of the system and its context. Changing schools and school systems will require leaders who have experience in linking to other parts of the system. The principal acting just as an instructional leader in a school site is now too narrow a concept to carry the weight of the reforms argued for in this review.

Fullan asserts that sustainability is the capacity of an education system to engage in the complexities of continuous improvement in ways consistent with deep values of human purpose. He identifies the eight elements of sustainability as follows:

Figure 12: Fullan's eight elements of sustainability

1. public service with moral purpose – commitment to raising the bar and closing the gap of student achievement, treating people with respect and oriented to improving the environment, including other schools
2. commitment to changing context at all levels
3. lateral capacity-building through networks
4. new vertical relationships that are co-dependent, encompassing both capacity building and accountability, especially through self-evaluation
5. deep learning through exchange of good ideas and collaborative cultures of inquiry
6. dual commitment to short-term and long-term results
7. cyclical energising (because the set of strategies that brings initial success may not be the ones to take us to higher levels)
8. the long lever of leadership to put in place the seven previous elements simultaneously, and have them feeding/working on each other.

Fullan, 2005

Hargreaves and Fink differ from Fullan in seeing sustainable educational leadership and improvement as that which:

preserves and develops deep learning for all that spreads and lasts, in ways that do no harm to and indeed create positive benefit for others around us, now and in the future.

(Hargreaves & Fink, 2003, p. 694)

As a result of their review of corporate and environmental literatures of sustainability and sustainable development as well as their own interview, observational and documentary analysis research on eight North American high schools over three decades, they identified the following seven principles of sustainability in leadership and change in schools and school systems:

Figure 13: Hargreaves and Fink's seven principles of sustainability

1. Depth – it matters
2. Length – it lasts
3. Breadth – it spreads
4. Justice – it does no harm to and actively improves the surrounding environment
5. Diversity – it promotes cohesive diversity
6. Resourcefulness – it develops and does not deplete material and human resources
7. Conservation – it honours and learns from the best of the past to create an even better future.

(Hargreaves & Fink, 2006, pp 18–20)

Hargreaves and Fink remind Fullan of his famously oft-repeated assertion that:

you cannot mandate what matters to effective practice ... Governments may want to assert and enforce the opposite ... [but the] collateral damage on all other areas of sustainability is just too great.

(Hargreaves & Fink, 2006, p. 253)

In parting company with Fullan in respect of his support for a system focus through imposed short-term, standardised achievement targets, Hargreaves and Fink (2006, p. 251) make the important point that 'Sustainability is a meal, not a menu. You can't pick and choose. All the principles fit together. You have to eat all your 'greens'.

For sustainability to be practical, it is important to grasp not just what sustainability looks like but also how to achieve it. Fullan had failed to do this. Accordingly Hargreaves and Fink (2006) extended the literature in the field when they outlined their five action principles:

Figure 14: Hargreaves and Fink's five action principles

1. Activism – engage assertively with environment
2. Vigilance – monitor the environment to check that it is staying healthy and not beginning to decline
3. Patience – defer gratification instead of seeking instant results
4. Transparency – always be open to scrutiny and inspection
5. Design – create systems that are personalised for people's use and compatible with human capacity.

(Hargreaves and Fink, 2006, p. 256)

They concluded with an additional condition of sustainable leadership:

Sustainable educational leaders promote and practice sustained learning ... sustain others as they pursue this cause together ... sustain themselves, attending to their own renewal and not sacrificing themselves too much as they serve their community ... [and] stay the course, stay together, stay around, and stay alive.

(Hargreaves & Fink, 2006, p. 272)

Concluding comments on single adjective leadership

Time and professional isolation are major barriers to collaborative endeavours. One time dimension is the years change requires to be bedded down in a school before active leadership can be readily implemented. Dinham's conference paper (2007, p. 37) was on his research examining 50 teams in 38 New South Wales schools that achieved outstanding educational outcomes in Years 7 to 10. He found that 'the turning-around and lifting-up processes can take around six to seven years to accomplish'. Donaldson describes some major attributes of schools that contribute to what he calls a 'leadership-resistant architecture' reflected in a 'conspiracy of business' (2001, p. 11). There is, according to Donaldson, little time for the school leader to convene people to plan, organise, and follow through. This is a second time dimension. Contact and the transaction of business often take place 'catch-as-catch-can'. Opinion setting and relationship building in schools, he argues, are mostly inaccessible and even resistant to any principal's formal attempts to guide and structure the direction of the school. The larger the school, the more complex and impersonal the environment and the fewer the opportunities a principal was likely to have for individual relationship building or problem solving.

While one leadership style or approach may work well for some leaders, in practice most adopt a range of leadership styles. Successful leaders adapt and adopt their leadership practice to meet the changing needs of circumstances in which they find themselves. As schools develop and change, different leadership approaches will inevitably be required and different sources of leadership will be needed so that development work keeps moving. Any single one-size-fits-all or adjectival approach to leadership, or checklists of leadership attributes, is superficially attractive but will limit, restrict and distort leadership behaviour in ways not conducive to school development and improvement.

Despite the apparent singularity of much of the literature, in practice proponents of instructional, transformational, distributed and sustainable leadership have, over time, moved well away from the exclusivity of the one-size-fits-all, charismatic, heroic model of school leadership. The literature now incorporates an expanded understanding of leadership to include aspects of the context, of antecedent conditions, the school mission and culture, and also a reinforcing structure and instructional program. For example, Hallinger (2007) calls for an integrative model of educational leadership that links leadership to the needs of the school context and Leo (2007) focuses on the role of social context and socio-cultural factors on achievement motivation.

The next part of this section outlines two models based on Australian research that also take this broader, integrative approach to successful school leadership. They will serve to remind us that leaders need to be able to see and act on the whole as well as the individual elements

and the relationships between them over time. The work is developmental. The models will also remind us that a single input by a leader can have multiple outcomes and that therefore success will depend on which areas, and when, the educational leader chooses to spend time and attention. In addition, they will remind us of the need for educational leaders to strive to ensure that through others they have agency to ensure what happens is what they want to happen. Finally, the models are fully consistent with the advice from Sections 2 and 3.

Successful school leaders

At a time of massive and increased interest and investment in the educational leadership, one is struck by the small number of research studies on Australian educational leadership. For example, Robinson's 2007 review found only 24 quantitative research studies, published between 1985 and 2006, that provided evidence of links between leadership and student outcomes. Only one of these studies was from Australia. A recent review of our four main Australian education journals for the five years between 2001 and 2005 found only 44 articles in the area, representing only 10 per cent of the total number of articles published (Mulford, 2007a).

Possibly, publication is taking place outside the four journals examined, but even here the evidence is not encouraging. A recently commissioned background paper for Teaching Australia is illustrative. For this paper, Watson (2005) undertook a scan of research findings on quality teaching and leadership. Of the 160 references cited, approximately 45 are from Australian sources, 20 based on Australian research and only four on Australian research on educational leadership. Other recently commissioned background papers on a leadership framework (Australian Principals Associations Professional Development Council (APAPDC), 2003) and school effectiveness (DEST, 2004) have produced similar findings, with Australian material only constituting between 13–30 per cent of material used.

These disappointing results indicate the low priority in this country for the funding of educational research and, in particular, research in the area of educational leadership. In the last five years (2002–06) just 3 per cent of Australian Research Council (ARC) funding went to the field of education. In turn, less than 5 per cent of all grants going to the field of education went to educational leadership and related areas. Based on a summary of ARC documentation in Mulford (2007a) it appears that the average annual amount invested by the ARC in educational leadership research in Australia over the last five years has been in the order of only \$52,000.

The quality of research evidence

In addition to the paucity of research, much of the research is of questionable quality. Little of it covers more than one state, few are longitudinal and many rely on very small and unrepresentative samples. There is little resulting conceptualisation and/or model building. In addition, there seems to be an aversion to building on or referencing previous research, preferring material of questionable relevance from other countries. The ability to extrapolate to larger populations, policy and practice from such a database is severely limited.

Given the shortfall in strong Australian research, what evidence do we rely on to inform policy and practice in Australian educational leadership? Despite its weaknesses, we must rely on overseas researchers and commentators. For example, Bates (in press) has explored the sources currently employed in 53 courses offered in 15 key Australian educational institutions and found little emphasis on Australian research on educational leadership and little reference to major Australian authors of previous decades. Non-Australian material is not always research- or evidence-based and may have very dubious value in the Australian context. Clearly the 'golden age' of school leadership described in the introductory section to this review now needs to be matched by quality research in our own country. Only then can researchers in the area get close to meeting their central tasks of helping inform what works best, for whom, and under what conditions in Australian schools.

The ACER Research Conference and this review constitute both a recognition of the need for better and more focused Australian research and a contribution to the field. When looking for criteria for quality evidence, the current and growing emphasis on evidence-informed policy and practice is as good a place as any (OECD, 2007). However, if one is seeking to establish a useful evidence base for school improvement then one also needs to establish the value of the evidence presented. There are a number of ways of judging the quality of evidence, including its integrity, predictive validity and clarity of definition in the variables employed.

The purpose of this next part of Section 4 is to examine the issues of the complexity and predictive validity of evidence. It is necessary that the research evidence be complex enough to come close to the reality faced by schools for only then will the evidence be such as to improve learning in schools. Two maps, or models, will be presented for consideration that better reflect this complexity and predictive validity in Australian schools than previous work in the field.

These models are the outcome of the researchers' attempt to reflect the complexity and thus the reality of practice through the use of qualitative and/or quantitative research methodologies. Of necessity, both methodologies involve a great deal of data reduction. What we need to bear in mind when examining the results of either methodology are answers to questions such as:

- Are the results/models sufficiently comprehensive?
- Do the results/models describe/explain the situation in schools by clearly articulating both the variables and the relationships between them?
- Do the results/models help understand/predict appropriate outcomes and practice?

These questions will be returned to after the examination of the two models.

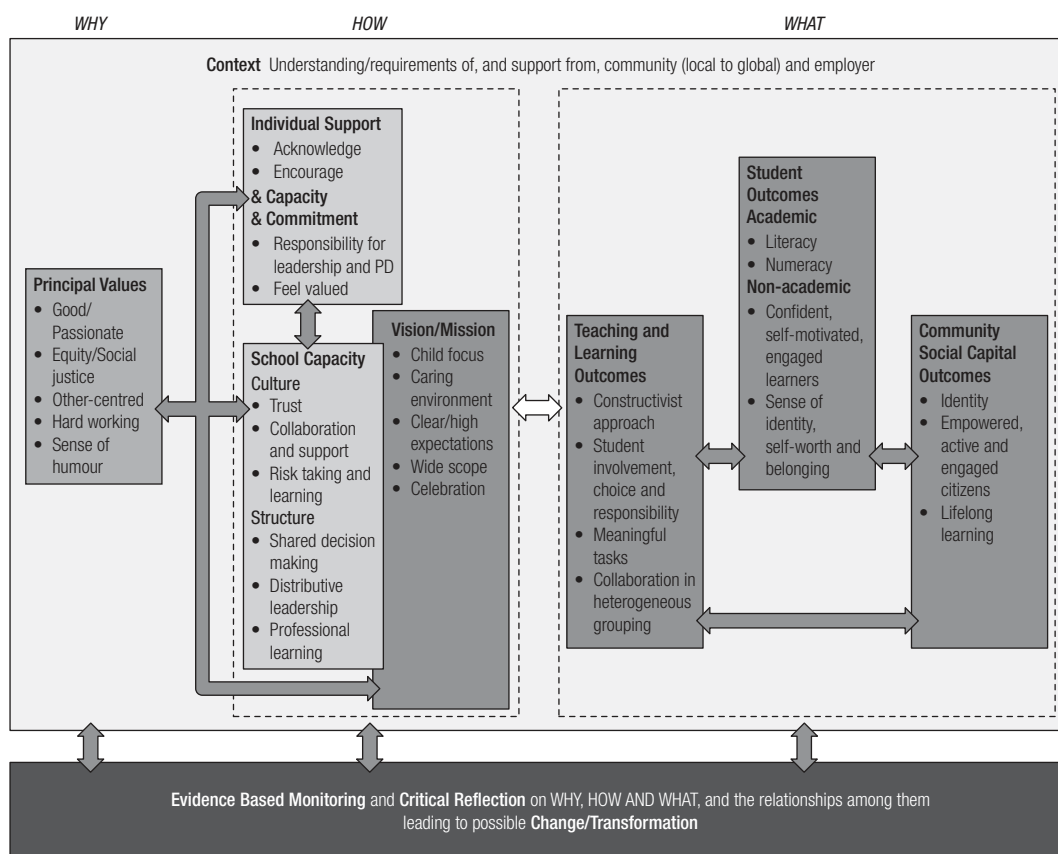
Leadership for organisational and student learning

The two models are derived from research based in each of the two methodological traditions. The first is a model of successful school principalship, based on the evidence from qualitative in-depth case studies of five best-practice Tasmanian schools that constitute part of an eight-country exploratory study: the Successful School Principals Project (SSPP) (Gurr et al., 2005; Mulford, 2007b). The second is a model of Leadership for Organisational Learning and Student Outcomes (LOLSO), based on quantitative survey evidence from over 95 principals, 3700 teachers and 5000 15-year-old high school students in South Australia and Tasmania. Details of the samples, methodologies and related literature reviews are presented in Silins and Mulford (2002a & b), Silins and Mulford (2004), Silins, Mulford and Zarins (2002 & 2004), and Mulford (2003 a & d) has analysed the application to policy of these data. Both models incorporate various elements of all the adjectival styles previously described in this review's Section 4.

Successful School Principals Project (SSPP)

Findings from the SSPP case studies suggest that successful school principalship is an interactive (see the arrows in Figure 15), reciprocal and evolving process involving many players, which is influenced by, and in turn, influences the context in which it occurs (see Figure 15). Further, the findings demonstrate that successful principalship is underpinned by the core values and beliefs of the principal. These values and beliefs inform the principals' decisions and actions regarding the provision of individual support and capacity building, and also of capacity building at the school level, including school culture and structure. The principal's core values and beliefs, together with the values and capacities of other members of the school community, feed directly into the development of a shared school vision that shapes the teaching and learning, student and social capital outcomes of schooling. To complete the proposed model is a process of evidence-based monitoring and critical reflection, which can lead to school maintenance, change and/or transformation.

Figure 15: Successful school principalship model



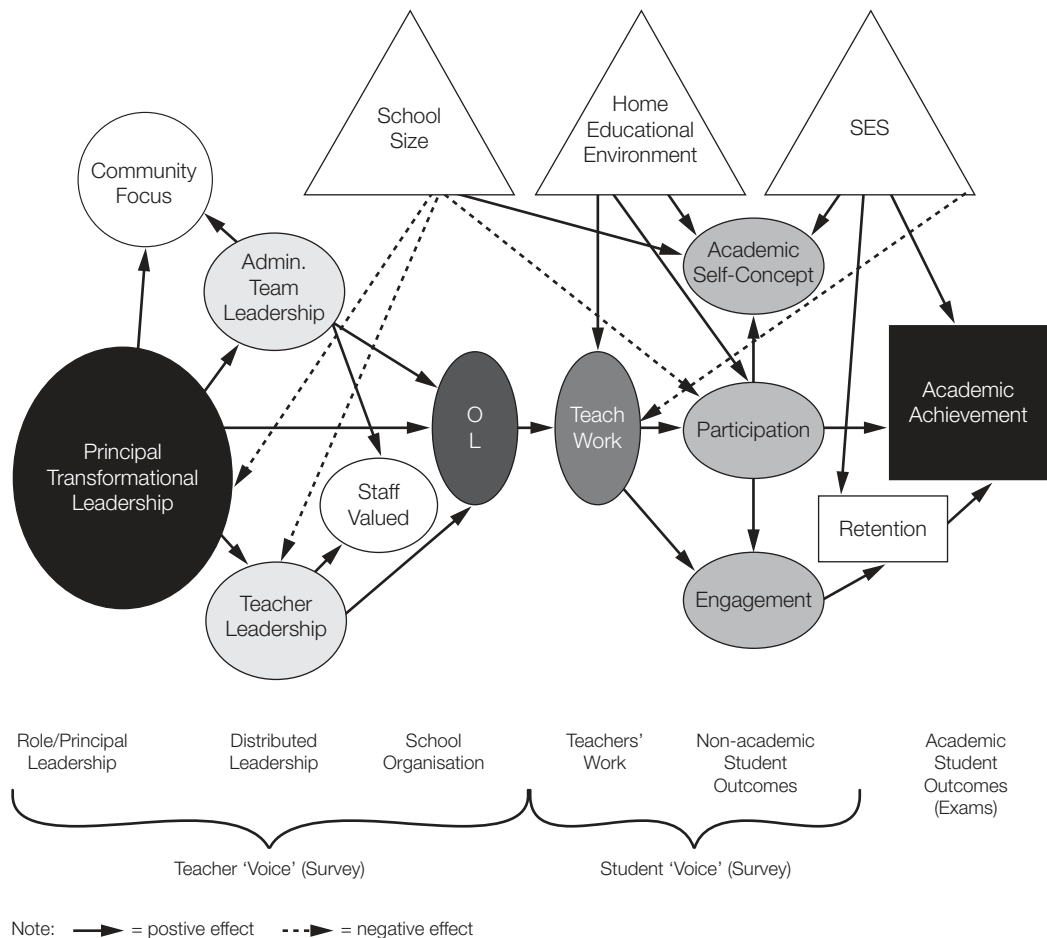
Mulford, ACER 2007 Research Conference paper

To 'read' the model in Figure 11, the context and the successful school principal's values form the 'why' of the model; the individual support and capacity, school capacity and school vision/mission forms the 'how'; and the teaching and learning, student and community outcomes forms the 'what'. The bottom set of arrows represent the evidence-based monitoring and critical reflection on the 'why', 'how' and 'what' and the relationship between them, and this results in the final section of the model, the 'how do we know' and 'do we need to change' element.

Leadership for Organisational Learning and Student Outcomes (LOLSO)

The LOLSO research clearly demonstrates the complexity of school leadership, with evidence for the construction of the model coming from different sources. Data on principal leadership, distributed leadership, schools having a community focus, staff feeling valued and organisational learning were all generated from the principal and teacher survey ('teacher voice'). Data on home educational environment, teachers' work, and student academic self-concept, participation and engagement (the non-academic student outcomes) were all generated from the student survey ('student voice'). School size and SES and student retention and academic achievement data were gleaned from school and/or departmental records. Figure 16 reveals the model constructed as a result of this LOLSO research.

Figure 16: The LOLSO model



Mulford, ACER 2007 Research Conference paper

It was found, however, that both positional and distributive leadership are only indirectly related to student outcomes. Organisational learning (OL), involving three sequential stages of trusting and collaborative climate, shared and monitored mission and taking initiatives and risks, supported by appropriate professional development, was found to be the important intervening variable between leadership and teacher work and student outcomes. That is, leadership contributes to OL, which, in turn, influences what happens in the core business of the school: teaching and subsequently for learning. It influences the way students perceive that teachers organise and conduct their instruction and their educational interactions with, and expectations of, their students. This is the indirect effect.

Students' positive perceptions of teachers' work directly promoted their participation in school, their academic self-concept and engagement with school. Student participation is directly and student engagement indirectly (through retention at school from Year 10 to Year 12) related to academic achievement. School size, socioeconomic status (SES) and, especially, students' home educational environment make a positive or negative difference to these relationships as indicated by the arrows in Figure 16. However, this was not the case in terms of teacher or leader gender or age, having a community focus or student academic self-concept.

How comprehensive are these models?

The SSPP case study research confirms previously published claims that successful school principalship makes important yet indirect contributions to school outcomes. However, the research suggests that the contribution occurs in a more complex way and with a wider range of outcomes than has been suggested by much of the previous research. Leadership in each of the case study schools was strongly influenced by the principals' core personal values and by the development of a shared organisational values base. Although these core values were similar across school sites, the internal and external school context influenced the way in which they

were translated into school practices and procedures. Successful principals also displayed a core set of basic leadership skills regardless of school context, including developing a shared vision, individual capacity building and organisational redesign. All principals, but particularly those from low SES schools, promoted equity plus social justice through the creation of strong school communities and socially just pedagogical practices, and by focusing on the development/reinforcement of a strong learning culture within the school community.

One of the most powerful emerging concepts operating here, as was argued in Section 3, was that of 'deep' democracy. The principals of successful schools practised respect for the worth and dignity of individuals and their cultural traditions, reverence for, and proactive facilitation of, free and open inquiry and critique, recognition of interdependence in working for 'the common good', commitment to the responsibility of individuals (teachers and students) to participate in free and open inquiry and the importance of collective choices and actions being taken in the interest of the common good (Furman & Shields, 2003).

Within the first model, a start has been made on describing the nature of each characteristic involved in successful school principalship. However, more needs to be done, especially in fleshing out these descriptions; for example, to clarify the ethical, moral and spiritual dimensions of the principal's values.

Even though the survey-based LOLSO model accounts for some 15 variables and their interactions, questions could be raised about its relevance for other than Australian high schools. More specifically, it is notable that LOLSO places much less emphasis on the organisational, managerial or strategic than has previously been the case in most of the literature. This is not surprising given that there is very little evidence in the research literature to link such an emphasis to either school organisational learning or student outcomes. There is more important work to be done in this area of inquiry.

Explanatory power of the models

There is an important question to be asked about the models: How accurately do the models explain the situation in schools through clearly identifying the key variables and the relationships among them? The preliminary SSPP model of successful school principalship highlights:

- the embedded/contextual nature of principal values, individual and organisational capacity and school mission and outcomes
- the interactive nature of principal values, individual and organisational capacity and mission on the one hand and outcomes on the other
- the broad interpretation of outcomes, and their interaction with each other, to include teaching and learning, student academic and non-academic outcomes and community social capital
- the separateness of evidence-based monitoring, implying that professional educators have a responsibility to not just accept, for example, what an employer and/or community may expect, but to critically reflect and, if necessary, act on all aspects of the model, including the context, and their interrelationships.

The LOLSO results indicated similar findings, and also found that whether the principal was male or female and the teachers' years in education, age and gender were not factors promoting leadership or OL. However, school size does make a difference. The LOLSO results indicated that the larger metropolitan schools with over 900 students did not provide the environment most conducive for principal transformational and teacher distributed leadership or for student participation, although having a larger school was positively related to students' academic self-concept. The results add weight to the research extolling the advantages of smaller schools. It was concluded by the researchers Mulford and Silins (2002a & b) that the successful school principalship model (as currently represented in Figure 12) needs further work on the congruence and typical sequence among the characteristics, the issue of the ability of successful principals to manage tensions and dilemmas within and between the characteristics, and their ability to sustain balance among the characteristics over time.

The LOLSO model has identified the cumulative nature of organisational learning and allowed researchers to speculate on a similar sequence in the characteristics of transformational leadership. Among its other findings, LOLSO confirmed the earlier argument that, as a response to the contextual forces, the reliance on academic performance as the sole measure of a school's success is particularly narrow and short-sighted. As was argued in Section 3, there is great need to broaden what counts for 'good education' and to include measures such as student perceptions of their school and teachers plus their own performance, self-concept and engagement.

Another important contextual factor was found to be the socioeconomic status (SES) of the school. SES had its expected positive relationship with student academic achievement, retention and academic self-concept. Interestingly, the LOLSO study found that SES had a negative relationship with student perceptions of teachers' work (the higher the SES, the lower the perceptions of teachers' work). On the other hand, the students' home educational environment (having a space and aids for study at home, as well as having discussions and help with school work and conversations about world events) had a stronger relationship than SES to students' academic self-concept, but also a strong positive relationship with students' participation in school and students' perceptions of teachers' work. This is an important finding because home educational environment is more amenable to improvement through school intervention, at least in the short term, than SES.

Another outcome of both transformational principal leadership and distributed administrative team leadership was found to be that the school was more likely to have a strong community focus. In such schools, teachers perceive the school as having productive relations with the community and school administrators are sensitive to and work actively with the broader community. However, no link was found between having a community focus and either OL or improved student outcomes. Some may find the lack of a direct link between a school having a community focus and either organisational learning or student outcomes is problematic. On the basis of the LOLSO results, if a choice had to be made between working with and being sensitive to the community and improving home educational environments, the latter will have more direct and immediate 'pay-off' for student outcomes. Of course, having a strong community focus may be important for other reasons including the development of social capital in the community, especially in poor inner-city and rural communities.

Finally, it is worth noting the perhaps controversial finding that students' academic self-concept was not related to their academic achievement. Even though academic self-concept did not link to other student outcomes, including academic achievement, it does not follow that academic self-concept is not an important student outcome. As indicated earlier in Section 3, student self-concept has been shown to be related to later life successes.

Models' predictive usefulness for planning outcomes and practice

In broad terms, the evidence from the SSPP and LOLSO research projects shows that there are three major, sequential and aligned elements of practice in leadership for improving student learning.

The first element relates to how people are communicated with and treated. It is about community. Success is more likely where people act rather than are always reacting, are empowered, involved in decision making through a transparent, facilitative and supportive structure and are trusted, respected, encouraged and valued.

The second element concerns the development of a community of professionals. A community of professionals involves shared norms and values, including valuing difference and diversity, a focus on implementation and continuous enhancement of learning for all students, de-privatisation of practice, collaboration and critical reflective dialogue, especially that based on performance data.

The final element relates to the presence of a capacity for change, learning and innovation. This closely relates to the second element, the community of professional learners.

Each of these three elements is ongoing, with just the emphasis changing. Also, each element and each transition between them is facilitated by an appropriate ongoing, optimistic, caring,

nurturing professional development program (for problem-based learning materials developed from the LOLSO research, see Mulford et al., 2004).

Concluding comments on successful school leaders

If we are to fully understand and take action on the leadership challenge of improving learning in schools, we need to move not only to multiple forms of leadership but also to a more complex set of relationships between these leaderships and a range of other variables.

It will be noted that SSPP and LOLSO also place much less emphasis on the organisational, managerial or strategic than did the earlier research literature. This has resulted from the realisation that there is very little evidence to link such an emphasis in a positive way to teacher, school or student outcomes (Mulford, 2003c).

Leadership is more nuanced and subtle than previously portrayed (Mitchell & Sackney, 1998; Mohr & Dichter, 2001; NCSL, 2007). It may be that we need to take the models further by having a set of models representing different groupings of variables and their relationships and sequences, for example for high-poverty, rural, inner-city, primary and/or public schools.

It can be argued that when lost in the complex, 'swampy' ground of schools and their environments, a simple compass may be more helpful than detailed road maps such as the models in Figures 15 and 16 linking leadership with improving learning in schools. However, in an age of 'global positioning systems' and models based on quality evidence that are complex enough to come close to the reality faced by Australian schools and can be used predicatively in that they link leadership and student outcomes, such a simplistic response does education and its continued reform a deep disservice.

Issues of leader recruitment and retention

Issues to do with leader recruitment and retention are the subject of the next part of Section 4. It includes a review of research on succession planning, pre-retirement leaders, leadership of small schools and schools in high-poverty communities, principals' autonomy and responsibility, especially their involvement in evaluation and accountability, leader professional learning and standards, and new models of shared leadership.

Succession planning

Australia, like other western countries, is facing the imminent retirement of a large proportion of principals and other school leaders from the post-war 'baby boomer' generation. There is evidence about the reluctance of experienced teachers to apply for leadership positions and a reduced (due to low population growth) cohort of teachers from which to select future leaders. These factors represent a major challenge in identifying and developing the next generation of school leaders (for the replicate situation in the United States of America, see Boris-Schacter, 2007). To further complicate the issue, in some states, due to the particular incentives built into superannuation schemes and difficulties in transferring the schemes from one state to another, there are financial incentives for school leaders to retire at around 55 years of age, further reducing the cohort of available candidature for principalships (Anderson et al., 2007).

Aspirations to principalship are not high and are diminishing. For example, in Lacey's (2003) survey of over 1300 Victorian government teachers and principals, only 12 per cent of respondents aspired to be principals and a further 12 per cent aspired to be assistant principals. Explanations for the recruitment difficulties included principal continuing incumbency, perceptions of the arduousness of appointment and selection process, and perceptions of principal intensification of work, accountabilities, stress and disengagement from their school. Work intensification relates specifically to such factors as devolved school management and standards-based accountability frameworks.

School leadership, like teaching, can be 'greedy' work (Gronn, 2003). There is rarely a time when leaders feel their work is finished.

Alongside the never-endingness of their tasks goes the fact that the work also involves emotional labour. The work is highly interpersonal, requiring empathy and sensitivity towards others. [Principals] report that staffing issues and dealing with individuals figure large ... dealing with negative members of staff came high on [principals'] list of least rewarding factors. Senior leaders' work is often concerned with caring for and protecting vulnerable children and young people.

(NCSL, 2007, p. 10)

Boris-Schacter (2007) found principals' lives in the United States of America were a balancing act in which they perpetually weighed the relative importance of three pairs of tensions:

- instruction and management
- work and personal lives
- society/community expectations and individual priorities.

The Australian teacher cohort currently in its early 40s is very small numerically, due to the low recruitment of the 1990s. As the generation of prospective principals, the members of this 'younger' cohort will become precious, but will have good prospects of becoming educational leaders. On the other hand, their elevation to the principalship means they will be in the role for an extended period of time which could be a considerable burden to have them carry.

The time it takes to become a principal is now too long for the 'bulge' in the teacher population to be ready to take up the vacancies anticipated in coming years (NCSL, 2007). This situation calls for urgent attention to be paid to school leadership succession planning. It may be that there needs to be more fast-tracking of those with leadership potential. This will require early identification of talent, with mentoring and coaching of these individuals; providing them with many more opportunities to lead – in their own and other schools – to broaden their knowledge of school contexts and types and to increase the number of principal role models they can draw on (NCSL, 2007).

Succession planning is not simply a quantitative issue. It is vital that education systems ensure there is a supply and flow of high-quality candidates for school leadership positions. Attending to quality also means tracking over time so that there is the right mix of leaders (for example, based on gender and ethnicity) and that the recruitment and appointment procedures improve.

Succession planning also means being aware of the career planning challenges created by the appointment of a large proportion of young school leaders who, if current career structures were to be retained, would be likely to be in leadership for a very long time. It may be that the evolving shared and rotating leadership models examined later in this review need to be examined sooner rather than later.

While nationally there needs to be a campaign to 'talk up' principalship (the overwhelming majority of principals are very positive about their work), there is also a local dimension to be recognised. The UK's National College for School Leadership has found (NCSL, 2007) that this national challenge will be best dealt with by local solutions developed by groups of schools taking responsibility for developing their talent pools and career paths (NCSL, 2007). These local solutions could include maximising the benefits of using principals who are close to retirement in a range of different supporting roles.

Leadership in pre-retirement

Watson (2007) has explored the dimensions of the crisis in school leadership in Australia and concludes that it is an indicative rather than a definitive shortage and that the level of interest in the job varies between schools, especially for rural schools and schools with lower levels of student achievement.

Continuing quantitative research from the Successful School Principals' Project (SSPP) (Figure 15), including surveys of Tasmanian government school principals and their teachers (Ewington et al., in press; Mulford, 2007c; Mulford et al., in press a, b, c), confirms other state and national cohort demographic trends which indicate the large proportion of principals in the later stages of their career, with 18 per cent aged 55 years or over and another 30 per cent being aged 50 to 54 years. Also consistent with the national data is the high proportion (73 per cent) of the pre-retirement principals who are male and the small cohort (17 per cent of all teachers) from which the next generation of principals are likely be chosen.

Figures concerning pre-retirement principals can be seen as a threat or an opportunity. The numbers serve to underline the need for much greater attention to be paid to the growing and future shortages of principals and their replacements. This is a significant opportunity for education systems to consider the skills, accountability frameworks and support structures necessary for school leadership in the future. One aspect of this shortage, but one not well developed in the research literature or in policy, centres on the pre-retirement principals themselves. Who are they? Do they continue to make a positive contribution to their schools? How can they best be used in the final years of their career?

The continuing SSPP research makes a start at responding to such questions. Results from the continuing SSPP study (Mulford et al., in press a) confirm that pre-retirement principals feel ambiguity, conflict and stress in the role more acutely than other principals. For example, it was found that the pre-retirement principals were more likely to feel the tensions when compared to other principals in relation to the perceived lack of support from their employer when making changes in their work. Despite these tensions and dilemmas, and consistent with the Queensland findings from Cranston and Ehrich (2002) and the Victorian Department of Education and Training (2004), most principals have 'never' considered resigning.

The continuing SSPP study (Mulford et al., in press b) results also suggest that pre-retirement principals, when compared with other principals, are less likely to:

- believe they make a difference
- act as a role model
- facilitate communication
- have high expectations
- be self-reflective.

Given the more positive results detailed below by Mulford et al. (in press c), the reasons for these findings are difficult to explain. It may be that the outcomes of previous research, which suggest pre-retirement principals are more likely than other principals to be confident, mature, calm, and 'wise' and that they are less likely to be bound by constraints, result from a more modest or realistic appraisal of their effects on others and their schools.

Some support for this explanation can be found in the smaller differences between principal and teacher mean scores for pre-retirement principals when compared to other principals on items having to do with 'making a difference', 'acting as a role model', 'high expectations' and 'being self-reflective'.

Further support for this 'non-self-promoting' explanation can be found in the open-ended part of the principal survey where principals were asked to respond to the item 'What conditions do you know about in your school that you do not talk about but if you did might lead to school improvement?'. As the following two representative replies indicate, the pre-retirement principals were very open and honest about what was occurring in their schools:

I do not know of anything that might lead to school improvement that I would not share with my staff and parent community.

I would talk about any issue that I thought would lead to school improvement.

(Mulford et al. in press a)

Another possible explanation for the findings that pre-retirement principals scored lower than other principals on items to do with initiating action (make a difference, role model, facilitate

communication) is that the pre-retirement principals may be more likely than other principals to realise that success involves the whole staff not just the principal (that is, they responded with 'we' rather than 'I'). This position is congruent with the finding, reported below, that pre-retirement principals are more likely to distribute leadership than other principals.

Further, the continuing SSPP analysis (Mulford et al., in press b) suggests that pre-retirement principals, when compared with other principals, are no different in terms of their:

- willingness to change
- promoting the school and initiating new projects
- being committed, passionate, determined, courageous, optimistic
- being collaborative and empowering
- adoption of evaluation and accountability strategies.

These results contradict findings from other research (Macmillan, 1998) which indicated that pre-retirement principals, when compared to other principals, are more likely to be rigid and autocratic, disenchanted with and withdrawn from work, and 'tired and trapped'. This research suggests the stereotype is no more than that.

Finally, the ongoing SSPP findings (Mulford et al., in press b) suggest that pre-retirement principals, when compared with other principals, are more likely to:

- distribute leadership
- not feel the tension between the need to be present at school and to participate outside the school
- believe students are both in a safe environment at school and are more able to solve conflicts through negotiation.

These findings confirm other research indicating that pre-retirement principals, when compared to other principals, are more likely to have a strong work ethic, to consult widely and to have a strong social consciousness.

Taken together, the Mulford et al. (in press a) results confirm that the pre-retirement principals continue to be a committed and valuable resource. Given this finding, it may be that more needs to be done for (and with) principals, in terms of the planning of their career paths, not just at the time of transition to retirement. Is it wise career planning that once appointed to a principalship a person will always be a principal? The traditional and hierarchical approach to educational careers may need to be challenged, with people more able to move in and out of positions at the classroom, school and system levels (Brooker & Mulford, 1989). Shared principalships, possibly combined with mentoring roles would appear to be obvious concepts to be explored by schools and systems (NCSL, 2006e).

The current focus in the United Kingdom on system leadership provides another example of being able to move in and out of schools (see later in this section). System leadership focuses on the school principal working in full service schools in areas such as childcare, parenting support and other services (for example, speech therapy, mental health services), in federations or clusters of schools and/or outside the traditional school networking with a range of other agencies and institutions (NCSL, 2006a, b, c, & d; PricewaterhouseCoopers, 2007). But it is too soon to know whether these developments can provide no more than just another higher position in the traditional career hierarchy or whether they will be taken up as a real opportunity for career flexibility by existing and potential principals.

At a time of a large and increasing proportion of principals in late career, it would make for more sensible human resource practice, both for the principals themselves and their education systems, to give greater research and policy attention to the issue. The 'work to 55, dead at 60' belief among some principals needs to be challenged. Superannuation schemes need to be restructured and made more cooperative so that flexible career options can be put in place. With education systems undergoing major and continuing change, while at the same time suffering potential shortages of effective school leaders, it is time to re-examine educational career structures, especially for those principals approaching retirement.

Leadership of small schools

Small schools of 200 or fewer students comprise between a quarter and a third of all schools in Australia, most of them in remote or rural locations. Such schools usually constitute the first principalship and pose unique problems for both leader preparation and encouraging the incumbents to remain in that principalship. The ongoing SSPP research in Tasmania (Ewington et al., in press) has confirmed contextual demands that result in role conflict for teaching principals. This role conflict arises from the need to provide both strong and shared leadership, effective use of staffing and other resources while working collaboratively with staff, being responsible for decisions made by or with others, and being responsive to local needs within a framework of system priorities.

Ewington et al. (in press) has found that principals of small rural schools are mobile, staying for short periods of time (often two years or less), and a higher proportion are female (females represented 59 per cent of principals in schools of 100 students or less, compared to 43 per cent for all schools) with those in the smallest schools either being in a younger or older age group. Even though small schools are likely to have extensive involvement in the community, principals of small rural schools of 100 students or less were found to be twice as likely to report negative relationships with the local community as other principals. This is an area requiring further research which may confirm Michael's (1996) and D'Arcy's (1995) research that showed that women find it especially difficult taking up the principalship of rural/remote schools because parent and community members still view the role of principal through the stereotype of an authoritarian married male. It might also be that the older age group of female principals, while they are experienced teachers, find the (late) change to leadership and administration a challenge.

Role conflict issues are compounded by the number of local committee memberships for a principal of a small rural school of 100 or less students, which is the same, if not greater than expected for a principal of an urban school. In addition, they would be expected to attend the same number of combined cluster and branch meetings. At the time of the Ewington et al. (in press) study, building reciprocal relationships with the community was further compounded by the demands of the implementation of system-wide structural changes and a new curriculum (the Essential Learnings – Tasmanian Department of Education, 2005). Principals are required to take on increasing numbers of new, centrally mandated roles.

Given these multiple demands, combined with relatively high teaching loads, it is little wonder that, for the principals in the Ewington et al. (in press) study, building reciprocal relationships with the local community was found to be very difficult, particularly by principals of rural schools of 100 or less students. The teaching/administration 'double load phenomenon' found in the small amount of previous research in the area was confirmed.

Ewington et al. (in press) have found that where there were statistically significant differences, as follows: principals of small rural schools of between 101 and 200 students had, in almost all cases, a more positive perception of the school and their contribution to its success than did principals of small urban schools of between 101 and 200 students and principals of small rural schools of 100 or fewer students. Principals of small rural schools of less than 100 students and principals of small urban schools of between 101 and 200 students tended to have similar perceptions. But, there were differences: perceptions of principals of small rural schools of 100 or fewer students were lower than principals of small urban schools of between 101 and 200 students. In combination, these results lead to the conclusion that factors other than rurality may be required to explain the differences. The open-ended responses lead the researchers to conclude that the combination of the 'double load phenomenon' and the increasingly mandated requirements for the implementation of growing amounts of Department of Education policy is the more likely explanation. As Departmental policy became increasingly centrally mandated, the misconception of small schools being a 'scaled down' version of larger schools grew, in particular, for principals of small rural schools of 100 or less students.

In those areas of Australia where the distance between schools allows them to meet on a regular basis one positive approach to helping resolve issues facing small schools may lie in greater use of federations and/or clusters of schools. Further research is required on this approach.

Leadership of schools in high-poverty communities

Despite the questions which may be raised about the effectiveness of schools as institutions serving those in high-poverty communities, as well as problems in labelling a school 'high-poverty', evidence has emerged of high-performing schools in high-poverty communities. A common characteristic of these schools is successful, high-performing leadership.

In the ongoing SSPP research, Tasmanian school success measures were derived both from principal and teacher perceptions of success and actual student results. The SSPP survey contained a number of sections seeking principals' and teachers' perceptions of their school's success. One section of the survey contained items on student literacy, numeracy, technological, and communication effectiveness, as well as their achievement, self-direction, thinking abilities, and citizenship orientations. Another section contained items on a range of social goals including having democratic values, being empowered, having an ability to work in groups and negotiate, having self-knowledge and confidence, and being anti-discriminatory. In addition, actual Tasmanian student test results were made available by the Tasmanian Department of Education. School median scores were calculated for each year level (3 and 5 for primary and 7 and 9 for secondary) for each of literacy and numeracy and an average of these medians, taking into account the SES of the school, was determined.

The SSPP research (Mulford et al., in press c) confirmed existing research (Thompson & Harris, 2004) with respect to the qualities of principals of high-performing schools in high-poverty communities, who, as leading learners:

- set the tone for improved teacher quality
- persistently work for high academic achievement
- invest primarily in relationship building and collaboration
- provide high levels of support for staff
- strengthen community involvement and interest
- enhance the physical environment
- acquire grants or focus on the system to gain greater resources
- work long hours
- receive district/system support.

This research has provided additional findings with respect to principals of high-performing schools in high-poverty communities, who, in comparison with other principals, are more likely to:

- spend less time out of their schools
- spend more time working with students
- place more importance on managing tensions and dilemmas
- want to be seen to be fair
- communicate results to staff.

In contrast, they are less likely than other principals to perceive they:

- receive support from their employer when making changes in their work based on new learnings
- are able to provide safe supportive environments
- are able to provide professional development relevant to staff needs.

They are less likely than other principals to perceive their students to:

- be successful in literacy and numeracy

- be effective communicators
- have a supportive environment at home.

Successful leadership of high-performance schools in high-poverty communities meets many of the elements argued for in earlier sections of this review. These elements include moving beyond bureaucracy to communities of professional learners. Despite emerging evidence, however, research in the area is limited. Even in the Mulford et al. study (in press c) the small size of the Tasmanian population of schools means that the numbers employed have been very small. More studies are needed of high-performing schools in high-poverty communities and comparative studies between mainstream schools and schools in high-poverty settings, especially to clarify the ways and extent to which contexts shape influential leadership practices. Not to do so is neither sensible or efficient, nor defensible on social justice grounds.

Principal involvement in evaluation and accountability

Principal autonomy

Overall, schools in Australia are becoming organisationally more diverse and complex, both in terms of their internal structures and the range of other schools and groups with which they interact. But tensions are still evident over the extent to which systems centralise or decentralise decision making to school leaders, schools and their communities. Even where large measures of local autonomy have been granted, curriculum centralisation and high levels of accountability mean that the area of discretionary decision making for school leaders is somewhat circumscribed. The paper by Mulford, Anderson and McKenzie (2007) presented at the ACER Research Conference quite clearly demonstrated this point about circumscription. Problems were identified in the areas of staff appraisal, and in student involvement in and public access to results, especially of teaching evaluations.

Nevertheless, in 2004 the Australian Government embedded the priority of more power to school principals in the Schools Assistance (Learning Together – Achievements Through Choice and Opportunity) Act 2004. The Act includes:

a commitment by the relevant authority to give the principal, and the governing body, of each government school in the State strengthened autonomy over, and responsibility for, education programs, staffing, budget and other aspects of the school's operations within a supportive framework of broad systemic policies'; and ...

a commitment by the relevant authority that appointments of staff in each government school in the State will be made with the approval of the principal, or the governing body, of the school.

(Schools Assistance, Learning Together – Achievements Through Choice and Opportunity Act 2004, p. 30)

In 2005 these priorities were endorsed by the Ministerial Council on Education, Employment, Training and Youth Affairs (MCEETYA).

While research on Australian educational leadership suggests that leadership is a key factor in successful schools (Anderson et al., 2007), pronouncements on the importance of leadership, and specifically on school leader autonomy effects on student outcomes, need to be approached with some caution. Insofar as the work of principals as school leaders affects student outcomes, as has been described in this review paper, the effects are likely to be indirect. Of increasing interest is whether with more autonomy comes more responsibility, especially for evaluation and accountability of the school and its students.

Principal responsibility for evaluation and accountability

The ongoing SSPP research (Mulford et al., in press b) suggests that successful principals see evaluation within the school as important and that being accountable to the system and community is linked to higher student outcome measures, including literacy/numeracy, social success and empowerment. In respect of these later success measures, Leo (2007) for one also argues for a greater focus in educational leadership studies on student views of their own ability, competence and motivation to learn.

The SSPP research established that successful school principals do the following:

Figure 17: Successful school principals and evaluation and accountability

- They view evaluation as important and are involved with most aspects of within-school accountability. Areas where this is not the case include staff appraisal and formal systems for student involvement in, and public access to, results, especially results of teaching evaluations.
- They use evidence from program evaluations, including evidence mandated by the employer, as levers for school improvement. [However, this tactic can have unexpected results for the system/employer and/or leaders. This is because good evaluation includes questioning the system. If a system is too tight to allow such 'deviation', then initiative and capacity building will be squashed. Good schools are about more than doing the same thing, however well.]
- They continually reflect on what, how and why they are acting as they do. Principals collect quality evidence to help them with this process in a constructivist manner and through collaborative activity. [This reflection can be hampered by tensions between principals and their employer, from pressure to be unthinkingly loyal to the system and from having to change direction, thus making strategic planning difficult, to being increasingly absent from the school.]
- They act to bridge gaps between the professional and other communities. That is, they are active rather than merely reactive.
- They use a range of characteristics and approaches to ensure the effectiveness of evaluation and accountability. This includes theorising and conceptualisation based on their professional reading and learning and qualifications in educational leadership, their experience, persistence, and the developing of the school capacities of trust and respect, empowerment and a shared and monitored vision.

(Mulford et al., in press b)

In the ongoing SSPP study (Mulford et al. in press, b) it was shown how improvements in staff capacity building and curriculum heterogeneity that were developing in Tasmanian schools under the co-constructed Essential Learnings curriculum were quickly lost once responsive, inside-out evaluation and accountability was discouraged. A predisposition, let alone a capacity, to use evidence was short-circuited. The emergent aspects of schools and the collaboratively, constructivist and professional approach to reform were banished. System demands for homogeneity, through the use of regulation, hierarchical power and control, a focus on outputs, including contractual outside-in accountability, took their place. Subsequent events made it clear that this approach has not and will not work.

Anecdotal experience would suggest this recent Tasmanian experience of contractual rather than responsive accountability (Halstead, 1994) is not uncommon. But it need not be so; the relationship between systemic bureaucracy and school leadership need not be like this. Centrally defined output criteria and local innovation in finding ways of meeting the criteria are not necessarily contradictory. What matters is the degree to which specification of standards becomes so detailed and interventionist that a culture of control rather than autonomy develops (OECD, 2001a). Clearly schools need to be open and accountable to their various constituencies and stakeholders for what they do. Yet there is a risk that honest self-evaluation, which is so essential to improvement, can create problems for bodies such as schools and education departments that are publicly accountable and feel unable to admit or be able to defend what they may see as failure. But if the goal is school improvement, then schools will need to have conditions in which they can explore how best to improve, having regard to the research evidence as to best practice.

A major unresolved issue in respect of accountability is whether approaches to it are mutually exclusive, subsumable and/or developmental. More work needs to be undertaken on this issue.

As with the evidence on school capacity building, organisational learning and social capital, there is a suspicion (Mulford, 2007d) that such approaches to accountability are developmental. If they are, and as pointed out earlier, it can help us understand better the intricacies involved in moving a school, or part of a school, from where it is now to one which is truly effective and constantly improving. Developmental models should help target appropriate interventions to ensure more effective progression through stages toward schools being attractive for staff and student learning.

When planning interventions, recognition needs to be given to the fact that it is a journey and that certain actions which at one stage may be inappropriate, or even counterproductive, may be judged to be suitable at another stage. Achieving balanced development would require that principals and teachers understand the stages involved and are able to take the appropriate action without being 'bowled over' by the change that surrounds them. Further, schools may need to be evaluated and held accountable using differing systems, depending on their stage of development.

Hyman (2005) attributes school improvements in the United Kingdom to a combination of four things: government investment; a group of first-rate headteachers; high-quality and better-paid staff; and an accountability framework that intervenes quickly on poor performance. But, as Hyman (2005) points out, tensions remain between 'pressure' and 'support'. This tension is perhaps inevitable, but recognising this, and managing tension well should be a goal of both systems and individual leaders.

There is a need for principals to be able to intervene quickly on poor performance. The SSPP study indicates principals have problems in the areas of staff appraisal and student involvement in and public access to results, especially of teaching evaluations. Some jurisdictions allow principals more freedom to intervene than others and some principals avail themselves of this freedom than do others. This situation is not an argument simply for system-led intervention but is also a challenge to the profession. In tomorrow's dynamic societies, less governable by the old methods of command and obedience (OECD, 2001b), governments will clearly need to find approaches to accountability that loosen, not tighten, central control over schools. The result, for schools and those in them, needs to be independence and interdependence, not dependence. In Halstead's (1994) terms, this is responsive rather than contractual accountability.

Professional learning and standards

A belief about the importance of school leader professional learning has permeated most of the earlier sections of this review paper. This belief also underpinned the ACER Research Conference and several papers explicitly focused on it (e.g., Ingvarson & Anderson, 2007; Leo, 2007).

The LOLSO research found that organisational learning (the important intervening variable between leadership and teacher work and then student outcomes in Figure 16) involved a three-stage sequence of trusting and collaborative climate, shared and monitored mission and taking initiatives and risks supported by ongoing, relevant professional development. School leaders need to be able to adapt and adopt practices to meet the changing context; they need to be contextually literate. They need to understand and be able to act appropriately on the developmental stages of building bonding and bridging, and linking social capital and communities of professional learners. They need to be able not just to distribute leadership but also develop leadership, including for succession planning. Issues and contexts associated with pre-retirement leaders, small and high-poverty community schools, and leader autonomy and responsibility all have their own particular demands for school leader professional learning.

In order to achieve these professional learning demands, there is a need to focus on both in-school and off-site learning opportunities for leaders. Work-based learning is powerful and is the generally preferred mode of existing school leaders. However, it can be narrowing and conservative, sometimes lacking a focus on change and alternative ways of working because it tends to sustain existing role orthodoxies rather than challenge them. Off-site learning can overcome these limitations, just by moving the learner off-site, away from the ongoing work

and into an environment where reflection can be achieved through a less cluttered prism. Breakthroughs in a school leader's development do not come from doing, per se, but by thinking about the doing. Leadership has to be learned not just by doing, but by being able to gain insight while doing it. As Mintzberg (2004, p. 10) puts it: learning is 'as much about doing in order to think as thinking in order to do'.

Despite the number and variety of leadership learning programs available in Australia, a four-year teaching qualification and registration as a teacher remain the only formal requirements for school leaders. Yet, as they have learned in other countries (NCSL, 2007) leadership needs to grow by design rather than by default. Fortunately, there are now examples of moves in Australia to formalise principal preparation in the States and Territories (Anderson et al., 2007). Issues to do with succession planning are fuelling a need for identifying and implementing better pathways and processes of support for prospective and established school leaders.

The use of standards frameworks to guide the professional learning and development of school leaders is a notable development in recent years. Every state or territory education system and school leaders' professional associations has, or is in the process of developing, some form of standards or standards reference framework for school leadership.

Ingvarson and Kleinhenz (2006) argue that a powerful way of using standards to support leaders' professional learning is to incorporate them into a standards-based professional learning system that requires participants to gather, and present for assessment, evidence of having met the standards. They see the most effective sets of leadership standards as able to indicate not only what leaders should aim to achieve, and the kinds of professional learning needed to achieve it, but also the kind of evidence they would need to produce to show that the standards have been met. The key here is the extent to which the profession itself can play a much stronger role in providing a standards-guided professional learning system (Ingvarson & Anderson, 2007).

While professional standards frameworks in Australia may be developed and presented in different ways, overall there is a striking similarity in the core components, particularly the explicit focus on participants' learning. This focus on professional or leadership learning has occurred because, as detailed in earlier sections, there is a need to balance the potentially competing school objectives of quality, equity and efficiency. The environment of learning is still more complex. In such a context there is a need to review the standards, possibly every three to five years, to ensure their ongoing relevance and currency.

Unfortunately, there is little research evidence in Australia about how specific program components affect school leaders' development and performance on the job, or which attempt to assess the benefits relative to program costs. Clearly, the recent plethora of leadership professional development programs need to be researched and evaluated in order that evidence be collected and used to better target future policy and program development in school leadership.

New models of shared principalship

Even if we cannot be sure what school leadership might become, there is already enough evidence to suggest that it is no longer what it once was. The heroic model has become tarnished in most contexts. While no clear patterns have yet emerged, there are growing questions around the lack of a convincing rationale for the persistence of current provision of separate primary and secondary schools. At a number of sites, in growth corridors of major cities new kinds of partnerships have been forged between the government, private and Catholic schools, estate developers and local government authorities. In these new suburbs, schools have become an especially important community hub and stakeholders are interested in exploring new ways of working together to offer childcare, health services and sports and recreation in a more seamless way. Such schools, called 'Full Service Schools' are emerging as a serious focus of policy discussion. Also, as discussed earlier in this review paper, school networks are becoming increasingly important in devolved school systems.

New and emerging models of school leadership seem to have one thing in common; they all involve participants working together. In order to make the role more attractive, a number of co-principalships, which are essentially job shares, have sprung up. Falling enrolments in rural areas and difficulties in recruiting principals to these and some other schools has seen the development of federations of schools and executive leader roles. The idea that every school has to have its own principal is being explored and tested. In education systems where the extremes of decentralisation and/or competition have gone too far and national or state test results have plateaued or are falling, there is a renewed interest in system leadership. System leadership involves principals and other leaders working beyond their own schools as consultant leaders, school improvement partners and so on (NCSL, 2006 a, b, c, & d; PricewaterhouseCoopers, 2007; Fullan, 2005).

These approaches, or models, are broad and overlap. Federated models are characterised by varying degrees of collaboration between schools and sometimes between schools and other providers, such as health and community services. They can involve shared governing bodies, with executive principals/heads overseeing several schools and/or other functions. System leadership models embrace all the different roles that principals can assume beyond the boundaries of their own school, that is, those that contribute to the wider educational system at a local, regional or national level.

A further issue these new approaches signal is the prospect of different skills being required of school leaders. For example, there is nothing about being a school leader that necessarily means they are good at collaboration and developing other adults, so these are skills that have to be learned. As pointed out earlier in this review, the research has consistently demonstrated the need for collaboration and for working to develop other adults are basic to all the evolving leadership models. Future leaders will need enhanced stakeholder and relationship management skills, political skills such as negotiating and networking, as well as skills in change, and in financial, people and project management (NCSL, 2007).

A recent exploration of research on these varieties of shared leadership provided the following key findings:

- There is no single model of shared leadership to suit all circumstances.
- Job redesign should be part of a larger education vision, not simply an expedient to deal with a current problem.
- Support from all stakeholder groups is essential if an unconventional model of [principalship] is to be introduced to a school.
- Research into introducing new models of [principalship] should focus as much on governance – including [employers] – as on school leaders and should look at the interaction between them.

(NCSL, 2006e, p. 1)

However, this study also concluded there is not sufficient evidence to confirm that the new models can contribute to improving the manageability and attractiveness of the principals' role.

Concluding comments

Given the current context and its implications for schools, as well as how schools are best organised for the future, what is the role of school leaders? Within the literature on school leadership there remains an overwhelming endorsement of one-style-fits-all leadership, often accompanied with varying degrees of evangelical zeal. There remains a predominant view that the 'right' leadership style exists, and if found, practised and implemented, in a strong, unequivocal manner, it will make all the difference.

However, while one leadership style or approach may work for some school leaders, the successful ones adapt and adopt their leadership practice to meet the changing needs of circumstances in which they find themselves. Recent Australian research-based models in the area confirm this broader approach to successful school leadership, placing much less

emphasis, for example, on the organisational or strategic elements than has previously been the case. Leadership is more nuanced and subtle than previously portrayed, and researchers need to study these changing circumstances and broader approaches.

Faced with the imminent retirement of a large proportion of principals and other school leaders from the post-war 'baby boomer' generation, evidence about the reluctance of experienced teachers to apply for leadership positions and the smaller than usual cohort of teachers from which to select future leaders, Australia has a major challenge in identifying and developing the next generation of school leaders. It appears that the challenges associated with succession planning will be best dealt with by local solutions developed by groups of schools taking responsibility for developing their talent pools and career paths.

Research results on pre-retirement principals confirm that they continue to be a committed and valuable resource of whom more creative use as role models and mentors should be made, either within existing structures or in new ones. Thus may the traditional and hierarchical approach to educational leadership careers be challenged, with people more able to move in and out of positions at the classroom, school and system levels.

Research on school principalship also identifies contextual demands arising from small schools and schools in high-poverty communities. More studies are needed in these areas. While research is clear that leadership in these and other types of schools is a key factor for success, the area needs to be approached with some caution. Insofar as the work of principals as school leaders affects student outcomes, the effects are indirect.

Of increasing interest is whether more involvement in being accountable to the system and community is linked to higher student outcome measures, including literacy/numeracy, social success and empowerment. It appears that what matters is the degree to which specification of standards becomes so interventionist that a culture of control rather than autonomy develops.

The importance of school leader professional learning permeates this review and the 'good' research. But despite the number and variety of leadership learning programs available in Australia, a four-year teaching qualification and registration as a teacher remain the only formal requirements for school leaders. This situation makes no sense and cannot be allowed to continue.

A number of new and emerging models of school leadership, such as co-principalship, federations of schools and executive leader roles and/or system leadership, have one thing in common – interactive professionalism. However, recent research on these varieties of shared leadership concludes that there is not sufficient evidence to confirm that the new models can contribute to improving the manageability and attractiveness of the principals' role.

In conclusion, a great deal of school success depends on which areas the educational leader chooses to spend time and attention on and how he or she approaches the task. This section, when taken in combination with Section 2 & 3 on context and school organisation, makes a start at identifying the appropriate areas and approaches. But it is clear that much more needs to be done. These challenges and recommendations in relation to them form the final section of this review.

Challenges and recommendations

This review paper began in Section 1 with an image and description of a set of interrelationships between key components of context, organisation and leaders. This nested, 'Russian dolls' concept of leadership, depicted in Figure 1, has underpinned the whole review. In this concluding section, the review returns to that clustered concept, provides a synthesis of some of the major issues raised by the review, confirms the challenges and provides recommendations in relation to each of the three components.

In this 'so called' golden age of school leadership, the evidence provided in this review allows us to conclude that the 'new managerialism,' which embraced managerial efficiency and effectiveness through bureaucracy and accountability as key levers for reforming schools, has failed. It is time that the professionals, the school leaders, ensure that what happens in schools, now and in the future, is what they want to happen. The major professional challenge for any school principal is overcoming the gap between dependence on, or a feeling of the inevitability of system or school bureaucracies being the means of achieving what they want, and actively working to implement their preferred model of schools as social centres and learning organisations.

The major leadership challenge is for school leaders to be able to understand and act on the context, organisation and leadership of the school, as well as the interrelationship between these three elements. Successful school leadership will be contextually literate, organisationally savvy and leadership smart. Successful school leadership is, by definition, the prime vehicle for linking all three elements.

School context

Context matters. School leaders need to be contextually literate. A context involving rapid advances in science and technology, increased globalisation, changes in demography including in the nature of work, and pressures on the environment argues for educational leaders achieving balances between and/or choosing between competing forces, a broadening of what counts for good schooling and broadening the ways schools are organised and run.

Choices between competing forces make the most sense when they foster stability in the form of a school's collective capacity to learn for change, independence rather than dependence, community rather than individualism, and heterogeneity rather than homogeneity. Broadening what counts for good schooling needs to include excellence and equity, cognitive and non-cognitive, especially personal and social skills. Understanding and being able to act in such a context will see school leadership that is intense, varied, accountable and rewarding (NCSL, 2007).

Figure 18: Recommendations on school context

- 1 Greater attention needs to be paid to the context in which school leaders operate both in terms of judging their success and in designing professional learning opportunities. School leaders must become contextually literate and then be part of the conversation regarding the implications of the context for society and the schools that serve that society and its development.
- 2 What counts for effective education needs to be broadened beyond cognitive, academic achievement to include areas such as student non-cognitive outcomes as well as community social capital – that is, to areas that have the greatest predictive validity for later individual and national well-being.
- 3 National and state educational interventions should give greater emphasis to the issue of effective implementation, including the need to progress through developmental stages identified in this review. In targeting interventions recognition needs to be given to the fact that it needs to be a journey with school leaders and that actions (including evaluation of success) at one stage may be inappropriate, or even counterproductive, at another stage.
- 4 Evidence-informed policy and practice increasingly should become the basis of decision making in and about Australian education and its leadership. Context, school organisation and leadership should be the focus of evidence gathering with funding for quality evidence gathering in these areas given priority.

School organisation

School organisation matters. School leaders need to be organisationally savvy. They need to be able to build capacity. Broadening the way schools are organised and run would see a move from the mechanistic to organic, living systems (or social centres, learning organisations, collective teacher efficacy, communities of professional learners), from thin to deep democracy, from mass approaches to personalisation through participation, and from hierarchies to networks.

Personalisation through participation involves being actively and continually engaged in setting one's own targets, devising one's own learning plan and choosing one's own way to learn and assess success. Broadening what counts for good schooling and the way schools are organised and run would also see a focus on bonding within schools, bridging between schools and linking between schools and their communities. Such social capital formation is developmental.

Successful school leaders will move their focus from the operational to the people agenda, to first develop community with, and leadership in, others. School leadership in such an organisation is less lonely and more collaborative and professionally interactive (NCSL, 2007). Awareness and skill development in group and organisational processes (understanding and developing people) is the first step in the development of school capacity building, followed by deciding where the school is going, through to building a vision and setting directions showing how it is going to get there, through to managing teaching and learning. Also involved is an ability to monitor success (see Figure 16), if necessary, to make changes.

Figure 19: Recommendations on school organisation

- 1 Decentralisation to schools should be better reconciled with overall system quality. There is a need to provide greater school autonomy with appropriate support.
- 2 The degree of detail with which some schools are held to account needs to be reviewed. Do system accountability measures facilitate or undermine school effectiveness?
- 3 Review the value that central and district administrations add to school and student outcomes and if a function does not add value, it should be discontinued and the resources saved and distributed back to schools.
- 4 The school and its community (that is, local community as well as communities/federations of schools) should increasingly become the focus of attention in strategies for sustained improvement.
- 5 As school capacity (organisational learning, communities of professional learners or collective teacher efficacy) is the important intervening variable between leadership and teacher work and then improved student outcomes, priority should be given to supporting the development of capacity in schools. Part of this priority should be on structures that provide time for reflective dialogue and action, as well as time and resources to progress through the developmental stages involved.
- 6 Student voice/leadership should be given a much higher priority in all schools and their communities.

School leader

Leadership matters and is changing (Leithwood et al., 2006; NCSL, 2007). School leadership needs to be smart; it needs to be evidence-based and shared. Successful school leadership is about building leadership capacity (NCSL, 2007).

School leadership today is more data- and evidence-based than ever before (NCSL, 2007). Australian evidence demonstrates that leadership that makes a difference is both position-based and distributive. However, both positional and distributive leadership are only indirectly related to student outcomes. Leadership contributes to organisational learning, which, in turn, influences what happens in the core business of the school: that is teaching and learning. It influences the way students perceive that teachers organise and conduct their instruction and their educational interactions with, and expectations of, their students. Students' positive perceptions of teachers' work directly promote a range of outcomes, such as their participation in school, academic self-concept, engagement with school and academic achievement.

New models of shared leadership and interactive professionalism which highlight the need for different leadership skills are emerging. Distributing leadership does matter, especially coordinated learning-centred patterns of distribution, which has at its heart the purpose of developing leadership in others. No skill is more important than leadership development and succession planning. Given the demographics of the profession, now is the right time to identify talent, fast-track those with potential, mentor and coach them, as well as change traditional hierarchical-based career patterns (NCSL, 2007).

Figure 20: Recommendations on School Leader

- 1 Schools and school systems and their leaders should confer greater professional autonomy to educational leaders, working with and through them.
- 2 The role responsibilities and levels of administrative support for school leaders should be reviewed to ensure that the priority is educational leadership.
- 3 Models of distributive leadership and differentiated staffing (for example, administrator-only positions working for the educational leaders and wider use of teacher aides) should be trialled, evaluated and reported upon.
- 4 As succession planning needs to be more than just-in-time job replacement, comprehensive succession frameworks for the management of educational leadership (including leader recruitment, development and retention) need to be developed. Success will be achieved when there are enough high-quality applicants who are interested in a job with which they are familiar enough (that is, there have been opportunities provided for familiarisation with the role) to make an informed career decision.
- 5 School leaders need the strong support of quality and specific professional learning. This provision needs to be seen as a continuum as well as acknowledging the involvement of school leader professional associations.
- 6 Provision of early leadership experiences for young teachers and leadership development for middle managers should become part of a whole career framework for leadership development.
- 7 A review needs to be undertaken of school leader appointment processes and criteria to ensure they reflect the new contextual and organisational demands being made of school leaders.
- 8 Selection processes need to encourage and support rather than deter leadership aspirants by, for example, recognising multiple career paths, being simplified to reduce complexity, time required and stress, and being based on merit and equity principles.
- 9 There is a need to promote the attractiveness of leadership roles in schools in 'challenging circumstances' including small schools and schools in high-poverty communities.
- 10 Consideration needs to be given to appointing school (and district and central office) leaders for fixed periods, including exploration of the attractiveness or otherwise of:
 - contracts of employment, for example, that provides tenure to a teaching position but contracts to all posts of responsibility
 - transfer to another school (or back to a school) after a period in one school (office position) (say 5 to 7 years)
 - periodic time away from the school (or office) context to undertake research sabbaticals or purposeful secondments (including in business and/or industry, especially where it can be reciprocated)
 - joint appointments with university, training bodies, and so on
 - co-principalship, federation leadership and system leadership.

continued...

- 11 Consideration needs to be given to strategies to maintain motivation and challenge for experienced principals, including not necessarily remaining a principal until retirement.
- 12 As the position of school leader needs to not only provide job satisfaction but also to be perceived by others as providing job satisfaction, more work is needed on making school leadership an attractive and 'do-able' task for all those who hold or aspire to such positions. Strategies could include:
 - providing early leadership experiences for young teachers
 - disseminating examples of good practice in managing workload and models of school structures and processes that make effective use of administrative and other staff, using appropriate task delegation
 - demystifying the principal's role, especially administrative and financial roles and responsibilities
 - encouraging principals to articulate and display a sense of job satisfaction.
- 13 There is a need to build on the preference by educators to learn from each other by developing and refining:
 - quality network learning communities
 - acting and/or shared leadership roles
 - apprenticeships and/or mentoring
 - both in-school and off-site learning opportunities.

Concluding comments

Throughout this review there has been a reiteration of how a great deal of a school's success depends on its leaders and the model(s) of leadership that are implemented in the school. Its success also depends on which areas of school life the educational leader chooses to focus the time and attention of the school leadership team. As any single input by a leader can have multiple outcomes, so does the impact of multiple leaders have a still greater effect. An effective leader, acting either alone or as a leadership team leader, needs to be able to see and act with a whole-organisation perspective, as well as work on the individual elements, and the relationships between them (NCSL, 2005c, p. 7). Given the complexity of schools, it is little wonder that principals and their leadership teams find their work both exhilarating and exhausting.

This review canvassed evidence from the national and international research literature on the three nested elements of context, organisation and leaders. To be successful in managing these three elements in a school, especially in respect to the embedded inter-relationships they contain, is the biggest current leadership challenge for school leaders. Within this broad challenge, school leaders must be part of ongoing conversations about context and its implications for schools. Leaders need to understand and be able to act on the evolving and preferred organisational models for schools.

Additionally it is clear that leaders need to be able to understand and act on the quality evidence that is now accumulating on being a successful school leader. Taken together, the ACER 2007 Research Conference and this review, by its existence and in its structure and substance, represent a plea for educational leaders to actually use the quality evidence thus presented and reviewed. It is recognised that there is a need to move beyond mere technical competence in school leadership. As this review has concluded there is a need to empower the professionals, providing the time for reflection on effective change and serious support for creativity. Only this way can schools and school systems move forward.

There is clearly a need to achieve better balances in our world, including between learning what the political and bureaucratic systems require of individual leaders and what practising professionals require of themselves and their colleagues. On the basis of the available research, it can be argued that this balance can best be achieved by groups of educational leaders, or professional collectives and alliances, setting, negotiating and delivering their own agendas. This position is consistent with the emerging priorities for successful educational leadership detailed in this review. After all, as Lecomte and Smillie (2004) confirm, participation in context, organisation and leadership, including policy making, not only enhances efficiency in implementation but also can contribute to the creation of more pluralistic and democratic educational systems.

List of 2007 ACER Research Conference papers

At the conference, four keynote papers (Robinson, Hallinger, Sarra and Leo), nine concurrent papers, four posters, the Victorian Minister for Education's address, and ACER CEO Masters' opening and closing addresses were presented.

Synopses of these presentations and some PowerPoint presentations are available for downloading on the conference website. The link to that website is: <http://www.acer.edu.au/workshops/conferences.html>

Keynote papers

Robinson, V. *The impact of leadership on student outcomes: Making sense of the evidence.*

Hallinger, P. *Learner-centred leadership: Implications from research on instructional and transformational leadership.*

Sarra, C. *Embracing the challenge of leadership in Indigenous education.*

Leo, E. *Take me to your leader: Leadership and the future*

Concurrent sessions

Dinham, S. *Authoritative leadership, action learning and student accomplishment.*

Caldwell, B. *Leadership for radical transformation in school education.*

Mulford, B. *Quality Australian evidence on leadership for improved student learning.*

Boris-Schacter, S. *Got a minute? Can instructional leadership exist despite the reactive nature of principalship?*

Ingvarson, L., and Anderson, M. *Standards for school leadership: Gateway to a stronger profession?*

Hughes, P., Mathews, S., & Khan, G. *Leaders, acting to improve outcomes for indigenous students.*

Mulford, B., Anderson, M., & McKenzie, P. *School leadership and learning: An Australian overview.*

Bezzina, M. *Leaders transforming learning and learners: Lessons from a pilot study.*

Watson, L. *Why would anybody want this job? The challenge of attracting and sustaining effective leaders for Australian schools.*

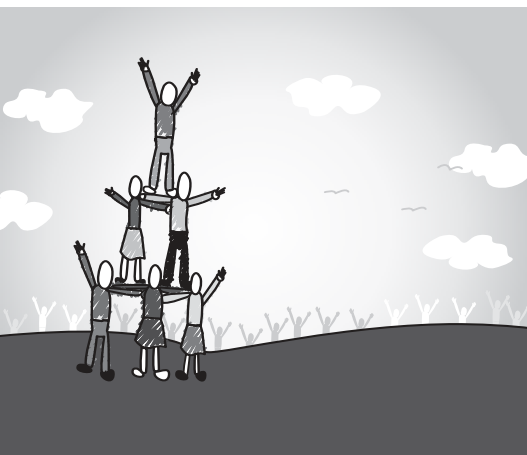
Posters

Weddell, P. *Recognising and rewarding excellence in schools.*

Lee, J. *Building a culture of sustainable learning through high expectations and professional learning: The experience of one Catholic secondary school in South West Sydney.*

Thompson, J. *Real-time performance monitoring of learning and school effectiveness.*

Richardson, C. *Value-added of senior secondary school students: Students, class and subject effects.*



References

- Achinstein, B. (2002). Conflict amid community: The micropolitics of teacher collaboration. *Teachers College Record*, 104(3), 421–455.
- Ainley, J., Frydenberg, E., & Russell, J. (2005). Schooling issues digest: Student motivation and engagement. Retrieved January 31, 2008, from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/schooling_issues_digest_motivation_engagement.htm
- Anderson, M., Gronn, P., Ingvarson, L., Jackson, A., Kleinhenz, E., McKenzie, P., Mulford, B., & Thornton, N. (2007). *Australia: Country Background Report. OECD improving school leadership activity*. A report prepared for the Australian Government Department of Education, Science and Training. Melbourne: ACER.
- Australian Council of Deans of Education (ACDE). (2004). *New teaching, new learning: A vision for Australian education*. Canberra: ACDE.
- Australian Principals Associations Professional Development Council (APAPDC). (2003). *Leaders lead: Beyond the lost sandshoe*. Hindmarsh: Author.
- Bandura, A. (1983). Perceived self-efficacy in cognitive development and functioning. *Educational Psychologist*, 28(2), 117–148.
- Banfield, R. (2005). *Quality assurance in the principalship: The case of the Tasmanian Principals' Institute*. Unpublished EdD thesis, University of Tasmania, Hobart.
- Barnett, K., & McCormick, J. (2003). Vision, relationships and teacher motivation: A case study. *Journal of Educational Administration*, 41(1), 55–73.
- Barnett, K., McCormick, J., & Conners, R. (2001). Transformational leadership in schools: Panacea, placebo or problem? *Journal of Educational Administration*, 39(1), 24–46.
- Bass, B. (1998). *Transformational leadership: Industrial, military and educational impact*. Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Bates, R. (in press). Teaching educational leadership and administration in Australia. *Journal of Educational Administration and History*, 40.
- Beare, H. (2007). Four decades of body-surfing the breakers of school reform: Just waving, not drowning. In T. Townsend (Ed.), *International handbook of school effectiveness and improvement* (pp. 27–40). Dordrecht: Springer.
- Beatty, B., & Brew, C. (2005). Measuring Student Sense of Connectedness with School: The Development of an Instrument for Use in Secondary Schools. *Leading & Managing*, 11(2), 103–118.

- Bennett, J. (2002). *Principal perceptions of a school-based reform initiative*. Unpublished Master of Education thesis. University of Tasmania, Hobart.
- Bennett, L. (2007). *Changing citizenship in the digital age*. Paper for OECD/INDIRE conference on Millennial Learners, Florence, March. Retrieved from <http://oecd.org/dataoecd/0/8/38360794.pdf>
- Bennett, N., Wise, C., & Woods, P. (2003). *Distributed leadership*. Nottingham: National College for School Leadership.
- Bishop, P., & Mulford, B. (1999). When will they ever learn? Another failure of centrally imposed change. *School Leadership and Management*, 19(2), 179–187.
- Blackmore, J. (1995). Breaking out from a masculinist politics of education. In B. Limerick & R. Lingard (Eds.), *Change forces: Probing the depths of educational reform*. London: Falmer.
- Blasé, J., & Blasé, J. (1999). Principals' instructional leadership and teacher development: Teachers' perspectives. *Educational Administration Quarterly*, 35(3), 349–378.
- Brooker, P., & Mulford, B. (1989). Is a high school promotion system designed for the '50s good enough for the '80s and '90s?. *The Practising Administrator*, 11(3), 12–16.
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cambrun, E., Rowan, B., & Taylor, J. (2003). Distributed leadership in schools: The case of elementary schools adopting comprehensive school reform models. *Educational Evaluation and Policy Analysis*, 25(4), 347–373.
- Carneiro, P., Crawford, C., & Goodman, A. (2006). *Which skills matter?* London: Centre for the Economics of Education, London School of Economics.
- Coleman, J. (1994). *Foundations of social theory*. Cambridge, MA: Belknap Press.
- Collins, J. (2006). *Good to great and the social sectors*. London: Random House.
- Commonwealth of Australia, (2004). *Schools Assistance, Learning Together – Achievement Through Choice and Opportunity Act*. Canberra, Australian Government Printer.
- Connor, C. (2005). *Within-school variation*. Nottingham: NCSL.
- Costello, P. (2007). *Intergenerational report 2007*. Canberra: Australian Government, Department of Treasury.
- Cranston, N., & Ehrich, L. (2002). Overcoming sleeplessness: Role and workload of secondary school principals in Queensland. *Leading & Managing*, 8(1), 17–35.
- Cullingford, C. (2001, July). *Pupil attitudes to schools*. Paper presented at The Learning Conference, Spetses, Greece.
- Cunha, F., Heckman, J., Lochner, J., Masterov, D. (2005). *Interpreting the evidence of life cycle skill formation*. London: NBER Working Paper 11331. Retrieved January 31, 2008 from <http://papers.nber.org/papers/w11331>
- D'Arcy, J. (1995). Musings of a female principal. In B. L. Limerick, (Ed.), *Second Year Book of the Australian Council for Educational Administration*. Rydalmere, NSW: Hodder Education.
- Day, C., & Harris, A. (2002). Teacher leadership, reflective practice and school improvement. In K. Leithwood & P. Hallinger (Eds.), *Second international handbook of educational leadership and administration* (pp. 957–977). Dordrecht: Kluwer.
- Day, C., & Leithwood, K. (Eds.), (2007). *Successful principal leadership in times of change: An international perspective*. London: Springer.
- Day, C., Stobart, G., Sammons, P., Kington, A., Gu, Q., Smees, R., & Mujtaba, T. (2006). *Variation in teachers' work, lives and effectiveness* (VITEA). London: Department for Education and Skills, Research Brief RB743.
- DEST (Department of Education Science and Training). (2004). *Investing in Our Schools Program*. Retrieved January 31, 2008 from http://www.dest.gov.au/sectors/school_education/programmes_funding/general_funding/capital_grants/iios/

- DEST (Department of Education Science and Training). (2005). *National Framework for Values Education in Australian Schools*. Retrieved February 17, 2008 from <http://www.civicsandcitizenship.edu.au>
- Department for Education and Skills DfES. (2005). *Every child matters: Change for children*. Retrieved March 27, 2008 from <http://www.everychildmatters.gov.uk/aims/>
- Dinham, S. (2005). Principal leadership for outstanding educational outcomes. *Journal of Educational Administration*, 43(4), 338–356.
- Donaldson, G. (2001). *Cultivating leadership in school: Connecting people, purpose and practice*. NY: Teachers College Press.
- Duke, D., Grogan, M., Tucker, P., & Heinecke, W. (Eds.). (2003). *Educational leadership in an age of accountability: The Virginia experience*. Albany: State University of New York Press.
- Ewington, J., Mulford, J., Kendall, D., Edmunds, B., Kendall, L., & Silins, H. (in press). Successful school principalship in small schools. *Journal of Educational Administration*, 46(5).
- Feinstein, L. (2000). *The relative economic importance of academic, psychological and behavioural attributes developed in childhood*. London: Centre for Economic Performance, London School of Economics and Political Science, University of London.
- Field, J. (2005). *Social capital and lifelong learning*. Bristol: The Policy Press.
- Fielding, M. (1999). Target setting, policy pathology and student perspectives: Learning to labour in new times. *Cambridge Journal of Education*, 29(2), 277–287.
- Fullan, M. (2005). *Leadership and sustainability: System thinkers in action*. Thousand Oaks, CA: Corwin Press, Toronto Principals Council.
- Furman, G., & Shields, C. (2003, April). *How can leaders promote and support social justice and democratic community in schools?* Paper presented to the annual meeting of the American Educational Research Association, Chicago, IL.
- Galton, M. (2000). Big change questions: Should pedagogical change be mandated? Dumbing down on classroom standards: The perils of a technician's approach to pedagogy. *Journal of Educational Change*, 1(2), 199–204.
- Gardner, H. (2007). *Five minds for the future*. Boston: Harvard Business School Publications.
- Gilbert, C. (2006). *2020 Vision: Report of the Teaching and Learning in 2020 Review Group*. Nottingham: Department for Education and Skills.
- Goddard, R. (2002). Collective efficacy and school organisation: A multilevel analysis of teacher influence in schools. *Theory and Research in Educational Administration*, 1, 169–184.
- Goddard, R., Hoy, W., & Hoy, A. (2000). Collective teacher efficacy: Its meaning, measure, and impact on student achievement. *American Education Research Journal*, 37(2), 479–507.
- Goddard, R., Hoy, W., & Woolfolk Hoy, A. (2004). Collective efficacy beliefs: Theoretical developments, empirical evidence, and future directions. *Educational Researcher*, 33(3), 1–13.
- Goodlad, J. (1994). *Educational renewal: Better teachers, better schools*. San Francisco: Jossey-Bass.
- Government of South Australia. (2006). *Success for all: Review of senior secondary education in South Australia*. Adelaide: Government of South Australia.
- Gronn, P. (2003). *The new work of educational leaders*. London: Paul Chapman Publishing.
- Grootaert, C., Narayan, D., Jones, V., & Woolcock, M. (2004). *Measuring social capital*. Washington D.C.: The World Bank, Working Paper No. 18.
- Gurr, D. (2002). Transformational leadership characteristics in primary and secondary school principals. *Leading & Managing*, 8(1), 78–99.
- Gurr, D., Drysdale, L., & Mulford, B. (2005). Successful principal leadership: Australian case studies. *Journal of Educational Administration*, 43(6), 539–551.

- Hallinger, P. (2003). Leading educational change: Reflections on the practice of instructional and transformational leadership. *Cambridge Journal of Education*, 33(3), 329–351.
- Hallinger, P. (2005). Instructional leadership and the school principal: A passing fancy that refuses to fade away. *Leadership and Policy in Schools*, 4(3), 1–20.
- Halstead, M. (1994). Accountability and values. In D. Scott (Ed.), *Accountability and control in educational settings* (pp. 102–121). London: Cassell.
- Hargreaves, A. (1991). Contrived collegiality: The micropolitics of teacher collaboration. In J. Blasé (Ed.), *The politics of life in schools*. Newbury Park: Sage.
- Hargreaves, A., & Fink, D. (2003). Sustaining leadership. *Phi Delta Kappan*, 84(9), 693–700.
- Hargreaves, A., & Fink, D. (2006). *Sustainable leadership*. San Francisco: Jossey-Bass.
- Harris, A., Moos, L., Moller, J., Robertson, J., & Spillane, J. (2007). Exploring different perspectives and approaches to the practice of school leadership. In *Positive leadership: Thinking and rethinking leadership*. Nottingham: National College for School Leadership.
- Harris, G. (2006). The future of public primary school education in United States. San Francisco: GBN Global Business Network.
- Harris, S. (2007). It's all ... there. *The Mercury Magazine*, Saturday, April 21, p. 10.
- Hartley, D. (1997). *Re-schooling society*. London: Falmer Press.
- Hayes, D., Christie, P., Mills, M., & Lingard, B. (2004). Productive leaders and productive learners: Schools as learning organisations. *Journal of Educational Administration*, 42(4/5), 520–538.
- Heifetz, R., & Linsky, M. (2002). *Leadership on the line: Staying alive through the dangers of leading*. Boston, MA: Harvard Business School Press.
- Henton, D., Melville, J., & Walesh, K. (1997). *Grassroots leaders for a new economy: How civic entrepreneurs are building prosperous communities*. San Francisco: Jossey-Bass.
- Hogan, D., & Donovan, C. (2005). The social outcomes of schooling: Subjective agency among Tasmanian adolescents. *Leading & Managing*, 11(2), 84–102.
- Howe, N., & Strauss, W. (2000). *Millennials rising: The next great generation*. New York: Vintage Original.
- Hyman, P. (2005). *1 out of 10: From Downing Street to classroom reality*. London: Vintage.
- Ingvarson, L., Anderson, M., Gronn, P., & Jackson, A. (2006). *Standards for school leadership: A critical review of the literature*. Canberra: Teaching Australia.
- Ingvarson, L., & Kleinhenz, K. (2006). *A standards-guided professional learning system*. Melbourne: Centre for Strategic Education seminar series paper No. 153.
- Johnson, B. (2003). Teacher collaboration: Good for some, not so good for others. *Educational Studies*, 29(4), 337–350.
- Jolly, D., & Deloney, P. (1996). *Integrating Rural School and Community Development: An initial examination*. Paper presented at the Annual Conference of the National Rural Education Association, San Antonio, Texas, 11–14 October.
- Jones, B. (2006). *A thinking reed*. Crows Nest: Allen & Unwin.
- Journal of Educational Administration 2005 43(6).
- Kamdar, M. (2007). *Planet India*. New York: Scribner.
- Kanter, R. (1994). Collaborative advantage: The art of alliances, *Harvard Business Review*, July.
- Kilpatrick, S., Johns, S., Mulford, B., Falk, I., & Prescott, L. (2001). *More than education: Leadership for rural school–community partnerships*. Canberra: Rural Industries Research and Development Corporation. Retrieved January 31, 2008 from <http://rirdc.gov.au/reports/HCC/02-055sum.html>

- Lacey, K. (2003). Factors that impact on principal class leadership aspirations. Unpublished PhD thesis, University of Melbourne.
- Leadbeater, C. (2004a). *Learning about personalisation: How can we put the learning at the heart of the education system?* London: UK Department for Education and Skills.
- Leadbeater, C. (2004b). *Personalisation through participation*. London: DEMOS.
- Leadbeater, C. (2005). *The shape of things to come*. London: DfES Innovation Unit. Retrieved January 31, 2008 from www.standards.dfes.gov.uk/innovation-unit
- Lecomte, H., & Smillie, I. (2004), *Ownership and partnership: What role for civil society in poverty reduction strategies?* OECD, Paris.
- Leithwood, K. (in press). Transformational school leadership. In E. Baker, B. McGaw & P. Peterson (Eds.), *International encyclopaedia of education*. Oxford: Elsevier.
- Leithwood, K., Day, C., Sammons, P., Harris, A., & Hopkins, D. (2006). *Seven strong claims about successful school leadership*. Nottingham: National College for School Leadership.
- Leithwood, K., Jantzi, D. (2000). The effects of transformational leadership on student engagement with school. *Journal of Educational Administration*, 4(10), 112–129.
- Leithwood, K., & Jantzi, D. (2005). A review of transformational school leadership research: 1996–2005. *Leadership and Policy in Schools*, 6(1), 177–199.
- Leithwood, K., & Jantzi, D., & Steinbach, R. (1999). *Changing leadership for changing times*. Buckingham, UK: Open University Press.
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *Review of research: How leadership influences student learning*. NY: The Wallace Foundation.
- Leithwood, K., & Riehl, C. (2003) *What do we already know about successful school leadership?* Paper for AERA, Chicago, April.
- Levin, B., & Riffel, S. (1997). *Schools and the changing world: Struggling toward the future*. London: Falmer Press.
- Lieberman, A., & Miller, L. (2004). *Teacher leadership*. San Francisco: Jossey Bass/Wiley.
- Lieberman, A., Moore Johnson, S., Fujita, H., & Starratt, R. (2007). Day after day, teachers are leaders within their classrooms. In *Positive leadership: Thinking and rethinking leadership*. Nottingham: National College for School Leadership.
- Lokan, J., Greenwood, L., & Creswell, J. (2001). *How literate are Australia's students?* The PISA 2000 survey of students' reading, mathematical and scientific literacy skills. Camberwell: ACER.
- Loughran, J., Mitchell, I., Neale, P., & Toussaint, D. (2001). PEEL and the beginning teacher. *Australian Education Researcher*, 28(2), 29–52.
- Louis, K. S., Febey, K., & Schroeder, R. (2005). State-mandated accountability in high schools: Teachers' interpretations of a new era. *Educational Evaluation and Policy Analysis*, 27(2), 177–204.
- Louis, K. S., Marks, H., & Kruse, S. (1996). Teachers' professional community in restructuring schools. *American Journal of Education*, 104(2), 103–147.
- MacBeath, J. (2006). *Leadership as a subversive activity*. Melbourne: Australian Council for Educational Leaders Monograph No. 39.
- Macmillan, R. (1998). Approaches to leadership: What comes with experience? *Educational Management and Administration*, 26(2), 173–184.
- March, J. (1984). How we talk and how we act: Administrative theory and administrative life. In T. Sergiovanni & J. Corbally (Eds.), *Leadership and organisational culture: New perspectives on administrative theory and practice* (pp. 18–35). Chicago: University of Illinois Press..
- Marginson, S. (1997). *Educating Australia: Government, economy and citizen since 1960*. Cambridge: Cambridge University Press.

- Margo, J., Dixon, M., with Pearce, N., & Reed, H. (2006). *Freedom's orphans: Raising youth in a changing world*. London: Institute for Public Policy Research. Retrieved January 31, 2008 from <http://www.ippr.org.uk/publicationsandreports/publication.asp?id=496>
- Marks, H., & Printy, S. (2004). Principal leadership and school performance: An integration of transformational and instructional leadership. *Educational Administration Quarterly*, 39(3), 370–397.
- Marks, W., & Louis, K. S. (1997). Does teacher empowerment affect the classroom? The implications of teacher empowerment for instructional practice and student academic performance. *Educational Evaluation and Policy Analysis*, 19, 245–275.
- Mawhinney, H., Hass, J., & Wood, C. (2005). Teachers' collective efficacy beliefs in professional learning communities, *Leading & Managing*, 11(2), 12–45.
- McREL. (2005). *The future of schooling: Educating America in 2014*. Colorado: Mid-continent Research for Education and Learning.
- Meyer, J., & Rowan, B. (1978). *Notes on the structure of educational organisations: Revised Version*. Paper prepared for the Annual Meeting of the American Sociological Association. Reported in J. Hannaway, Administrative structures why do they grow? *Teachers College Record*. 79(3), 416–417.
- Michael, A. (1996). *Issues facing women as principals in rural and remote areas*. Brisbane: Report prepared for the Queensland Teachers Union.
- Mintzberg, H. (2004). *Managers not MBAs*. San Francisco, CA: Berrett-Koehler.
- Mitchell, C., & Sackney, L. (1998). Learning about organisational learning. In K. Leithwood & K. Louis (Eds.), (1998). *Organisational learning in schools* (pp. 177–199). Lisse: Swets & Zeitlinger.
- Mohr, N., & Dichter, N. (2001). Building a learning organisation. *Phi Delta Kappan*, 82(10), 744–747.
- Moore Johnson, S. (2004). *Finders and keepers: Helping new teachers survive and thrive in schools*. San Francisco: Jossey-Bass. Retrieved January 31, 2008 from <http://www.gse.harvard.edu/~ngt/>
- Mulford, B. (1994). *Shaping tomorrow's schools*. Hawthorn: Australian Council for Educational Administration Monograph No. 15.
- Mulford, B. (2002). The global challenge: A matter of balance. *Educational Management & Administration*, 30(2), 123–138.
- Mulford, B. (2003a). *School leaders: Challenging roles and impact on teacher and school effectiveness*. Paris: Commissioned paper by the Education and Training Policy Division, OECD, for the Activity 'Attracting, Developing and Retaining Effective Teachers'. Retrieved from <http://www.oecd.org/dataoecd/2/52/37/33393.pdf>
- Mulford, B. (2003b), Balance and learning: Crucial elements in leadership for democratic schools, *Leadership and Policy in Schools*, 2(2), 109–124.
- Mulford, B. (2003c). Leadership in Education: Losing sight of our interests? In N. Bennett, M. Crawford, & M. Cartwright (Eds.), *Effective educational leadership* (pp 3–13). London: Open University Press & Paul Chapman Publishing.
- Mulford, B. (2003d). The role of school leadership in attracting and retaining teachers and promoting innovative schools and students. Canberra: Review of Teaching and Teacher Education, Commonwealth Department of Education Science and Training. Retrieved from http://www.dest.gov.au/sectors/school_education/publications_resources/profiles/school_leadership
- Mulford, B. (2004). Congruence between the democratic purposes of schools and school principal training in Australia. *Journal of Educational Administration*, 42(6), 625–639.
- Mulford, B. (2007a). *Overview of research on Australian educational leadership 2001–2005*. Melbourne: Australian Council for Educational Leaders Monograph No. 40.

- Mulford, B. (2007b). Successful school principalship in Tasmania. In C. Day & K. Leithwood (Eds.), *Making a difference: Successful school leadership in eight countries*. London: Springer.
- Mulford, B. (2007c). Successful school leadership: What and who decides? *Australian Journal of Education*, 51(3), 228–246.
- Mulford, B. (2007d). The challenge of building social capital in professional learning communities: Importance, challenges and a way forward. In L. Stoll, & K. Seashore Louis, (Eds.), *Professional learning communities: Divergence, detail and difficulties* (pp. 166–180). London: Open University Press/McGraw Hill,.
- Mulford, B., Edmunds, B., Ewington, J., Kendall, L., Kendall, D., & Silins, H. (in press a). Successful school leadership in late career. *Journal of Educational Administration*, 47(1).
- Mulford, B., Edmunds, B., Kendall, L., Kendall, D., Ewington, J., & Silins, H. (in press b). Successful school principalship, evaluation and accountability. *Leading & Managing*.
- Mulford, B., Kendall, D., Ewington, J., Edmunds, B., Kendall, L., & Silins, H. (in press c). Successful principalship of high performance schools in high poverty communities. *Journal of Educational Administration*, 46(4).
- Mulford, W., Silins, H., & Leithwood, K. (2004). *Educational leadership for organisational learning and improved student outcomes*. Dordrecht, The Netherlands: Kluwer Academic Publishers.
- National College for School Leadership (NCSL). (2005a). *Learning-centred leadership: Towards personalised learning-centred leadership*. Nottingham: Author.
- National College for School Leadership (NCSL). (2005b). *Establishing a network of schools*. Cranfield: Network Learning Group: Author.
- National College for School Leadership (NCSL). (2005c). *Emerging lessons from NCSL research activity*. Nottingham: Author.
- National College for School Leadership (NCSL). (2006a). *System leadership in action*. Nottingham: Author.
- National College for School Leadership (NCSL). (2006b). *New models of headship: Federations*. Nottingham: Author.
- National College for School Leadership (NCSL). (2006c). *New models of headship: Primary executive heads*. Nottingham: Author.
- National College for School Leadership (NCSL). (2006d). *New models of headship: Secondary or special school executive heads*. Nottingham: Author.
- National College for School Leadership (NCSL). (2006e). *New models of headship: Varieties of shared headship – A preliminary exploration*. Nottingham: Author.
- National College for School Leadership (NCSL). (2007). *What we know about school leadership*. Nottingham: Author.
- OECD. (2000). Programme for International Student Assessment (PISA). Retrieved from www.pisa.oecd.org
- OECD. (2001a). *New school management approaches*. Paris: Author.
- OECD. (2001b). *What school for the future?* Paris: Author.
- OECD. (2004). *Learning for tomorrow's world: First results from PISA 2003*. Paris: Author.
- OECD. (2005). *Teachers matter: Attracting, developing and retaining effective teachers*. Paris: OECD. Retrieved January 31, 2008 from http://www.oecd.org/document/52/0,2340,en_2649_33723_34991988_1_1_1_1,00.html
- OECD. (2006). *Think scenarios, rethink education*. Paris: Author.
- OECD. (2007). *Evidence in education: Linking research and policy*. Paris: Author.

- O'Neill, J. (2000). 'So that I can more or less get them to do things they really don't want to do'. Capturing the situational complexities' of the secondary school head of department. *Journal of Educational Enquiry*, 1(1), 13–34.
- Peck, S. (1987). *The different drum: Community making and peace*. NY: Simon & Schuster.
- Pedro, F. (2006). *The New Millennium learners: Challenging our views on ICT and learning*. Paris: Paper for the OECD–CERI New Millennium Learners activity. Retrieved from http://oecd.org/document/56/0,2340,en_2649_35845295_38358584_1_1_1_1,00.html
- Peters, T. (1987) *Thriving on chaos*. London: Harper & Row.
- PricewaterhouseCoopers. (2007). *Independent study into school leadership*. London: Department of Education and Science, Project RB818.
- Pusey, M. (2003). *The experience of middle Australia: The dark side of economic reform*. Cambridge: University of Cambridge Press
- Rankin, H. (2005). *The new workforce: Five sweeping trends that will shape your company's future*. NY: Amacom.
- Robinson, V., Lloyd, C., Hohepa, M. & Rowe, K. (2007). *The impact of leadership on student outcomes: An analysis of effects from international research*. Paper presented at AERA, Chicago, April.
- Ross, J., & Gray, P. (2006). Transformational leadership and teacher commitment to organisational values: The mediating effects of collective teacher efficacy. *School Effectiveness and School Improvement*, 17(2), 179–199.
- Ross, J., Hogaboam, A., & Gray, P. (2004). Prior student achievement, collaborative school processes and collective teacher efficacy. *Leadership and Policy in Schools*, 3(3), 163–188.
- Rusch, E. (2005). Institutional barriers to organisational learning in school systems: The power of silence. *Educational Administration Quarterly*, 41(1), 83–120.
- Scribner, J., Hager, D., & Warne, T. (2002). The paradox of professional community: Tales from two high schools. *Educational Administration Quarterly*, 38(1), 45–76.
- Sergiovanni, T. (1984). Leadership and excellence in schooling: Excellent schools need freedom within boundaries. *Educational Leadership*, 41(5), 4–14.
- Sergiovanni, T. (1990). *Value-added leadership: How to get extraordinary performance in schools*. London: Harcourt Brace Jovanovich.
- Sergiovanni, T. (2000). *The lifeworld of leadership*. San Francisco: Jossey Bass.
- Silins, H., & Mulford, B. (2002a). Leadership and school results. K. Leithwood & P. Hallinger. (Eds.), *Second International Handbook of Educational Leadership and Administration* (pp. 561–612). Norwell, MA: Kluwer Academic Publishers.
- Silins, H., & Mulford, B. (2002b). Schools as learning organisations: The case for system, teacher and student learning. *The Journal of Educational Administration*, 40(5), 425–446.
- Silins, H., & Mulford, B. (2004). Schools as learning organisations: Effects on teacher leadership and student outcomes. *School Effectiveness and School Improvement*, 15(3–4), 443–466.
- Silins, H., Mulford, B., & Zarins, S. (2002). Organisational learning and school change. *Educational Administration Quarterly*, 38(5), 613–642.
- Somech, A. (2002). Explicating the complexity of participative management: An investigation of multiple dimensions. *Educational Administration Quarterly*, 38, 341–371.
- Spillane, J. (2006). *Distributed leadership*. San Francisco: Jossey-Bass.
- Stoll, L., Bolam, R., McMahon, A., Thomas, S., Wallace, M., Greenwood, A., & Hawkey, K. (2006). *Professional learning communities: Source materials for school leaders and other leaders of professional learning*. London: Department of Education and Skills, Innovations Unit.

- Stoll, L., Fink, D., & Earl, L. (2003). *It's about learning: And it's about time*. London: Falmer Press.
- Sturgess, G. (2006). Blair's public service revolution – and how it's influenced Australia. *The Public Sector Informant*, October, pp. 8 & 21.
- Suzuki, D. (2003). *The David Suzuki reader: A lifetime of ideas from a leading activists and thinker*. Vancouver: Greystone Books.
- Sweetland, S., & Hoy, W. (2000). School characteristics and educational outcomes: Towards an organisational model of student achievement in middle schools. *Educational Administration Quarterly*, 36(5), 703–729.
- Tasmanian Department of Education. (2005). Curriculum in Tasmanian schools. Retrieved February 17, 2008 from <http://www.education.tas.gov.au/school/educators/curriculum>
- Thompson, P., & Harris, A. (2004). *Leading schools that serve neighbourhoods and communities in poverty*. Paper prepared for the Second International Leadership in Education Research Network Meeting, Boston.
- Veen, W. (2003). A new force for change: Homo Zappiens. *The Learning Citizen*, 7(1), 5–7.
- Victorian Department of Education and Training (DET). (2004). *The privilege and the price: A study of principal class workload and its impact on health and well-being*. Melbourne: Victorian Department of Education and Training.
- Watson, L. (2005). *Quality teaching and leadership: A scan of research findings*. Canberra: Teaching Australia
- Wheatley, M. (2005). *Finding our way: Leadership for an uncertain time*. San Francisco: Berrett-Koehl.
- Wheelan, S., & Tilin, F. (1999). The relationship between faculty group development and school productivity. *Small Group Research*, 30(1), 59–81.
- Wildy, H., & Dimmock, C. (1993). Instructional leadership in primary and secondary schools in Western Australia. *The Journal of Educational Administration*, 31(2), 43–62.
- World Bank. (2005). *Expanding opportunities and building competencies for young people: A new agenda for secondary education*. Washington, DC: World Bank.
- York-Barr, J., & Duke, D. (2004). What do we know about teacher leadership? Findings for two decades of scholarship. *Review of Educational Research*, 74(3), 255–316.