

# **AN EVIDENCE BASE ON THE EFFECT OF SCHOOL AUTONOMY ON STUDENT ACHIEVEMENT: AUSTRALIAN STUDIES**

**Brian J. Caldwell<sup>1</sup>**

The purpose of this paper is to report on Australian contributions to the International Study on School Autonomy and Learning (ISSAL). This contribution has two components to date, first, a review of national and international evidence on the links between school autonomy and student achievement and second, case studies of schools that provide evidence of how the links have been made. Plans are in place for a third contribution, the major component of which is a large-scale survey of principals. The paper is organised in four parts, the first of which provides the Australian context. The second part contains a summary of the evidence that illuminate the links. The third part reports the case studies. The paper concludes with an account of plans for the next stage of the Australian contribution to ISSAL.

## **AUSTRALIAN CONTEXT**

There are six states and two territories in Australia, each with its own government. There is also a federal government. The population of Australia is about 23.8 million. The constitution of Australia assigns responsibility for school education to the states and territories but the federal government has played an increasingly powerful role over the last 50 years because it can make grants to states and territories to which conditions are attached. The federal role arises to a large extent because vertical fiscal imbalance is severe by international standards.

About two-thirds of students attend public (also referred to as government or state) schools with the others attending either Catholic or Independent schools (also referred to as private or non-government schools). There has been a trend to the latter in recent years to the extent that the majority of senior secondary students in the largest cities attend non-government schools.

'School-based management' is a term that is widely used internationally but is rarely used in Australia to describe the decentralisation of authority and responsibility to schools within a centrally-determined framework of policies, standards, and accountabilities. The term used most frequently in the 1970s and early 1980s was 'devolution', as advocated in a landmark report in 1973 described below. The idea of the 'self-managing school' was frequently used in the late 1980s and the 1990s. More recently, the concept of 'autonomy' has been invoked, although schools in the public sector operate in the aforementioned framework. Most Catholic schools are organised into systems of education that provide varying degrees of autonomy to schools. Independent schools have a high level of autonomy. Catholic and Independent schools receive funds from the public purse and may charge fees for instruction. Public schools may not charge fees for instruction.

The reasons that have been advanced to support initiatives in school autonomy have varied with the change in terminology. Empowerment of teachers and the community was frequently advocated in the earlier developments ('devolution'). The focus in more recent times has shifted to an educational rationale, reflecting the uniqueness of schools and the need to set priorities, select staff and formulate budgets in a way that best matches the mix of needs, interests, aptitudes and aspirations of students.

---

<sup>1</sup> Brian J. Caldwell is Managing Director and Principal Consultant at Melbourne-based Educational Transformations and Honorary Professorial Fellow in the Graduate School of Education at the University of Melbourne where he served as Dean of Education from 1998 to 2004. This paper was presented by Associate Professor Lawrie Drysdale, Melbourne Graduate School of Education, in an international symposium on School Autonomy and 21<sup>st</sup> Century Learning at the Annual Conference of the World Educational Research Association (WERA), Budapest, September 2015.

## **Historical perspective**

At first sight Australia may be expected to have a relatively decentralised system of public education given the physical size of the country and the relatively small population. However, most of the population is concentrated in large cities. Education departments were established in the late 19<sup>th</sup> century to control what has been traditionally described as 'free compulsory and secular' systems of state schools. Schools were supervised by centrally-appointed inspectors.

As far as public policy on decentralisation is concerned, the seminal event was the release in 1973 of the Interim Report of the Australian Schools Commission, generally known as the Karmel Report. Decentralisation, or devolution as it was referred to at the time, was elevated to the status of a value that underpinned its recommendations. The Committee agreed that 'there is an obligation on it to set forth the principal values from which its recommendations have been derived' (Interim Committee for the Australian Schools Commission 1973: 10). The key statement was: 'The Committee favours less rather than more centralised control over the operation of schools. Responsibility should be devolved as far as possible upon the people involved in the actual task of schooling, in consultation with the parents of the pupils whom they teach and, at senior levels, with the students themselves'.

This excerpt shows unmistakably that the Committee was concerned with 'control over the operation of schools', not limiting its view of devolution to concepts such as participation or consultation, and that a role for the centre, at a state rather than national level, was important in determining an equitable approach to the allocation of resources. As things turned out, these recommendations were taken up in some jurisdictions, as described below, but the federal role was strengthened to the extent that the Australian Schools Commission became the agency for distributing a growing pool of federal funds. The Commission ceased operations in the mid-1980s but a larger federal bureaucracy replaced it, continuing to the present.

## **Trends**

In the decade following the release of the Karmel Report only three public school authorities took up to any noteworthy extent the cause of community involvement through structural arrangements for school councils or school boards. A rudimentary form of school councils was already in place in South Australia. Recommendations for school boards in the Australian Capital Territory (Hughes 1973) coincided with the Karmel Report and these were implemented with a higher level of authority and responsibility than in any other system at the time. A range of options for school advisory councils was developed for adoption in Victoria in the mid-1970s.

There were few major initiatives until the 1990s when Victoria made dramatic changes to the extent that more than 90 percent of the state's annual recurrent budget for school education was decentralised to schools for local decision-making and principals had the power to select staff. School councils, with parents and other members of the community in the majority, set policies and approved budgets. Schools continued to operate within a centrally-determined framework of curriculum and work-force enterprise agreements. There have been important changes in other states over the last five years. For example, Western Australia established 'independent public schools' along similar lines to Victoria, with Queensland adopting the same terminology. New South Wales, traditionally the most centralised system, has introduced a policy of 'local schools, local decisions'.

There is now bi-partisan political agreement on the left and the right at the federal level and in most states and territories. The left-of-centre federal government that served from 2007 until 2013 implemented a scheme known as Empowering Local Schools (ELS) that provided substantial funding to all states and territories, with the exception of Western Australia that declined its share of funds, as well as to Catholic and Independent schools. Implementation was made possible by a series of National Partnership Agreements between the Australian

Government and State and Territory Governments as well as Catholic and Independent schools. While these funds supported a shift in authority and responsibility in some instances, most were used to build a capacity for local decision-making, with a focus on professional development and community engagement. The creation of 'independent public schools' is a policy of the current right-of-centre federal government, which has set a target of 25 percent of all public schools in Australia achieving this status. Some jurisdictions have declined to use this terminology even though federal funds have been made available on mutually agreed terms.

### *Curriculum*

Until recently Australia was one of three nations / jurisdictions in the Asia-Pacific Region that did not have a national curriculum, the others being Canada and the United States. First proposed more than two decades ago, a national curriculum (referred to as the Australian Curriculum) has been achieved through the work of the Australian Curriculum, Assessment and Reporting Authority (ACARA), established under federal legislation in 2009 (foundational work was undertaken by the former National Curriculum Board). Funding for ACARA is shared 50 percent federal, 50 percent states and territories. Its policies and programs are developed by a board of 13 persons, 10 of whom are nominees of states, territories and non-government jurisdictions, but these are subject to the approval and direction of the Education Council of the Council of Australian Governments (COAG).

Details of the Australian Curriculum may be obtained from the ACARA website at [www.acara.edu.au](http://www.acara.edu.au). The Australian Curriculum has undergone an independent review since early 2014 (Donnelly and Wiltshire 2014) and planning for change in several areas is underway.

### *Testing and reporting*

National tests in literacy and numeracy have been conducted since 2008 for all students in Years 3, 5, 7 and 9. These are known as NAPLAN tests (National Assessment Program – Literacy and Numeracy). Design and delivery of NAPLAN have been the responsibility of ACARA since 2009. Results for every school in the country are reported on a website that is readily accessible under the title of My School ([www.myschool.edu.au](http://www.myschool.edu.au)). These paper-and-pencil tests are conducted in each school in May, with state-by-state performances reported publicly in August, and school-by-school performances published early in the following year. Parents receive reports on the performance of their children. There are plans for online testing that will enable reports for each student within a week or so of the tests.

What is reported for every school in Australia, about 9,500 in total, is arguably the most sophisticated, indeed elegant, presentation of data on student performance on national literacy and numeracy tests at Years 3, 5, 7 and 9 to be found in any nation. Schools are compared to 'similar' schools on the basis of their scores on an Index of Community Socio-Educational Advantage (ICSEA). The graphical presentations of these comparisons are impressive. The extent to which a school adds value to the learning of students is made possible by tracking the performance of the same students from one level of testing to the next, and this is shown graphically along with how similar schools, schools with the same 'starting point', and all schools at the same grade level have performed. The school provides material to describe itself and this appears at the beginning of each entry.

## **REVIEW OF EVIDENCE OF LINKS BETWEEN AUTONOMY AND ACHIEVEMENT**

While there is broad international literature on the topic, there is an absence of recent evidence in the Australian setting on the strength of links between school autonomy and student achievement. The review reported in this part of the paper (Caldwell 2014) drew on Australian evidence to date as well as international sources.

The review was concerned with the decentralisation of authority and responsibility to schools in systems of public education. A concept such as autonomy, in the full sense of the word, is

misleading because a school in a system of public education is not fully autonomous. It is better to refer to a relatively high or relatively low level of autonomy, being careful to specify the functions over which schools have secured more authority and responsibility.

The review was tailored to the Australian context to the extent that evidence on charter schools in Canada and the United States was not included. There have been no initiatives or proposals for developments along these lines in Australia even though they are of scholarly interest.

### **Selection of sources**

Particular attention was given in the review to certain kinds of sources. Meta-analyses or the bringing together of meta-analyses had the highest priority. Large-scale international studies drawing on large data bases, where jurisdictional comparisons were made, were also cited, especially those by or for the OECD, many of which make use of results in the Programme for International Student Assessment (PISA). Reports of respected private consultancies that have substantial evidence bases, for example, those of McKinsey & Company, warranted attention. More sharply-focused longitudinal studies in particular jurisdictions were summarised. The work of international 'thought leaders' that has an evidence base, but also draws on many years of engagement in the policy arena were given weight. Well-constructed case studies have their merit, especially if they form part of the foregoing but, in their own right, had low priority in the review except if they illustrated a particular process or set of strategies that higher priority literature suggests are important. The timeliness of the review was indicated by the fact that about 40 percent (32 of 75) sources listed as References in the review were published in 2012 or later (about the same proportion for sources cited in this paper).

### **Key themes**

#### *Contexts and Concepts*

A substantial body of evidence has emerged in the last three years as skilled researchers have designed robust quantitative studies, the findings of which have illuminated the links and rendered obsolete or ill-informed statements such as 'school autonomy has no impact on student achievement' (Caldwell and Spinks 2013). Impact is contingent on the setting and the capacity of schools (Barrera-Osorio, Fasih and Patrinos 2009; Fullan and Watson 1999, 2011; Vernez, Karam and Marshall 2012).

The concept of autonomy is used in different ways in different settings and researchers and policymakers must specify what functions are centralised and what are decentralised in interpreting the findings of research and drawing implications for policy and practice (Caldwell 1998, 2005, 2010, 2012; Mourshed, Chijioke and Barber 2010).

Some jurisdictions have had several decades of experience with higher levels of school autonomy (Caldwell and Spinks 1988, 1992, 1997, 2008), and concepts such as autonomy or school-based management have passed into history as the new approaches to management have become institutionalised (Caldwell and Spinks 2013).

#### *The Big Picture*

Evidence from deep analysis of results in PISA tend to confirm that higher levels of school autonomy are associated with higher levels of student achievement providing there is a balance of autonomy and accountability (OECD 2007: 252-3; Schütz, Wößmann [Woessmann] and West 2007: 34-35; Wößmann, Lüdemann, Schütz and West 2007: 59). Even deeper analysis reveals that there are differences in impact between developed and developing nations and, within each of these, there are differences among schools. The relationship described above is generally affirmed in developed countries, but for developing countries, higher levels of school autonomy may have no impact or even negative impact (Hanushek, Link and Wößmann 2012).

Further research confirms that the focus of autonomy should be on professional practice, with the aim being to make connections between the functions associated with school autonomy and actions that are likely to have an impact on student achievement (Fullan and Watson 1999, 2011). Exclusive reliance on structural changes for their own sake is unlikely to have an impact (Fullan, Hill and Crévola 2006: 6; Hopkins 2013: 29; Leithwood and Menzies 1998). It is important to align a range of strategies that research shows are linked to gains in student achievement (Caldwell and Spinks 1998).

#### *Inside the Black Box*

The most powerful evidence on mediating factors linking school autonomy and student achievement is on the work of principals and other school leaders in building professional capacity through staff selection, professional development and appraisal; setting priorities on the basis of data about performance; and communication of purpose, process and performance (Barber, Donnelly and Rizvi 2012: 12; Caldwell and Spinks 1998; Cooperative Research Project 1998; Hattie 2009 – citing various meta-analyses with several including a focus on leadership; Jensen 2013: 36-38; Schleicher 2011). Cultural factors may limit effects in some settings (Walker, Lee and Bryant 2014). These capacities can be built and made effective in settings where there may be only moderate levels of school autonomy. There is evidence that federations (alliances) of schools with relatively high levels of autonomy may enhance student achievement if they are focused on sharing knowledge and resources (Chapman, Muijs and Collins 2009; Chapman, Muijs and MacAllister 2011; Chapman and Muijs 2014; Ofsted 2011).

Differences between developed and developing countries in respect to the impact of school autonomy on student achievement are also evident within these contexts such that, within each, there may be no impact or negative impact if schools do not have the capacities that research has demonstrated are likely to facilitate the links (Di Liberto, Schivardi and Sulis 2013: 1; Hanushek, Link and Wößmann 2012). There is evidence that the impact of school autonomy on student achievement becomes stronger and more positive the longer a school has possessed and utilised a higher level of autonomy, reflecting the time it takes for the necessary capacities to be built and confidence to be gained (Eyles and Machin 2014).

Parental engagement has many benefits but there is little evidence to date that there is a positive impact on student achievement, except for the engagement of parents in support of their children in the early years of schooling, even though such an impact is invariably an expectation (Educational Transformations 2007).

#### *Innovation and 21st Century Education*

While there is general recognition of the importance of innovation, there is little evidence to date that higher levels of school autonomy are more likely to foster it than initiatives taken at the central level of a school system (French, Miles and Nathan 2014: 13; Kärkkäinen 2012). In some systems the latter has established what are known as 'innovation zones', which are innovations in their own right, within which schools are encouraged and supported to be innovative. There is modest but promising evidence that there may be an impact on student achievement in areas in which these schools are specialising so, to this extent, there is an association with a degree of school autonomy (Jackson 2014).

There are different views on what constitutes 21<sup>st</sup> century skills and how they should be addressed in the curriculum (Donnelly and Wiltshire 2014; Trilling and Fadel 2009; Fadel, 2014a; 2014b). Work continues in some settings on how they should be measured. Some jurisdictions, notably Singapore, appear to be making good progress (Fullan and Watson 2011: 34). There is no evidence in the literature reviewed thus far that there is an association between higher levels of school autonomy and higher levels of student achievement in respect to these skills. 21<sup>st</sup> century education may be a more useful concept than 21<sup>st</sup> century skills.

There is a need for further research on matters related to innovation and 21<sup>st</sup> century education as far as school autonomy and its impact is concerned. This will be a focus in the third phase of the international project.

## **CASE STUDIES**

The case studies were intended to provide responses to the following question: 'How have schools with a relatively high degree of autonomy used their increased authority and responsibility to make decisions that have led in explicit cause-and-effect fashion to higher levels of student achievement?'

### **Selection of schools**

In Australia, nominations of schools were sought from senior leaders of three jurisdictions (Victoria, Queensland and the Australian Capital Territory). There were two main criteria. First, the nominated schools have taken up a higher level of autonomy for at least two years. Second, the nominated schools have achieved gains in measures of student achievement and there is confidence that they can describe in direct cause-and effect fashion how they used their autonomy to achieve their success (while acknowledging there will be a range of factors that have contributed). Leaders were invited to nominate up to three schools in their jurisdictions from which the researcher made a selection to ensure that different kinds of schools (primary, secondary and primary-secondary) and locations (urban, regional and rural) were represented in the set of four.

There is no claim that the nominated schools are 'the best' as far as gains in student achievement are concerned or 'the best' in exercising school autonomy. They are not, therefore, a representative sample, and no attempt is made to generalise the findings. The schools are intended to be 'demonstration' schools of how the links were made.

### **Methodology**

The research was conducted by the author with the support of a grant from the Australian Government. The principals of selected schools were formally invited to participate in the project, indicating whether they wished their school to remain anonymous. Each of the four schools agreed to be named in the report (Caldwell 2015).

Information about each school was gathered before the first visit. Sources included online reports of school plans and reviews as well as information in the school's entry on the My School website maintained by the Australian, Curriculum, Assessment and Reporting Authority (ACARA). Information was then gathered at the school site over two days. The principal was invited to provide information about the history, context and special characteristics of the school as well as its performance in recent years.

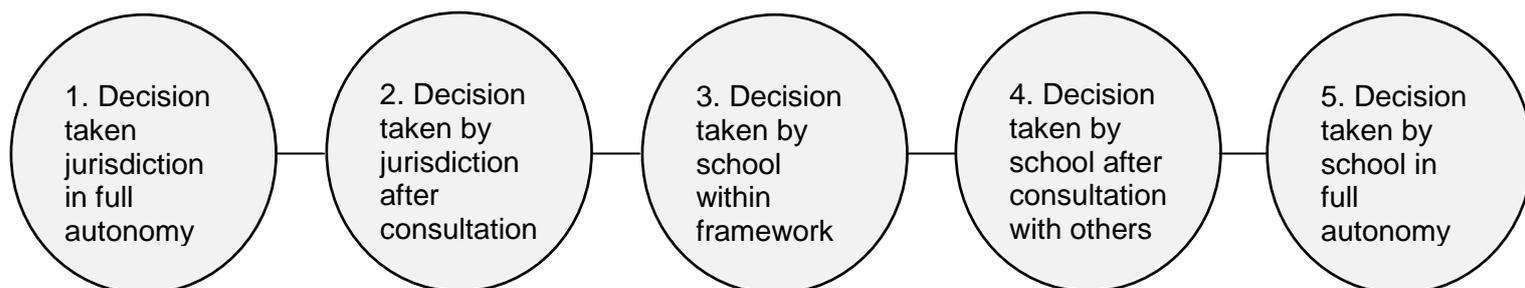
The principal was also invited to describe up to three school-based examples where the school had used its authority to make decisions that led to gains in student achievement. Further information was then sought from the principal and other staff nominated by the principal, including where relevant the council / board president or nominee, to illuminate the processes and outcomes, gathering evidence wherever possible to enable the links to be mapped.

### **Assessing the level of autonomy in each jurisdiction**

The OECD has gathered information on the extent of autonomy in different countries / jurisdictions around the world (OECD 2011). There are five levels in the OECD continuum: decision taken by a higher authority in full autonomy, decision taken by a higher authority after consultation with the school, decision taken by the school within the framework set by a higher authority, decision taken by the school after consultation with others, and decisions taken by the school in full autonomy. There are four domains in which decisions are made: organisation of instruction, personnel management, planning and structures, and resource management.

The OECD reported on the locus of decision-making for member countries / jurisdictions for each of 47 items in the four domains for government lower secondary schools. A panel of people who were knowledgeable about policy and practice in their jurisdictions provided an assessment of the level at which decisions were made and the mode of decision-making.

The items in the OECD survey were adapted slightly to suit the Australian context and the researcher assessed the level of autonomy for each of the three jurisdictions where case study schools were located, basing his assessment on his knowledge of policy and practice as well as advice from principals. The following continuum was used as a point of reference in assessing the level of autonomy for each of 44 items:



## Findings

### *Characteristics of case study schools*

Table 1 summarises the characteristics of the four schools and the three examples nominated by principals where links between school autonomy and student achievement are demonstrated. The schools are in three settings: urban, regional and rural. Three of the four schools have an ICSEA score between 900 and 1000, indicating a moderate level of socio-educational disadvantage. One has an ICSEA score between 1000 and 1100 indicating a moderate level of socio-educational advantage. There is considerable diversity among the three examples nominated by principals. These include a capacity to select staff, capacity-building including coaching, community engagement, and personalising support for students.

No attempt was made to generalise from the experience of these four schools. They were considered 'demonstration schools' that illustrated how the links to student achievement have been made under conditions of autonomy for certain functions.

### *Findings in light of international evidence*

The report of each case study included a discussion of the extent to which the findings were consistent with international evidence on the links between higher levels of school autonomy and student achievement, as summarised in the second part of this paper, a key finding being: 'The most powerful evidence on mediating factors linking school autonomy and student achievement is on the work of principals and other school leaders in building professional capacity through staff selection, professional development and appraisal; setting priorities on the basis of data about performance; and communication of purpose, process and performance'.

The findings in each of the case studies were consistent with the international evidence at a very high level. An illustration of how the links between school autonomy and student achievement were mapped at one school is presented below.

Table 1: Characteristics of case study schools

| School                       | Jurisdiction | Level               | Setting  | 2014 ICSEA | Examples of where links to student achievement were demonstrated   |
|------------------------------|--------------|---------------------|----------|------------|--|
| Broadmeadows Primary         | Victoria     | Primary             | Urban    | 927        | International experiences in professional development<br>Coaching<br>Local selection of staff                |
| Specimen Hill Primary        | Victoria     | Primary             | Regional | 970        | 'Great expectations'<br>School improvement<br>Team planning<br>[with an integrating theme of wellbeing]      |
| Canberra High                | ACT          | Secondary           | Urban    | 1086       | Selection of staff<br>Student support and development of literacy and study skills<br>Band and music program |
| Millmerran State P-10 School | Queensland   | Primary - Secondary | Rural    | 944        | Whole-school capacity-building<br>Targeted Personalised Approach<br>Community engagement                     |

*Illustrating the links between school autonomy and student achievement*

Specimen Hill Primary School was one of the four schools in the case study phase (Table 1). It was established in 1874 in Golden Square, a suburb of the rural city of Bendigo in central Victoria. 'Specimen' in the title of the school is derived from the gold-mining era in the last half of the 19<sup>th</sup> century. As a public school in Victoria, it has a high level of autonomy in decision-making, including the selection of staff. The recent rapid improvement in student achievement is illustrated in the school's performance in the National Assessment Program: Literacy and Numeracy (NAPLAN) since 2008, as shown in Table 2.

As explained in the first part of the paper, the performance of schools in NAPLAN is compared to that in schools with similar socio-educational characteristics (ICSEA) as well as with all schools. ICSEA is the Index of Socio-Educational Advantage. Comparisons are of five kinds: 'substantially above', 'above', 'same', 'below' and 'substantially below'. Table 2 illustrates changes in student achievement at Specimen Hill, as indicated in NAPLAN scores in Years 3 and 5 across the years 2008, 2010, 2012 and 2014. Specimen Hill had an ICSEA

score in 2014 of 970, just below the median ICSEA across all schools (1000). The ICSEA score for Specimen Hill was 982 in 2008 indicating little change in the community supported by the school on the variables that make up ICSEA.

Table 2: Changes in measures of student achievement at Specimen Hill Primary School from 2008 to 2014 as measured by results in the National Assessment Program: Literacy and Numeracy (NAPLAN)

| Test                | Year | Comparator | 2008 | 2010 | 2012 | 2014 |
|---------------------|------|------------|------|------|------|------|
| Reading             | 3    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
|                     | 5    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
| Writing             | 3    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
|                     | 5    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
| Spelling            | 3    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
|                     | 5    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
| Grammar Punctuation | 3    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
|                     | 5    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
| Numeracy            | 3    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
|                     | 5    | Similar    |      |      |      |      |
|                     |      | All        |      |      |      |      |
| ICSEA               |      |            | 982  | 958  | 957  | 970  |

#### Colour coding

|                     |  |
|---------------------|--|
| Substantially above |  |
| Above               |  |
| Same as             |  |
| Below               |  |
| Substantially below |  |

The comparisons in the table indicate that Specimen Hill performed at about the same level as similar schools and all schools in 2008, except for Grammar and Punctuation for Year 5 where it was above similar and above all schools, and below all schools for Spelling in Year 5. There was a decline in performance in 2010 when the school performed below similar and all schools on 13 of 20 comparisons, being substantially below all schools in Year 5 Writing, Year 5 Spelling and Year 5 Grammar and Punctuation.

A different picture emerged two years later, with the school performing better than like and all schools in seven of the 20 comparisons, and below in only two. NAPLAN 2012 was conducted the year after the appointment of a new principal and a school review that confirmed the declining performance of the school in some areas (and praising others) and the need for the kind of strategies that were then implemented.

The transformation is starkly evident in the results for 2014. The school did not perform below like or all schools in any comparison but performed better or substantially better in 13 of the 20 comparisons, the reverse of what occurred in 2010.

The principal nominated three examples where there is evidence that local decisions (autonomy) had led in cause-and-effect fashion to gains in student achievement. These were the setting of Great Expectations, the employment of a School Improvement Officer (SIO) and Team Planning. Wellbeing emerged as an integrating theme. Figure 1 illustrates the links between decisions and actions in School Improvement and Wellbeing and higher levels of student achievement based on information provided in interviews with the principals, staff and parent members of the school council.

The school used its autonomy in respect to the selection of staff to appoint a School Improvement Officer (SIO) and a Wellbeing Officer (WO). Reading across the top line of Figure 1, a focus of the work of the SIO was on building the capacity of teachers. Sample strategies included coaching, team planning, instructional planning, analysis and use of data, personalising learning and peer observation. The SIO was a model of capacity-building through her own engagement in graduate studies and professional development in related areas. It is one thing for teachers to know about and understand what is to be done in respect to school improvement but it is another thing for them to actually apply the knowledge. It was clear from information shared in the course of the study that they were indeed able to do this and that the links illustrated in Figure 1 had been made.

#### *Role of the principal*

The Australian Institute for Teaching and School Leadership (AITSL) developed the Australian Professional Standard for Principals which was approved by all ministers for education (AITSL 2011a, 2014). The principals in the case study schools demonstrated their achievement of the Standard at a high level. There is a strong case that the Standard describes how all principals should exercise a high level of professional autonomy. It was also evident in each case study that building the capacity of teachers to meet selected elements of the Australian Professional Standards for Teachers (AITSL 2011b) was a priority for principals and other leaders. The Standard is based on three leadership requirements:

- vision and value
- knowledge and understanding
- personal qualities and social and interpersonal skills

These requirements are enacted through the following five key professional practices

- leading teaching and learning
- developing self and others
- leading improvement, innovation and change
- leading the management of the school
- engaging and working with the community

Exhibit 1 contains the Standard as it applies to the principal's role in improvement, innovation and change, each of which was required in making the links between school autonomy and student achievement in the case study schools.

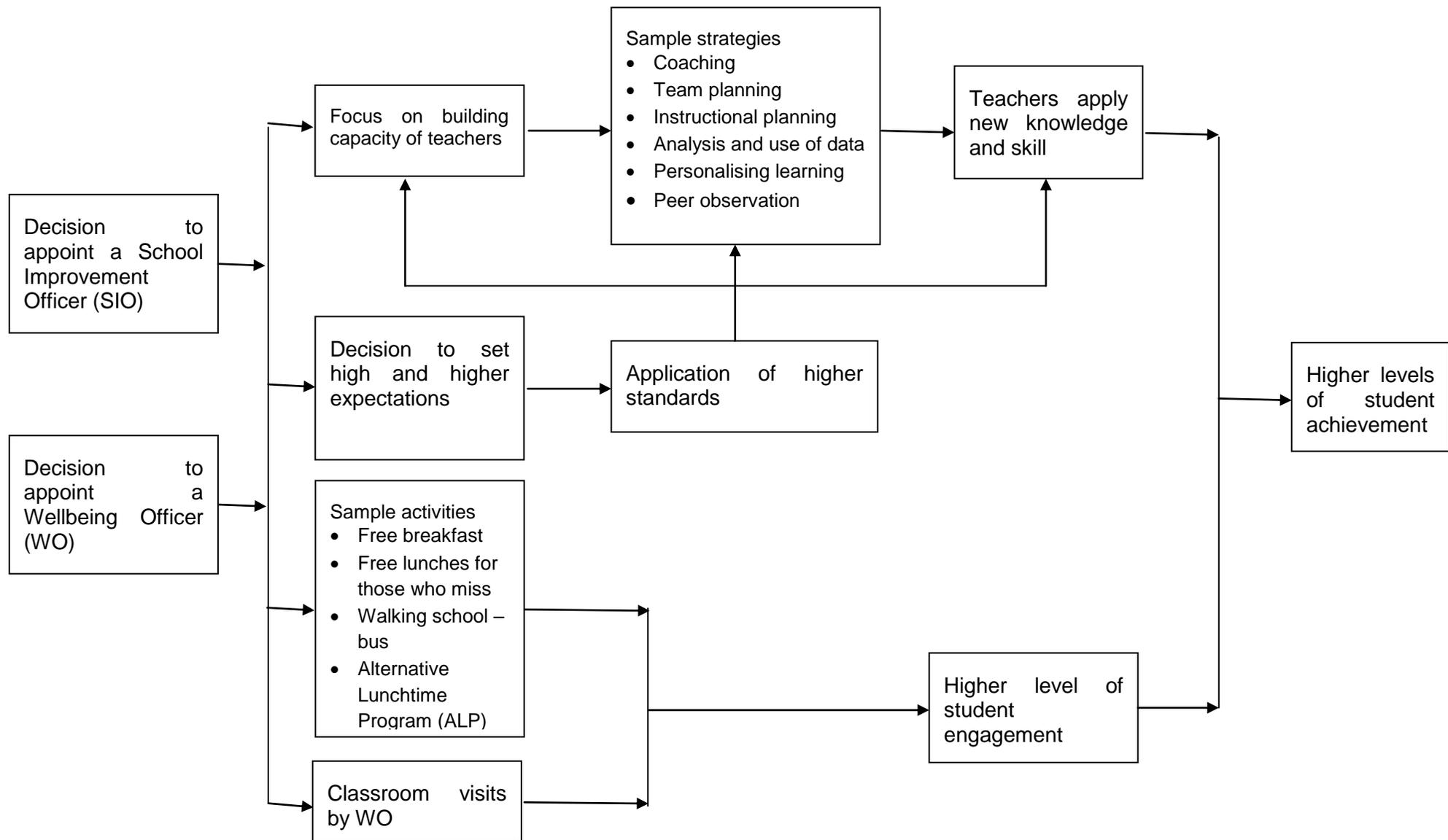


Figure 1: Links between decisions and actions in School Improvement and Wellbeing and higher levels of student achievement at Specimen Hill Primary School

Exhibit 1: Excerpts related to improvement, innovation and change in the Australian Professional Standard for Principals (Australian Institute for Teaching and School Leadership 2011)

*Role of the principal*

Principals are able to embrace uncertain, complex and challenging contexts and work with others to seek creative and innovative solutions that support quality outcomes for all

*Leading improvement, innovation and change*

Principals work with others to produce and implement clear, evidence-based improvement plans and policies for the development of the school and its facilities. They recognise that a crucial part of the role is to lead and manage innovation and change to ensure the vision and strategic plan is put into action across the school and that its goals and intentions are realised.

*Professional practices*

- Work with the school community to promote and sustain school improvement informed by school effectiveness research. Lead and facilitate through teams the necessary innovation and change to reflect changing demands on and expectations of the school and use project management to foster both efficiency and effectiveness in achievement of goals. Take a strategic role in the development and implementation of new and emerging technologies to enhance and extend teaching and learning experiences.
- Develop quality assurance and review strategies to demonstrate the need for and effectiveness of innovation and change to secure improvement. Ensure the vision for the school is shared, clearly understood and acted upon effectively by all.
- Motivate and work with others to foster creativity, innovation and the use of appropriate new technologies to achieve excellence. Demonstrate personal commitment to continuous improvement using problem solving, creative thinking and strategic planning. Use appropriate leadership styles sensitive to the stage, growth and development of the school.

*Conclusion*

A high level of coherence was evident in each of the case studies in the sense that leadership and management were closely if not tightly connected to curriculum and pedagogy. There was a time when leadership and management appeared to be disconnected from the core work of the school. This coherence extends to the selection of staff and the allocation of funds in budgets, each of which reflect the unique mix of learning needs at a school and priorities for action. The four case studies in these 'demonstration schools' provided rich descriptions of what was done and by whom to make the link to learning.

**NEXT STEPS**

The design of the next stage includes an additional case study of a public school in Victoria with a high level of autonomy that excels in the way it addresses so-called 21<sup>st</sup> century skills. A review of evidence on the links between school autonomy and student achievement in such schools was included in the second part of this paper and will be updated. However, none of the four case study schools in the third part gave explicit attention to this area and an additional case study is suggested.

Design of the next stage also includes a survey with two components: one that includes a common set of items to be administered in each participating nation / jurisdiction in ISSAL;

another set that is applicable to Australia only. It is expected that the survey will be administered in an estimated 600 schools, being a stratified representative sample of principals of government schools in each state and territory. The survey responds to a sharper focus on leadership in the next stage of ISSAL, as captured in the research question: 'How do school leaders exercise their degrees of freedom to initiate and sustain curriculum and pedagogical improvement and innovation?'

## ACKNOWLEDGEMENTS

The financial support of the Australian Government for the Australian contribution to the International Study on School Autonomy and Learning (ISSAL) is acknowledged. Approval to conduct the four case studies in three jurisdictions was given by the Department of Education and Training (Victoria), Department of Education and Training (Queensland) and the ACT Education and Training Directorate (Australian Capital Territory). Their senior officers provided nominations of schools to be considered for study. Thanks are extended to Di Craig, Principal of Specimen Hill Primary School and her colleagues for participating in the case study phase; this school was selected for illustration in the third part of the paper.

## REFERENCES

- Australian Institute for Teaching and School Leadership (AITSL) (2011a). *Australian Professional Standard for Principals*. Melbourne: AITSL.
- Australian Institute for Teaching and School Leadership (AITSL) (2011b). *Australian Professional Standards for Teachers*. Melbourne: AITSL.
- Australian Institute for Teaching and School Leadership (AITSL) (2014). *Australian Professional Standard for Principals: Leadership Profiles*. Melbourne: AITSL.
- Barber, M., Donnelly, K. and Rizvi, S. (2012). *Oceans of Innovation: The Atlantic, the Pacific and the Future of Education*. London: Institute for Public Policy Research.
- Barrera-Osorio, F., Fasih, T. and Patrinos H. (2009). *Decentralized Decision-Making in Schools. The theory and evidence on school-based management*. Washington D.C.: World Bank. [http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079934475/547667-1145313948551/Decentralized\\_decision\\_making\\_schools.pdf](http://siteresources.worldbank.org/EDUCATION/Resources/278200-1099079877269/547664-1099079934475/547667-1145313948551/Decentralized_decision_making_schools.pdf)
- Caldwell, B.J. (1998). *Self-managing Schools and Improved Learning Outcomes*. Report commissioned by the Department of Education, Employment, Training and Youth Affairs (DEETYA). Canberra: DEETYA.
- Caldwell, B.J. (2005). *School-Based Management*. No. 3 in the Education Policy Series of the International Academy of Education. Paris: International Institute of Educational Planning (IIEP), UNESCO.
- Caldwell B.J. (2010). School Reform and Restructuring: Self Managing School. In Peterson, P., Baker, E. and McGaw, B. (Eds). *International Encyclopedia of Education*. Volume 5, pp. 72-77. Oxford: Elsevier.
- Caldwell, B.J. (2012). *Review of Related Literature for the Evaluation of Empowering Local Schools*. Commissioned by the Australian Council for Educational Research (ACER) as one component of its report to the Empowering Local Schools Section, National School Reform Branch, Curriculum Assessment and Teaching Group, Department of Education, Employment and Workplace Relations (DEEWR) of the Australian Government. [https://docs.education.gov.au/system/files/doc/other/review\\_of\\_related\\_literature\\_for\\_the\\_evaluation\\_of\\_empowering\\_local\\_schools.pdf](https://docs.education.gov.au/system/files/doc/other/review_of_related_literature_for_the_evaluation_of_empowering_local_schools.pdf)
- Caldwell, B.J. (2014). *Impact of School Autonomy on Student Achievement in 21<sup>st</sup> Century Education: A Review of Evidence*. Melbourne: Educational Transformations. (Available at [www.educationaltransformations.com.au](http://www.educationaltransformations.com.au))

- Caldwell, B.J. (2015). *School Autonomy and Student Achievement: Case Studies in Australia*. Melbourne: Educational Transformations. (Available at [www.educationaltransformations.com.au](http://www.educationaltransformations.com.au))
- Caldwell, B.J. and Spinks, J.M. (1988). *The Self-Managing School*. London: Falmer.
- Caldwell, B.J. and Spinks, J.M. (1992). *Leading the Self-Managing School*. London: Falmer.
- Caldwell, B.J. and Spinks, J.M. (1998). *Beyond the Self-Managing School*. London and New York: Routledge.
- Caldwell, B.J. and Spinks, J.M. (2008). *Raising the Stakes: From Improvement to Transformation in the Reform of Schools*. London and New York: Routledge.
- Caldwell, B.J. and Spinks, J.M. (2013). *The Self-Transforming School*. London and New York: Routledge.
- Chapman, C. and Muijs, D. (2014). Does school-to-school collaboration promote school improvement? A study of the impact of school federations on student outcomes. *School Effectiveness and School Improvement*. 25(3): 351-393.
- Chapman, C., Muijs, D. and Collins, A. (2009). *The Impact of Federations on Student Outcomes*. Nottingham: National College for School Leadership
- Chapman, C., Muijs, D., and MacAllister, J. (2011). *A Study of the Impact of School Federation on Student Outcomes*. Nottingham: National College for School Leadership. <http://dera.ioe.ac.uk/12140/1/download%3Fid%3D155373%26filename%3Dthe-impact-of-school-federation-on-student-outcomes.pdf>
- Cooperative Research Project (1998). *Assessing the Impact*. Final Report of the Cooperative Research Project on 'Leading Victoria's Schools of the Future', conducted by the Department of Education, Victorian Association of State Secondary Principals, Victorian Primary Principals Association, The University of Melbourne (Fay Thomas, Chair). [This was the sixth report of the five-year Cooperative Research Project, with earlier reports in 1994, 1995 (two), 1996 and 1997]
- Di Liberto, A., Schivardi, F. and Sulis, G. (2013). *Managerial Practices and Students' Performance*. November 22. [http://www.fga.it/uploads/media/Di\\_Liberto\\_Schivardi\\_Sulis\\_Managerial\\_Practices\\_and\\_Students\\_Performance\\_-\\_FGA\\_WP49.pdf](http://www.fga.it/uploads/media/Di_Liberto_Schivardi_Sulis_Managerial_Practices_and_Students_Performance_-_FGA_WP49.pdf)
- Donnelly, K. and Wiltshire, K. (2014). *Review of the Australian Curriculum*. Final Report. Commissioned by the Minister for Education (Australian Government). Canberra, ACT: Australian Government.
- Educational Transformations (2007). *Review of Parental Engagement in Queensland State Schools*. A literature review and case studies of current practice in Queensland State Schools commissioned by the Department of Education, Training and the Arts, Queensland. Melbourne: Educational Transformations (unpublished).
- Eyles, A. and Machin, S. (2014). *The Introduction of Academy Schools to England's Education*. Paper presented at the CESifo Area Conference on Economics of Education, Munich, Germany, September 12-13.
- Fadel, C. (2014a). *Education with a Capital E*. Occasional Paper 134. Melbourne: Centre for Strategic Education.
- Fadel, C. (2014b). Character education framework for the 21<sup>st</sup> century. Presentation at an international conference on the theme 'Character Education for a Challenging Century' hosted by the Centre for Curriculum Redesign (CCR), International School of Geneva, Switzerland, 22-24 October.

- French, D., Miles, K.H. and Nathan, L. (2014). *The Path Forward: School Autonomy and its Implications for the Future of Boston's Public Schools*. Report Prepared for The Boston Foundation and Boston Public Schools. Boston MA: Boston Public Schools.
- Fullan, M., Hill, P. and Crévola, C. (2006). *Breakthrough*. Thousand Oaks, C.A.: Corwin Press.
- Fullan, M. and Watson, N. (1999). *School-based Management: Reconceptualizing to Improve Learning Outcomes*. Final paper prepared for the World Bank on 'Improving Learning Outcomes in the Caribbean', August. <http://www.michaelfullan.ca/media/13396040480.pdf>
- Fullan, M. and Watson N. (2011). *The Slow Road to Higher Order Skills*. Report to the Stupski Foundation. [http://gelponline.org/sites/default/files/resource-files/fullan\\_the\\_slow\\_road.pdf](http://gelponline.org/sites/default/files/resource-files/fullan_the_slow_road.pdf)
- Hanushek, E.A., Link, S. and Wößmann [Woessmann], L. (2012). Does School Autonomy Make Sense Everywhere? Panel Estimates from PISA. *Journal of Development Economics*. No. 296. [www.scribd.com/doc/178647348/Does-School-Autonomy-Make-Sense-Everywhere-Panel-Estimates-from-PISA](http://www.scribd.com/doc/178647348/Does-School-Autonomy-Make-Sense-Everywhere-Panel-Estimates-from-PISA)
- Hattie, J. (2009). *Visible Learning: A Synthesis of over 800 Meta-analyses relating to Achievement*. London and New York: Routledge.
- Hopkins, D. (2013). *Exploding the Myths of School Reform*. Melbourne: Australian Council for Educational Research (ACER).
- Hughes, P. W (Chair) (1973). *A Design for the Governance and Organisation of Education in the Australian Capital Territory*. Canberra: Commonwealth Department of Education.
- Interim Committee of the Australian Schools Commission (1973). *Schools in Australia*. Peter Karmel (Chair) (The Karmel Report). Canberra: Australian Government Printing Service.
- Jackson, D. (2014). *An Introduction to New York City's iZone: Redesigning the Schooling System Together*. Paper prepared for the Global Education Leaders Program (GELP), March. [www.google.com.au/?gws\\_rd=ssl#q=Jackson+an+introduction+to+New+Yor+City's+iZone](http://www.google.com.au/?gws_rd=ssl#q=Jackson+an+introduction+to+New+Yor+City's+iZone).
- Jensen, B. (2013). *The Myth of Markets in School Education*. Melbourne: Grattan Institute.
- Kärkkäinen, K. (2012). *Bringing about Curriculum Innovations: Implicit Approaches in the OECD Area*. OECD Working Paper No. 82. Paris: OECD.
- Leithwood, K. and Menzies, T. (1998). 'Forms and effects of school-based management: A review. *Educational Policy*. (12) 3: 325-346.
- Mourshed, M., Chijioke, C. and Barber, M. (2010). *How the World's Most Improved School Systems Keep Getting Better*. London: McKinsey & Company.
- OECD (2007). *PISA 2006 Science Competencies for Tomorrow's World*. Paris: OECD Publishing.
- OECD (2011). School autonomy and accountability: Are they related to student performance? *PISA in Focus*. 2011/9. Paris: OECD Publishing.
- Ofsted (2011). *Leadership of More than One School: An Evaluation of the Impact of Federated Schools*. London: Office for Standards in Education.
- Schleicher, A. (2011). Is the sky the limit? *Phi Delta Kappan*. 58-63.
- Schütz, G., Wößmann [Woessmann], L. and West, M.R. (2007). *School Accountability, Autonomy, Choice, and Level of Student Achievement: International Evidence from PISA 2003*. Education Working Paper No. 14: Directorate of Education, OECD. Online. [www.elternlobby.ch/deutsch/argumente/pdf/fbw13woessmann.pdf](http://www.elternlobby.ch/deutsch/argumente/pdf/fbw13woessmann.pdf)

- Trilling, B. and Fadel, C. (2009). *21<sup>st</sup> Century Skills*. Hoboken, NJ: John Wiley & Sons.
- Vernez, G., Karam, R. and Marshall, J.H. (2012). *Implementation of School-Based Management in Indonesia*. Santa Monica CA: RAND Corporation. [www.rand.org/content/dam/rand/pubs/monographs/2012/RAND\\_MG1229.pdf](http://www.rand.org/content/dam/rand/pubs/monographs/2012/RAND_MG1229.pdf)
- Walker, A., Lee, M. and Bryant, D.A. (2014). How much of a difference do principals make? An analysis of between-schools variation in academic achievement in Hong Kong public schools. *School Effectiveness and School Improvement*. 25(4): 602-629.
- Wößmann, L., Lüdemann, E., Schütz, G. and West, M.R. (2007). *School Accountability, Autonomy, Choice, and the Equity of Student Achievement: International Evidence from PISA 2003*, Directorate of Education, OECD. <http://ideas.repec.org/p/oec/eduaab/13-en.html>