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TEACHING in context



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Teaching in context

John Graham

Teaching is often portrayed in the media as a practice without a context. Stories feature individual teachers who seem to achieve tremendous outcomes for students, no matter what school they are at or under what conditions they are teaching. The impression is that they have a special capability and commitment that is not shared by their peers. Individual competency is placed on a pedestal while the context within which that competency is being exercised becomes just background noise. The high-performing teacher, according to this scenario, is someone who is able to rise above any constraints and achieve results, regardless of their teaching context.

This distorted view of teacher quality is one of those media memes that muddy the realities of school education and the practice of teaching within it. The Harvard educationist Richard Elmore, commenting on the relationship between the individual teacher and their context, said, 'When you introduce the idea that learning occurs at organisations called schools, not in private practice, you introduce another layer of complexity.'

Schools, according to Elmore, are a collective enterprise - organisations requiring 'a strong normative environment' to work effectively. When a teacher steps into a school they are entering a specific context determined by many conditions of practice: school resource levels; the background of students; the location of the school and the nature of the school community; the parameters set by government policies; the level of staffing; the quality of the leadership, organisation and relationships in the institution; the accessibility of worthwhile professional development; the relevance and inclusiveness of the curriculum; workload levels etc. The concept of 'teacher quality' makes little sense without an understanding of what quality teaching means within the context where it is practised.

John Graham is editor of *Professional Voice* and works as a research officer at the Australian Education Union (Vic). He has been a secondary teacher, worked on national and state-based education programs and in the policy division of the Victorian Education Department. He has carried out research in a wide range of areas related to education and training. He has had particular responsibility for the many issues impacting on teachers and teaching as a profession, teacher education, curriculum change, and the politics, organisation and funding of public education. He has written extensively in various publications about all of these matters.

The teacher quality meme lines up with other simplified "truths" or beliefs about education which have a sort of common sense appeal, and are therefore attractive to politicians. As such, they influence the policy agenda of many governments, appear regularly as 'solutions' in think-tank reports, are enthusiastically propagated by parts of academia and are reflected in the media reporting of education policies. They incorporate a sense that the debate is already over and the real issue is how to embed the 'findings' in policy and implement that policy in education systems and schools.

At the more sophisticated end of policy-making, these 'truths' use a veneer of research respectability to justify positions such as the need for greater school autonomy and choice, the unimportance of class size, the unalloyed benefits for teachers of the new digital environment, the negligible need for mainstream gender diversity education, the quality of private schooling and the need for public schools to become more like their non-government rivals. Each of our writers in this edition of *Professional Voice* moves at least one of these 'truths' out of the self-evident basket and shows why it is, at a minimum, contestable or, more strongly, deeply flawed.

One such 'truth' enthusiastically endorsed by most governments (and their departments of Treasury) is that reducing class sizes has little to no impact on student outcomes. At the beginning of each episode of the ABC's recent observational documentary series *Revolution School*, John Hattie from Melbourne University's Graduate School of Education unequivocally states that: "Reducing class size, private schooling and giving parents choice does not make a difference to the quality of education." To reinforce the authority of what Professor Hattie has had to say, the ABC introduces him as "arguably the world's most influential education researcher" and describes his 2008 book, *Visible Learning*, as "the holy grail of effective teaching".

The articles in this journal have no problem with Hattie's views about private schooling and parental choice and, in fact, several authors present research which comes to an even stronger conclusion about the negative impact of these policies on Australia's educational outcomes. When it comes to class size however, there is no such agreement.

In his article, *Is class size important? Lessons from research*, Peter Blatchford from the Institute of Education at the University College, London and director of an international network on 'Class Size and Effective Teaching', takes issue with Hattie's conclusions about the effectiveness of lowered class sizes on student learning. The main problem Blatchford finds with the Hattie analysis is the basis of his evidence – the use of meta-analyses which give equal weight to studies of varying quality. He questions the validity of Hattie's comparisons of factors like specific methods of teaching (such as "direct instruction") with

class size reduction which "merely sets limits on the number of pupils in a class". More fundamentally, meta-analyses, like that of John Hattie, are not "dedicated studies" as they:

'...use data collected by other researchers sometimes for other purposes. They are not necessarily wrong but it is odd that so much weight is attached to studies that don't directly address the topic on which conclusions are made.'

Blatchford maintains that the most valid and reliable research into the effects of class size comes from dedicated studies. He outlines the two main types of dedicated research designs which yield the best evidence about this matter. The first is experimental, exemplified by the Tennessee Student Teacher Achievement Ratio (STAR) project, which is regarded as "the gold standard design for establishing causality in that it is a randomised experiment". The second type of research design is exemplified by naturalistic longitudinal regression approaches. The Class Size and Pupil Adult Ratio (CSPAR) research carried out by the UCL Institute of Education is an example of this. It examined the effects of class sizes as they occurred naturally in schools across England and controlled statistically for potentially confounding factors, such as student attainment levels. Both STAR and CSPAR, arguably the best and largest studies in the field, agreed on the size of the positive effect of lower class sizes and how they have the greatest impact on the early years of schooling and the most disadvantaged low achieving students.

A second area where the context of teaching has become all-important is the multiplying digital environment in schools. Most of the discussion about the impact of digital technology has focused on its integration into the curriculum and its effects on student learning. Neil Selwyn, Professor in the Faculty of Education at Monash University, shifts that focus from students to the work of teachers. He believes the prevailing view which sees new technologies as only a benefit to teachers is one-sided, and that there needs to be 'greater recognition of the ways in which digital technologies might actually make teachers' work more complex and difficult'.

Selwyn describes how digital technologies have almost surreptitiously intensified teacher workload. They have converted some elements of education into mundane online tasks that 'don't feel, look or smell like labour at all'. The 'always-on' nature of mobile phones, email and other online communications have further blurred the lines between work and home, extending the times and places of teachers' work.

Of equal importance, according to Selwyn, is the way in which digital technologies have been eroding the professional nature of teachers' work. They standardise teachers' activities

and actions, combine with existing trends to decrease the autonomy and capacity of teachers to self-regulate their work, outsource core professional responsibilities such as the development of teaching materials and personal feedback on student work and, in general, lead to a subversion of professional judgment and expertise. These technologies can also play a key role in efforts to quantify the effectiveness and success of teachers by helping schools to 'embrace the longstanding business mantra of 'If You Can Measure It, You Can Manage It'.

Teachers in public school systems are teaching in a very special context which is based on universal access to education. Alan Reid argues that policy settings over the past 40 years have diminished the strength of public education and resulted in a large achievement gap between rich and poor - a gap that is widening. He attributes this to the fact that policy-makers have been neglecting the concept of need and foregrounding the principle of entitlement. This entitlement principle has resulted in increasing amounts of public money being directed to private schools, with a consequent expansion of that sector at the expense of public education. Because of this, the public education system has become increasingly residualised with greater concentrations of disadvantaged students. The 'solution' for public schools, according to advocates of choice and competition, is for them to become more like private schools in order to survive and flourish in an education market.

Reid argues that the Gonski Review provided a once-in-a-generation opportunity to revitalise public schools by once again fastening school funding to a concept of need. However, while he sees a fairer system of funding as a necessary condition for strengthening public education, he argues that it is not sufficient to reverse the drift to private schools. There also needs to be a move away from the current trend of making public schools more private and instead re-emphasising their 'publicness'. This means giving new life to the concept of the common good, with public education being understood as a community resource to which everyone has rights of access. Rather than public schools being expected to be more private, private schools should be required to be more public in their actions and make-up.

Professor Jennifer King Rice is a distinguished academic from the University of Maryland who uses economics to analyse the adequacy of US education systems. In her article for *Professional Voice* she defines an 'adequate education' as:

"...one that provides resources sufficient to ensure that all students, regardless of background or residential district, have the opportunity to realise a clearly defined set of goals'.

Her analysis of adequacy studies across America indicates that 'almost without exception' additional resources are needed in poor school districts serving some of the needlest students. She divides these resources into five categories: effective teachers and principals; appropriate class size; challenging and culturally relevant curriculum and supportive instructional resources; sufficient quality time for learning and development; and up-to-date facilities and a safe environment.

Rice sets out a variety of research findings in each of these categories. Regarding class size for example, she agrees with Blatchford about the positive and persisting effects of small classes, particularly for low-income and minority groups. She states that more supportive working conditions have the potential to improve the capacity of teachers in difficult-to-staff and low-performing schools. Other findings relate to the need for high-quality stable school leadership, the negative impact on the curriculum and student learning of testing requirements, the tendency for schools serving low SES students to use technology to drill basic skills rather than develop problem-solving skills and creative capacities, and the effects of poor facilities. She cites the most recent evidence about the impact of poor facilities as 'lower test scores, lower productivity and retention of teachers, and unhealthy environments that affect children's heath, motivation and performance'.

No issue in school education has generated more heat (and so little light) as the controversy over the Safe Schools program. Set up as an anti-bullying program aimed at promoting acceptance of lesbian, gay, bisexual, transgender and intersex (LGBTI) students, it has become a punching bag for conservative forces in politics, religious groups and the media. In their view, it is less an anti-bullying program than an attack on core Australian values through 'Marxist' social engineering. Anne Mitchell and Lynne Hillier, two of the founders of the program, shine a welcome light on the myths and fabrications generated by the controversy and provide a detailed account of the research which led to the establishment of the program.

Professional Voice has run several articles challenging the misconception that a private school education is academically superior to one gained in a public school. Studies of the performance of first-year university students who entered their courses with the same ATAR have found that public school students have a better academic record and a lower dropout rate than their private school peers. Similarly, the PISA data about Australian student performance shows no difference in achievement once SES background is factored in. David Zyngier adds to this evidence with his analysis of Year 12 VCE results for public and private schools with comparable Index of Community Socio-Educational Advantage (ICSEA) rankings. The only performance difference between the two sectors is that public schools achieve the same results, with far less funding.

Our interview for this edition is with Jane Caro, well-known author, broadcaster, social commentator and passionate supporter of public education. She answers a series of questions about public education and uses her background as an award-winning advertising writer to sum up the 'brand' difference between public and private schools.

'My advertising background informs my response to the [public education] debate in two ways. First, I know that private schools are the branded products and public schools, the generic. They are made in the same places by the same people with the same ingredients – it's just one has prettier packaging and a higher price.'

Is class size important? Lessons from research

Peter Blatchford

Across the world the debate about class sizes in schools continues. On one side are the voices in favour of smaller classes because of the benefits for teaching and learning. Chuck Achilles and Jeremy Finn, two of the main researchers on the famous STAR project in the USA, have said: "Class size (reductions) should not just be a cornerstone, but the foundation of educational policy for the early education of America's citizenry." On the other side are those who argue that class size is unimportant. Andreas Schleicher, the head of the OECD PISA surveys, recently argued that one big myth about top performing school systems is that small classes raise standards. He said: "... everywhere, teachers, parents and policy-makers favour small classes as the key to better and more personalised education", and went on to argue that high-performing countries (many of them in East Asia) have large classes so the size of a school class cannot therefore be important (BBC website, February 4, 2015).

At heart is a wide gulf between the professional experience of many involved in teaching that small classes aid teaching and learning, and much policy-related commentary. This disjuncture I have called the Class Size Conundrum (CSC).

Across the world the debate about class size is intensely political. In Australia, as in the UK and the USA, the sceptical voices about class size reduction seem more powerful, and frustrate those who see benefits from smaller classes. Currently there is an interesting situation in East Asia. In contrast to the West and Australia, a strong interest has recently been shown in smaller class sizes in Shanghai, Hong Kong, Taiwan, Macao and other countries and regions where there have been government and state-led initiatives to reduce the number of pupils. These regions regularly top the PISA international rankings of educational performance.

Peter Blatchford is Professor in Psychology and Education at the UCL Institute of Education in the UK. He has directed large-scale research projects on the deployment and impact of teaching assistants and programs of research on the educational effects of class size differences and on collaborative group work. He has written 15 books and 100 peer-reviewed papers and book chapters. He directs the Class Size and Effective Teaching International Network and co-directs the Special Educational Needs in Secondary Education (SENSE) project.

But what does the research tell us about the effects of class size? Does it matter if primary-aged pupils are in large classes over 30? What have we learned from 50 years of research? I have written at length about the research evidence going back many years. In this article I want to highlight what I feel are key points from this work.

In a number of places I have argued that research into class size can be considered in three stages. What might be called 'first generation' research considers the connection between class size and academic attainment; second generation research examines class size and classroom processes and third generation research considers effective teaching in relation to class size. Let us look at each of these in turn.

The recent narrative about class size effects on attainment suggests that it is not important. Highly influential reports from the OECD (PISA in Focus 13, 2012); McKinsey & Company (2007); Grattan Institute (2012); Brookings Institution (Chingos and Whitehurst, 2011) and the UK Sutton Trust Toolkit have led to the view that class size reduction (CSR) is not cost effective.

However, the evidence base for class size effects in these reports is often vague and unconvincing. One common strategy, illustrated in the quote from Schleicher above, is to argue that class size cannot be important because high-performing countries on PISA scores also tend to have large classes. But such cross-country comparisons are flawed since an association does not mean one can infer causality. There are many reasons why high-performing countries do well, e.g. parental support, cultural factors, private tutoring and so on.

Econometric analyses of class size effects are increasingly central to current views on class size and now dominate the literature in the West. There are some very sophisticated analyses of class size effects on attainment, but despite efforts to address possible confounding factors the basic data sets are often limited. The McKinsey report is widely cited but its conclusions are based almost entirely on one paper by Hanushek. Eric Hanushek is an American economist who argues that class size is a relatively trivial influence on academic progress and that funds should be invested elsewhere. There have been strong critiques of his work, e.g. by Ehrenberg et al and Berliner and Biddle.

Another common source of evidence are meta-analyses, where the results from a number of separate studies are combined. Perhaps the best known of these is John Hattie's *Visible Learning* which places class size low in the rankings of effectiveness of interventions. The work is very impressive but a common concern with meta-analyses is the equal weight given to studies of varying quality. Another problem is that in Hattie's analysis class size is compared with factors such as reciprocal teaching, teaching meta-cognitive strategies and

direct instruction; but this is not a fair test in the sense that these are distinctive methods of teaching while class size reduction (CSR) merely sets limits on the number of pupils in a class.

An interesting point to make about analyses of the sort just discussed is that they are not *dedicated* studies; that is, cross-country comparisons, econometric and meta-analyses all use data collected by other researchers sometimes for other purposes. They are not necessarily wrong but it is odd that so much weight is attached to studies that don't directly address the topic on which conclusions are made.

There are two main types of dedicated research design which can provide a firmer handle on class size effects. One is experimental (e.g. STAR) and the other is the naturalistic longitudinal regression approach (e.g. CSPAR).

The Tennessee STAR Project is of considerable significance. It represents the gold standard design for establishing causality in that it is a randomised experiment. Pupils and teachers from kindergarten to Grade 3 were assigned at random to three types of class within the same school: small class (around 17 pupils), regular class (around 23 students) and regular class with teacher-aide. At the end of each year pupils in small classes performed significantly better in reading and maths than pupils in both regular classes. Pupils from minority ethnic backgrounds gained most from small classes. There have been criticisms of the study but further analyses broadly support the original findings.

Other American experimental studies, e.g. Primetime, the California study and SAGE are limited in their designs and are not as strong as the STAR project. Unfortunately, they are wrongly given equal weighting by many reviews and meta-analyses.

The UCL Institute of Education study, CSPAR, was a multi-method study that examined the effects of class sizes as they occurred naturally in schools across England (rather than artificially controlling for class size as in experimental studies) and controlled statistically for potentially confounding factors, such as student attainment levels. The study analysed the progress of the same pupils from school entry (the reception year, aged 4 years) to Year 6 (aged 11). There was a large sample – over 20,000 pupils – and a careful study of classroom processes connected to class size differences, using questionnaires, interviews and systematic observation approaches.

The findings showed that literacy attainment was higher in smaller classes over the first two years of schooling. The class size effect was slightly larger than the differences between boys and girls, which we know to be significant. There was a similar effect for maths for the

first year of schooling. Small classes benefitted pupils of all abilities but low-achieving pupils gained more in literacy. Interestingly, the effect size was of similar magnitude to that found in the experimental STAR study in the US.

So arguably the best and largest studies (STAR and CSPAR) therefore agree on the size of effect, and that effects are most marked in the early years of schooling after school entry. Smaller classes seem to benefit the most disadvantaged and low-attaining pupils the most. It is often said that class sizes have to be less than 20 for any effect to be seen but the CSPAR was able to measure effects of class size across the full distribution of class sizes and no clear evidence of a threshold effect was found: the effects were broadly linear.

Is an increase in the number of support staff an alternative to small classes? In the UK, teaching assistants (TAs) now make up a quarter of the workforce in primary schools, and spend much of their time in predominantly instructional activities with pupils. TAs of course have a major effect on pupil—adult ratios. Positive findings have come from specific curriculum interventions made by TAs, but the UCL Institute of Education DISS (Deployment and Impact of Support Staff) study found pupils with more support from TAs across the school year made less progress than similar pupils with less or no support, even after controlling for reasons why pupils were allocated more support (reflected in low initial attainment or special educational need). It does not seem that the increase in TAs is an adequate response to larger class sizes.

Academic performance is obviously important but there is a need for research on other outcomes and processes. This takes us to second generation research: what can we conclude from studies of the effect of class size on classroom processes? Does class size affect the amount and type of teacher—pupil interaction, or the amount of student engagement in class? Again the research base is not strong. It is often anecdotal and reliant on teacher reports. There are few rigorous (e.g. systematic observation) studies to help.

There were some consistent findings from the CSPAR study. This component of the study used systematic observation methods to record moment-by-moment interactions and behaviour in large and small classes. It found that for 10 and 11-year-olds teachers had more direct individual contact with pupils, both brief and more sustained, in small classes. There was also more pupil talk to the teacher, whether initiating or responding to the teacher (Blatchford et al, 2005).

Previous research has not examined possible interactions between class size and type of pupil such as low attainers, high attainers or pupils with special educational needs. The DISS study tackled this deficiency through another systematic observation study involving 34,420

observations of 683 pupils in 49 schools. The study found that low attainers suffered more in large classes in terms of more off-task behaviour and more teacher criticism (Blatchford et al, 2011).

Class size is also important in the case of pupils with special educational needs (SEN). In the UK and elsewhere there are longstanding policies on the inclusion of pupils with SEN in mainstream schools yet, as every teacher knows, teaching pupils with SEN in large classes is a huge classroom management challenge. In many countries TAs are commonly used to help but IOE research has shown that it is inappropriate to separate pupils with SEN from teachers. It is hard not to believe that pupils with sometimes complex learning problems would not benefit from smaller classes – this is after all typical in special schools. But again there is little research to help.

Recent OECD surveys indicate that contrary to their often reported conclusion that class size is not important, there are other advantages associated with small classes. The 2013 OECD Teaching And Learning International Survey (TALIS, published in November 2015) shows that smaller class sizes are perceived as allowing teachers to spend less time managing the class and more time with each student. The results also show that larger classes are correlated with less time spent on actual teaching and learning, more time spent on keeping order in the classroom and more time spent on administrative tasks. Larger classes are associated with a higher proportion of students with behavioural problems, which perhaps explains why less time is spent on teaching and learning activities.

It is important that research also considers other non-academic attainment outcomes. What about pupils' attitudes to learning, their enthusiasm and confidence, their ability to learn independently, their ability to think critically and to develop personal creativity and practical skills? With regard to teachers, what about the provision of individual help for pupils and assessment of progress? What about the ethos of the class, the level of cooperation and, above all, the personal relationships of all concerned? We have very little systematic research to help answer these questions.

I wonder whether this helps explain the Class Size Conundrum. The lack of attention in much research to non-academic outcomes might help explain the disparity between teachers' views of the benefits of small classes (which is based on a wide experience of pupil functioning) and the more modest results from research (which has mostly focused on academic test results).

We turn now to the third generation of research, into effective teaching in relation to class size – or rather the lack of such research. John Hattie asks an important question: why are

the effects of CSR often so modest (Hattie, in Blatchford et al, in press)? If more attention were paid to this question we could move beyond the arid debate about whether CSR on its own is a good or bad thing. It's important to say again that CSR is not in itself an educational initiative but simply a reduction in the number of pupils in a classroom. Posing the policy decision as a choice between investment in CSR and investment in teacher quality is too simplistic. It seems to me that our efforts should be devoted to the development of informed pedagogical changes in small classes. What constitutes effective teaching in a small class? What opportunities are presented by small classes? What do smaller classes allow the teacher to do differently or better? And, if we are faced with large classes, how can we provide the best kind of teaching approaches? This is important because there is evidence that teachers do not always change their teaching when faced with fewer pupils.

One approach is to draw on what we know about effective teaching generally – for example, generic principles of effective instruction – and apply this to professional training for small classes (as happened in Hong Kong with Maurice Galton's 'six principles'). This could be supplemented by what research there has been on class size effects. Again there has been little work on this but some have tried to develop informed pedagogical approaches in relation to small classes (see Blatchford et al, in press; books edited by Wang and Finn, 2000, and Finn and Wang, 2002; Galton, Lai and Chan, 2015).

There are lessons from East Asia. Governments there want to change predominant teaching approaches (teacher-dominated, high-stakes exams, high pressure on students, lack of creativity or independent learning) to a more learner-centred pedagogy. 'Small class teaching' (SCT) or 'small class education' has become a strong force in an attempt to move from a teacher-centred to learner-centred pedagogy, and is part of government educational reforms, such as China's National Outline for Medium and Long-term Education Reform and Development (2010-2020), Hong Kong's 'six principles' and Taiwan's 'spirit of SCT'. There has also been an emphasis on professional development to support the move to small class teaching, something largely unheard of in the West. This reflects aims different to the West's concern with academic performance. In the East there are worries that despite high performance on test scores, PISA results also show that Korean students express the lowest interest in mathematics, and Hong Kong students show low interest in reading for enjoyment. However, in East Asia there has unfortunately been very little empirical research and systematic evaluation.

The UK Leverhulme Trust-funded Class Size and Effective Teaching Network, which I lead, is an international grouping of researchers which aims to advance understanding of the educational effects of class size, and address the neglected topic of effective pedagogies in different sizes of class. It is enabling researchers from the UK, mainland Europe, East Asia

and the USA to build a broader international perspective, involving strategically important countries, and offers a unique opportunity to share findings and move the field on, with important practical benefits for education worldwide. Insights from this work can be found in a new book edited by Blatchford, Chan, Galton, Lai and Lee.

By way of conclusion I make the following summary points: class size *is* important; small classes are most important for the youngest pupils; in the case of older pupils CSR might best be targeted at low-attaining pupils and those with SEN; we need to plan carefully for the deployment of TAs; and finally we urgently need good large scale first and second-generation studies of class size effects and we need to develop and evaluate effective pedagogical strategies in relation to class size.

IOE class size research references

Blatchford, P (2003) The Class Size Debate: Is Small Better? Open University Press

Blatchford, P (2003) "A systematic observational study of teachers' and pupils' behaviour in large and small classes". Learning and Instruction 13.6, 569–595

Blatchford, P, Bassett, P & Brown, P (2005) "Teachers' and pupils' behaviour in large and small classes: a systematic observation study of pupils aged 10/11 years". *Journal of Educational Psychology* 97.3, 454–457

Blatchford, P, Bassett, P & Brown, P (2011) "Examining the effect of class size on classroom engagement and teacher–pupil interaction: differences in relation to prior pupil attainment and primary vs secondary schools". Learning and Instruction 21, 715–730

Further references

Blatchford, P (2012) 'Class size: is small better?' In P Adey & J Dillon (eds) Bad Education: Debunking Myths in Education. Open University Press

Blatchford, P, Chan, KW, Galton, M, Lai, KC & John C (eds) (in press) Class Size: Eastern and Western perspectives.

Routledge

Ehrenberg, RG, Brewer, DJ, Gamoran, A & Willms, JD (2001) 'Does Class Size Matter?' Scientific American 285, 32-40

Finn, JD, Pannozzo, GM, & Achilles, CM (2003) 'The 'why's' of class size: student behaviour in small classes'. Review of Educational Research 73.3, 321–368

Galton, M, Lai, KC & Chan, KW (2014) Learning to Teach Small Classes: Lessons from East Asia. Routledge

Harfitt, GJ (2015) Class Size Reduction: Insights from Secondary School Classrooms, Springer

Hattie, J (2005) 'The paradox of reducing class size and improving learning outcomes'. *International Journal of Educational Research* 43, 387–425

Note

An earlier version of this paper will appear in the UK National Association for Primary Education journal Primary First.

Teachers vs. technology Rethinking the digitisation of teachers' work

Neil Selwyn

One of the great deceptions of the 'digital age' is the idea that digital technologies lessen the need for hard work and generally improve people's working lives. Technology marketing will often promote the idea that new and exciting things simply get 'done' through digital technologies without the need for work at all. At best, most people tend not to think about the work and labour involved in their use of digital technology. Yet the continued expansion of digital technology is intrinsically entwined with work. The ongoing digitisation of society clearly involves substantial amounts of mental and manual labour, alongside significant shifts in the coordination and distribution of work

So what implications might these trends have in the world of education? While usually judged solely in terms of learning and pedagogy, education technology is a site where much education work is now carried out. In particular, the working lives of teachers are increasingly predicated around the use of technology. For example, school management systems such as Compass are used to organise and manage the day-to-day business of teaching, from distributing resources to monitoring performance. Alongside these institutional systems is the everyday use of office software such as email, Word, PowerPoint, Excel and electronic calendars. Lesson planning and delivery are bolstered by the use of Google, YouTube and the thousands of school-related apps available through iTunes and Google Play. Facebook and Twitter are valuable sources of professional support and development; sites such as LinkedIn are important forums for career development.

Generally, the role of technology in teachers' work is described in positive terms – facilitating innovative pedagogy, alleviating administrative burdens, and generally functioning as the 'teachers' friend'. As Bill Gates recently argued, digital technology offers an opportunity

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"... to get rid of the drudgery pieces, like creating math homework and grading math homework. You know, teachers want to get in and help individual students. ... For the K-12 teacher, it's mostly eliminating the stuff they are not that enthused about doing."

Of course, it is Bill Gates' job to be enthused about digital technology rather than grading maths homework. Whereas new technologies are often presumed to enhance the working lives of teachers, this clearly cannot always be the case. Instead, there needs to be greater recognition of the ways in which digital technologies might actually make teachers' work more complex and difficult. The technological reconstitution of teachers' work and working practices certainly merit greater scrutiny.

Here, then, are five trends in teachers' work with digital technology that merit closer attention.

1. Digital technology and the standardisation of teachers' work

Perhaps the most obvious role that digital technology plays in many schools is the standardisation of teachers' activities and actions. Some institutional systems such as timetabling and workload modelling software are designed explicitly to standardise work. Yet other school management systems such as Compass also involve a lot of template and *pro forma* work. At the end of each term, many teachers will find themselves using online 'comment banks' of prescribed text to construct reports and other forms of feedback. Teaching with technology often involves teachers filling in the blanks of generic lesson plans, schedules, logs and records.

These technologies promise to bring consistency to teachers' work and reduce errors in human judgment. Indeed, many online school systems are configured to ensure consistency in teachers' decision-making, especially with regards to what is judged to constitute a 'success' or a 'problem'. For example, while teachers might individually input data relating to specific coursework grades, instances of (non-)attendance and so on, most decision making around these aggregated data is computed by software. Systems will decide that a student is marked 'Red', 'Yellow' or 'Green' seemingly of their own accord. Outcomes no longer depend solely upon different teachers' sense of professional judgment and discretion.

2. Digital technology and the exhibiting of teachers' work

Shared access to these standardised school technologies means that teachers' work is often open to be seen by all others in a school – from colleagues and managers to parents and

students. As such, digital technologies are an important means of making teachers' work publically accountable. Systems such as Compass make it easy for managers to check that teachers have completed grading, report writing and lesson planning. Technology is a key part of efforts to audit, measure and quantify the 'effectiveness' and 'success' of teacher work.

These technologies can be seen in a positive light. As anyone who has deliberately left an email trail will know, technology is a useful means for teachers to leave records of what they have done. Yet having one's work made so visible to so many people also has its downsides. Technology constitutes a means for teachers to be seen to be (not) performing well and/or (not) working efficiently. Teachers now have to carefully consider how they are presented. There might be an increased competiveness, feelings of accountability or perhaps a reluctance to share work with colleagues online without getting due credit as the original author.

3. The digital recycling of teachers' work

Indeed, what teachers do in the classroom no longer needs to depend upon an individual's own preparatory work. Instead, digital education increasingly involves the re-use and re-appropriation of content. Teachers are urged to 'embrace the remix' and engage in 'co-creative labour' practices. For example, the re-use of other teachers' PowerPoint slides is now common practice in some schools. Understandably, a number of websites have emerged where entrepreneurial educators can resell their best lesson plans, slide-decks and other online content. As the New York Times enthused in a 2015 report, such sites support 'A Sharing Economy Where Teachers Win'.

Notions of authorship and intellectual property are certainly altering as a result of technology-based teaching. The argument is now being made that teachers can no longer expect to own their own digital teaching content but are simply guns for hire, bought in like actors in a film or stage production. As a result, teachers are beginning to find some major online platforms restricting access to the data generated from their own teaching. On occasion, teachers are even finding their originally authored materials being passed off and resold as the work of others.

4. The digital measurement of teachers' work

It is also important to recognise the growing use of digital technologies to support the direct quantification and measurement of teachers' work. This takes a variety of forms. Websites such as ratemyteachers.com offer students an anonymous means to compare judgments on their teachers' 'helpfulness', 'easiness' and overall 'hotness'. Conversely, the recent trend for

'learning analytics' offers managers and institutions a variety of ways to evaluate the quality of teachers' work. There is a thriving market for commercial applications that allow teachers to generate 'real-time feedback' from classes. Online surveys are also used regularly by schools, districts and government agencies to gauge student satisfaction, attitudes to school, teacher wellbeing and other forms of feedback.

The digital monitoring of education work has expanded well beyond online applications. Organisations such as the Gates Foundation have pushed millions of dollars toward developing digital video surveillance of classrooms as a tool to support teachers to improve their teaching. Other innovations include the use of biometric 'engagement pedometers' and similar self-quantification technologies to gauge levels of student engagement and motivation. Such technologies have certainly helped schools embrace the longstanding business mantra, "If you can measure it, you can manage it."

5. The digital expansion of teachers' work

These examples notwithstanding, perhaps the most significant trend is the digital expansion of education work across space and time. In short, digital technologies make it considerably easier for teachers (and their students and managers) to engage with their work 24/7, regardless of location or time of day. Through mobile phones, email, social media, learning management systems and other forms of e-learning, people can work in ways that best suit their circumstances rather than fit around the fixed institutional expectations of their school.

In particular, teachers are increasingly expected to communicate with students out of class 'anytime, anywhere', monitor their classes' after-school engagement with homework tasks, conduct lessons even when not physically in school, and deal with administration, planning and bureaucratic aspects of their work outside of classroom time. Many teachers engage with school email across evenings, night times, early mornings, weekdays and weekends – all in the hope that it does not impede the next working day. This blurring often involves the perceived obligation to respond quickly to student queries. Many teachers also feel a need to maintain constant availability to school managers and staff. All told, teaching is no longer something that only takes place within the confines of the working day.

Discussion

In many ways these uses of technology in schools simply reflect how most forms of labour are now organised across society. Teachers are not the only professionals to experience the blurring of work and leisure time. Education is not the only economic sector to be

increasingly reliant on principles of automation and 'open' production. As such, the changes just described could be celebrated as bringing modern efficiencies to the traditionally conservative work setting of the 20th Century bricks-and-mortar school. Many of the examples outlined are certainly faster-paced and more flexible than is the norm in education. These technologies undoubtedly allow teachers to be better connected and less confined by institutional restrictions.

Yet there is also much to be wary of. In particular, the forms of work just described can be challenged in terms of their equity and ethics. It could be contended that these new forms of education perpetuate much older forms of worker exploitation and disempowerment. For example, the recycling and/or reselling of teachers' intellectual property could be framed in exploitative terms. For all their efficiencies and flexibilities, it might be argued that few of these technological practices serve to advantage the people who are actually doing the work.

Also problematic are the ways that specific forms of work are obscured by digital technology, pushing certain aspects of what teachers and students do into the realm of non-labour. While many teachers will consider clearing their email inboxes in the evenings and weekends as a necessary evil before commencing a day's work, these activities are in fact a core part of the day's work. Digital technologies are adept at converting some elements of education into what the US scholar-activist Trebor Scholz describes as 'casual digital labour' – mundane online tasks that don't "feel, look, or smell like labour at all". When scrolling through work emails at home or on holiday, what else are you doing but working?

Equally insidious are the ways that the same digital technologies foreground other forms of work as somehow more important. Digital communications technologies and content management systems are key means of teachers' work now being made visible to a range of different audiences. Open-content, online evaluation and rating systems can be praised for bringing an enhanced transparency and accountability to education, but they are also powerful means of surveillance, control and discipline. The downside of having one's work publicly documented through technology is an increased pressure to be seen to do well, what many teachers might experience as a form of panoptic performativity.

Some of the most insidious impacts of these uses of technology are the most difficult to quantify. For example, underlying many of these descriptions of technology is the impression of altered sensibilities and sensitivities around teachers' work. Undoubtedly, technology can be used in ways to enhance collegiality. Yet it can also be used in ways that reduce empathy between colleagues, fostering interactions that are needlessly curt or blunt, or otherwise overly demanding or intrusive. We should not forget the affective difficulties of disengaging

mentally from one's work as a teacher – in particular the heightened anxiety and fatigue induced by the experience of being 'always on' through constant connection to learning management software and email systems.

All told, digital technologies such as those described in this article are certainly altering the character of teachers' work. More pointedly, all of these technologies infuse teaching with a sense of commodification and market logic. These are technologies that support wider imperatives to perform efficiently and 'get things done', thereby focusing attention toward what is consequential rather than what is actually important. This leads to perverse situations which contradict what many people would consider to be the underlying purpose and spirit of technology. How have we reached a point where teachers are using websites to outsource the intellectual benefits (and perhaps even pleasures) of developing their own teaching materials? Why would professional educators shirk the pedagogic responsibility of offering personal feedback on their students' assignments?

Conclusions

Digital technology does not automatically improve, enhance or transform education. Instead, the examples in this article point to a growing tendency for digital technology to support the fragmentation of education work and separate the 'conception' of teaching and learning from its 'execution'. Tech entrepreneurs often like to celebrate the 'unbundling' of education processes, yet such technologies risk the deskilling of teachers through the persistent standardisation and separation of work, and the subversion of professional judgment and expertise. To repeat a point made earlier, these are not technologies that necessarily advantage the majority of teachers.

At the heart of such technological changes is the reconstitution of labour processes from ones directed by workers to ones controlled by managers and administrators, as well as government and commercial interests. In contrast to the enthusiastic claims that often accompany digital education, the long-term outcome of such technologies is likely to be the increased alienation and disengagement of teachers from their work. Of course, digital technology is not the root cause of these problems. Pressures of performativity, auditing, deskilling and work–life balance have increasingly defined education systems since the 1980s. Yet digital technologies are clearly enabling and amplifying such issues in contemporary schools, and therefore merit more scrutiny and push-back.

So there is much that now needs to be done by everyone with an interest in the area of education and technology. To date these are issues, tensions and questions that have barely featured in discussions about 'digital learning' and '21st Century education'. This is an

uneasy silence that should be broken. So how might things be otherwise? How might digital technologies be implemented in more equitable and empowering ways for teachers? How might everyone who labours in education engage in a collective critical rethinking of how they want technologies to be used in their working lives and working environments?

In particular, how might unions and organised labour push back against the worst of these developments (through, for example, the campaigns by the American Federation of Teachers and Education International to challenge the activities of companies such as Pearson)? Should Australian teachers push for their own version of the recent French government proposals for a 'right to disconnect' where workers are entitled to switch off from work computer systems at weekends or evenings? Could schools follow the lead of some companies and ban the use of email altogether?

Such suggestions might appear a little fanciful in the face of the ongoing digitisation of schools and classrooms. These are not easy things to imagine amidst the prevailing dominance of Google, Apple, Facebook and Amazon, but there is a pressing need to consider what alternatives might still be possible in the face of the growing ubiquity of digital schooling. The real hard work of digital education starts here.

Public and proud Reclaiming the essence of public schooling in Australia

Alan Reid

A large achievement gap between rich and poor blights Australian education – and the gap appears to be widening. Australia is near the bottom of OECD countries in terms of equity in education.

A major cause of the gap is that successive governments have diminished the strength of public education and, in so doing, increased the social stratification of Australian schools.

This trend has major social and economic consequences for all of us. If these are to be addressed, governments need to properly fund public schools. However, adequate funding is a necessary but not a sufficient condition to strengthen public schools. Accompanying the decline in funding to public schools has been a trend to privatise them, which is diluting some of the important features of public education.

I will argue that both the decline in funding and the trend to privatise public schools need to be tackled simultaneously by basing strategies on agreed understandings about the essence of being public.

The neglect of public schooling

The policy neglect of public schools can be traced back to the introduction of systematic federal funding to private schools in the 1970s.

If the public funding of private schools had been organised around a needs-based model as was originally intended by the Whitlam government, it could have ended very differently. But it wasn't. Starting with the Fraser government, funding policies began to neglect the concept of need and foreground the principle of entitlement.

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The entitlement principle resulted in increasing amounts of public money going to private schools, with a consequent expansion of that sector at the expense of public education. Increasingly public education has come to be seen as a safety net for those who cannot afford private education, rather than as a public good.

Over time, the total amount of funding from Commonwealth, state and territory governments closed the gap between the per capita funding of students in the public and private sectors. The most recent My School data shows that when like schools are compared in these sectors many private schools are receiving amounts close to that of public schools.

Add the income from fees, and the average per capita income that many private schools have to spend on teaching, resources and facilities exceeds that of public schools, sometimes by a considerable amount.

Increased funding has enabled private schools to enhance their market appeal through such means as improving facilities and creating smaller classes – which in turn attract aspirational parents. It has led to a steady drift of students from the public system, almost entirely comprising those from higher socio-economic backgrounds.

The consequences for Australian education

The public education system now carries more than 80% of all students from educationally disadvantaged backgrounds. Of course this pattern is uneven across the public system which is itself becoming increasingly fragmented, with differences between schools in terms of resources and student backgrounds.

Such developments have a number of serious consequences for Australian education, including that they widen resource disparities between schools, reduce educational outcomes particularly for students from educationally disadvantaged backgrounds, and diminish the social and cultural mix of individual schools and thus the capacity of schools to promote social and intercultural understanding.

There is an urgent need to change the current inequitable approach to funding schools so that there is a fairer distribution of funds based on need. In particular, additional public money must be directed to the most disadvantaged schools, most (but not all) of which are in the public system.

Funding is not the only issue for public schools

But funding is not the only issue. Increased funding to private schools has occurred in a policy environment which promotes choice in an education market. In this environment public education has come to be seen by policy makers as a safety net provision for those who cannot afford private education, rather than as a public good.

This is compounded by the call for public schools to win back 'custom' by taking on the trappings of private schools. The problem is that those schools which do so, inevitably, have to jettison some of the characteristics that are so central to public education.

So, while a fairer funding model is needed to reverse the drift to private schools, it is not enough on its own. A new funding model may reduce disparities in resources between schools and sectors as a whole, but it will do nothing about the creeping privatisation of public education. A strategy is needed to address both these issues simultaneously.

The need to articulate the essence of public schooling

The problem is that public discussion about education is being conducted in the absence of an agreed understanding about what constitutes the essence of public education. Without such an understanding, education policy and practice can actually work to dilute those features of public education which make it such an important part of Australian democracy.

So, an important precursor to changing the current policy direction is to refresh the foundation principles upon which our great system of public education has been built. By offering a common language for public discussion, an agreed framework for public education would achieve a number of outcomes

Why an agreed framework is essential

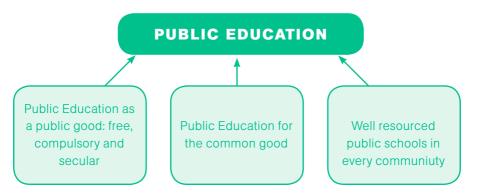
First, it would emphasise the individual and public benefits which derive from public education. In so doing it would promote the idea that public education is the schooling system of first choice, rather than a safety net for those who cannot afford private education.

Second, it would provide a powerful public justification for the importance of a well-resourced public education system for Australian society; and would demonstrate the damaging effects of policies which produce large resource disparities between schools.

Third, it would identify those characteristics of public education about which our society can be most proud, and which must not be lost. These could constitute public benchmarks against which to judge many aspects of policy and practice, including what is expected of private schools for receiving public money.

In short, the first step in addressing the drift away from public schools and the associated stratification of the Australian schooling system lies not in the current trend of making public schools more private, but rather in (re)emphasising their public characteristics. What are the dimensions of public education that must be protected and enhanced?

Three fundamental dimensions of a framework for Australian public education



In a recent paper for the Australian Government Primary Principals Association (AGPPA), I argue that there are at least three fundamental dimensions of a framework for public education which must work together. To neglect one of them is to weaken the whole. They are:

Public education as a public good: This dimension relates to 'ownership'. In this usage, public education is the same as a public utility: owned by the state, funded from taxes provided by the public, and managed by the state on the public's behalf. The idea of public education as a public good is a powerful dimension that must be protected in contemporary Australia. From this perspective, public education should be understood not as a commodity to be used solely for the benefit of individuals, but as a community resource to which everyone has rights of access and which is non-exclusionary.

The key principles of public schools as public goods are that they are free, compulsory and secular. Each of these principles is under threat today and must be protected and promoted, for without them the idea of universal public education can only be a mirage.

Public education for the common good: The lack of focus on the public purposes of public education has created the conditions within which the idea of public education as a safety net has been able to flourish. A rejuvenated understanding of public education therefore demands attention be paid to its role in advancing the common good. It is the second dimension of a framework for public education.

There are at least two key aspects to consider. The first is to create and maintain a system of education which itself models a commitment to the common good. This includes ensuring that education is available free to all on a comparatively equal playing field on a non-exclusionary basis, and has policy and practices which are consistent with, and promote, the common good in education.

The second aspect relates to the role of public education for the common good. This involves public schools developing the skills, dispositions and understandings of children and young people, such that they can engage – respectfully and thoughtfully – with others in deliberation about the common good in the broader society.

There are a number of implications for understanding public education – teaching and learning, culture, structure, organisation, funding and governance – through the lens of its common good purposes. In particular, it injects specific meaning into some important characteristics of public education such as quality, links with local community, collaboration, innovation, equity, diversity and cohesion, and democracy. These characteristics look very different in and through policy and practice when they are understood through a more 'privatising' lens.

Well-resourced public schools in every community: If dimensions one and two provide a philosophical framework for public education, they are meaningless unless public schools are adequately resourced. Thus, the third dimension of a three-pronged understanding of public education is that governments have an obligation to provide and maintain well-resourced quality public schools, available to all, in every community in Australia.

The foundation premise of this dimension is that in a democratic society education should be available to all on equal terms so that each child can develop to her or his full potential. Properly resourced public schools are the starting point for the achievement of this goal. It therefore follows that our society should make every effort to ensure that the differences between schools in such basic areas as equipment, teacher quality, buildings, class sizes and so on are reduced. And yet at the moment, the schools with the greatest challenges are given the least amount of resources to deal with them. In the main these are public schools.

The approach to funding schools in Australia has magnified rather than reduced resource differentials, and contributed to creating totally unacceptable educational outcomes. Australia has developed a funding model that is complex, arbitrary, inequitable and dysfunctional. It privileges choice for some at the expense of quality and equity for all. But given the self-interest at play in the education debate, how is it possible to engineer an approach which turns this around?

The Gonski review provided a once-in-a-generation opportunity to return to the principle of needs-based funding. The fact that the government has effectively rejected the major intent of the review does not mean it was wasted. Future governments may reconsider, and if so would do well to adopt a version of the Gonski model which retains its strengths, and removes weaknesses such as the 'no losers' policy which was imposed on the review by the previous government.

Each of these three dimensions needs to be fleshed out through public discussion, resulting in a rich description of what is valued in public education which can then be used as the benchmark against which policies and practices are developed, enacted, and evaluated.

Every community in Australia deserves a high quality public school

Public education is a precious community resource which is so essential to the life and wellbeing of our democratic society, and to the individuals and communities that live in it. The framework above demonstrates the folly of under-resourcing public education, and treating it as a safety net. It underlines the need for a different starting assumption for public policy: that every local community in Australia must contain well-resourced, socially mixed, secular public schools which belong to a public system, provide a quality education, and are free and open to all.

It has never been as important as now for the whole community to support, nurture and strengthen our public schools and to celebrate the contribution they make to the common good.

Endnote

This article was first published in *The Queensland Principal*, Vol. 43. No. 1, March 2016. It is based on a major report Professor Reid has written for the Australian Government Primary Principals Association (AGPPA) on the past, present and future of public education. The report can be found online at bit.ly/2abZoFL (PDF).

Ensuring fundamental resources for an 'adequate' education

Jennifer King Rice

While there is no single recipe for success in all school communities, recent research has identified components of an *adequate* education – a first step toward equal educational opportunity. An adequate education is one that provides resources sufficient to ensure that all students, regardless of background or residential district, have the opportunity to realise a clearly defined set of goals.

Before further exploring the concept of adequacy, however, it is important to note that current measures of how well students might be meeting goals are problematic. First, while the stated goals of education may be broad (as in developing student interest in civic life, or their problem-solving abilities), schools' success is typically measured using standardised test scores and graduation rates – crude and narrow measures that offer little or no insight into many important goals.

To return to the topic of adequacy itself: it is important to note that the term is conceptually distinct from equality. Adequacy is a floor; it is the minimum level of resources needed to realise the stated goals of education. Equality, on the other hand, is "necessarily comparative or relational". Of course, these concepts could be closely connected if, for example, we were to assess the degree to which individuals have equal opportunity to realise defined outcomes, or if civic equality were considered an essential outcome of an adequate education. Generally, however, equal opportunity tends to be the higher standard when the reference is to broader educational, social, and economic outcomes.

Taken together, adequacy studies suggest almost without exception that additional resources are needed in poor school districts to provide all students with the opportunity

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to realise specified educational outcomes. In this discussion I mean to emphasise those resources well documented by research. They include:

- · Effective teachers and principals
- · Appropriate class size
- · Challenging and culturally relevant curriculum and supportive instructional resources
- · Sufficient quality time for learning and development
- · Up-to-date facilities and a safe environment.

While these broad sets of resources are not particularly contentious, the policies needed to support them often are. Equal opportunity requires smart, carefully crafted policies designed to guarantee that these fundamental resources are available to all students, especially those from disadvantaged backgrounds.

Every school needs good teachers

Empirical evidence is clear that teachers are the most important school resource required to produce high-quality educational opportunities for all students. However, many schools and classrooms lack high-quality teachers, and the problem is most pronounced in urban schools serving large concentrations of high-poverty students. These schools experience higher rates of turnover than their non-urban counterparts; the teachers they lose tend to have better qualifications than those who stay; and the teachers hired to fill the vacancies tend to be less experienced and less qualified than those they replace. In the end, these schools find themselves serving some of the highest need students with many of the least qualified teachers

While education policy over the past several decades has focused heavily on teachers, policy makers continue to wrestle with the concurrent challenges of how to expand the pool of qualified teacher candidates, recruit teachers to the schools where they are needed most, and retain qualified and effective teachers over time. Some policies in the name of equity have had perverse effects on equitable staffing practices. For example, in the United States, No Child Left Behind (NCLB) and other high-stakes accountability policies that publicly indict educators for low student performance often have the effect of driving the best teachers away from the schools that need them most.

A recent review of school reconstitution as a mechanism for turning around low-performing schools found that newly hired staff were often less equipped to handle their responsibilities than the educators they replaced. The study concluded that this strategy can exacerbate the challenges of staffing chronically low-performing schools if policies are not carefully designed to support the work of educators in those settings. High-stakes

accountability policies have also affected the quality and preparation of individuals entering the teaching profession in unanticipated and sometimes perverse ways.

NCLB's 'highly qualified teacher' (HQT) requirement spurred an unprecedented emergence of alternative teacher certification programs. While research shows that the nature of the preparation matters (for example, pre-service pedagogical coursework and clinical training are associated with teacher effectiveness), the wide variability in requirements across certification programs has largely distorted the meaning and value of that credential. The HQT requirement has also blurred the distinction between teacher quality and teacher qualifications. Research has found that districts and schools with a surplus of 'highly qualified' teachers have the luxury of considering other quality-related traits in their hiring practices, while those with a shortage are forced to focus on qualifications for compliance purposes.

Targeted policies that address school capacity and working conditions have the potential to contribute to more equitable staffing. Promising policies that could be targeted to difficult-to-staff schools include induction programs, mentoring, and site-specific professional development; more planning time with colleagues to coordinate curriculum and discuss the needs of individual students; and higher pay for more challenging positions. Rewards for high performance in difficult settings might also be helpful – but they would require first the ability to measure teacher performance in ways that meet validity and reliability standards, an issue not yet resolved.

In addition, improved working conditions relating to planning time, workload, influence over school policy, administrative support, class size, instructional materials and school resources have been found to be associated with teacher retention. While more research is needed on the effects of targeting such policies to difficult-to-staff schools, existing evidence on working conditions and teacher efficacy suggests that efforts to create more supportive and productive environments have the potential to improve the capacity and performance of educators in difficult-to-staff and chronically low-performing schools.

Every school needs good leaders

One of the most important factors in attracting, developing, and retaining good teachers is having high-quality, stable school leadership. We know from existing research that "effective principals influence a variety of school outcomes, including student achievement, through their recruitment and motivation of quality teachers, their ability to identify and articulate school vision and goals, their effective allocation of resources, and their development of organisational structures to support instruction and learning."

The principal's job is complex and multidimensional, and the effectiveness of principals depends, in part, on their sense of efficacy on particular kinds of tasks and on their ability to allocate their time appropriately across daily responsibilities. In particular, time spent on organisational management is associated with positive school outcomes measured by test score gains as well as by teacher and parent assessments of school climate. Further, principals must be prepared to evaluate teachers and to use multiple sources of data to guide teacher and school improvement. Research shows that principals' subjective evaluations of teachers may offer valuable information on teacher performance beyond what student test scores alone can capture, including contributions to the school's culture, the development of other teachers, and student outcomes such as enthusiasm and persistence.

Research has also shown that principal quality is most important in high-poverty and low-performing schools, but quality principals are inequitably distributed across schools.

Low-income students, students of colour, and low-performing students are more likely to attend a school that has a "first-year principal, a principal with less average experience, a temporary or interim principal, a principal without at least a master's degree, and a principal that went to a less selective college as compared to their more advantaged counterparts."

There is, however, some good news. Evidence suggests that effective principals are likely to remain in their schools, even if those schools are characterised by high poverty or low achievement. So, "the common view that the best [principals] leave the most needy schools is not supported" by the evidence. While high-poverty and low-achieving schools may be most likely to have inexperienced principals, if the principals are effective they are likely to remain. These findings underscore the importance of policies that create conditions and target resources for recruiting effective principals and helping them succeed in high poverty and low-performing schools.

Appropriate class size

In addition to high-quality educators, students need to be in classes that are structured to support their learning. Studies have shown that small classes can have a substantial effect on student performance, that the effects are greatest for low-income and minority students in the early grades, and that the effects persist over time. Evidence also suggests that more years in small classes are important for sustaining long-term effects. Critics of small classes argue that across-the-board class size reduction can be a costly intervention with modest effect sizes. However, to the extent that class size reductions are targeted to the students, grades, and subjects where they have the greatest impact, the costs decrease and the effects increase.

While some analyses have positioned teacher quality and small classes as alternative investments, with most favouring investing in teacher quality, both teacher quality and smaller classes are necessary provisions in disadvantaged schools. Small classes have been shown to provide an environment for effective teachers to work with individuals and small groups, to experiment with innovative instructional practices, and to engage students in whole group discourse. Small classes are also associated with more instructional time and less time spent on discipline, with the effects most pronounced in classes of lower-performing students.

While smaller classes provide an environment conducive to classroom instruction that can result in higher achievement for poor and minority students, they also presumably create conditions for greater connections with teachers. To the extent that these teachers operate within an ethic of caring, these interactions may result in broader outcomes related to motivation, confidence, and persistence.

Challenging and culturally relevant curriculum and instructional resources

All students need to be exposed to curriculum that is challenging and culturally relevant, and they need to have access to instructional resources that support their learning. In order to ensure a solid foundation for learning, students need strong, individualised reading and maths interventions in the early grades. According to Slavin, Karweit and Wasik, "success in the early grades does not guarantee success throughout the school years and beyond, but failure in the early grades does virtually guarantee failure in later schooling." Key factors for early success include effective teachers and high-quality individual tutoring for students experiencing difficulties.

As students move through school, tracking and variable access to advanced courses contribute to unequal opportunity. Too often students from poor and minority families are placed in unchallenging courses that are unlikely to provide access to future educational opportunities enjoyed by their more affluent peers. This can have profound effects on student outcomes. In fact, one study of high school tracking found that "the difference in achievement between tracks [within schools] exceeds the difference in achievement between students and dropouts, suggesting that cognitive skill development is affected more by where one is in school than by whether or not one is in school."

In many cases, this sorting occurs through formal tracking that sometimes begins at young ages and that grants access to more advanced courses as students progress through middle and high school. In other cases, schools serving less advantaged students simply have fewer advanced course offerings for students to take. Schools that are smaller, that are located in more rural areas, and that serve higher concentrations of low-income and minority

students are less likely than other schools to offer Advanced Placement (AP) courses, for example. While overall advanced course-taking rates have increased for all demographic groups, increases have been most pronounced for females, whites, Asians, and students from middle and higher income families. As a result, demographic disparities in advanced course taking have actually increased.

Students also must have access to culturally relevant curriculum and culturally responsive teaching in order to have equal opportunity. Carter explains that "educators would be remiss in ignoring the sociocultural aspects of schooling and thus assuming that a one-size-fits-all model works for all students. If we want to understand why the experiments with equality of opportunity policies have not produced certain anticipated returns, we must comprehend why 'access' alone is not enough and why the social and cultural 'stuff" matter." The content of the curriculum should be affirming and relatable for all students, and teachers should be prepared to engage in culturally-responsive teaching practices that account for the language, culture, and socio-emotional perspectives of their students. However, these principles have been undermined by state testing requirements that have narrowed the curriculum and by centralised curriculum standards that have shifted curricular decisions away from local communities.

Further, instructional resources like textbooks, materials and technology are necessary to ensure equal opportunity. In the current information-based society, technology is a key competency for social and economic participation, and an essential ingredient in an education designed to realise equal opportunity. Technology – including laptops, tablets, and software – as well as professional development designed to teach teachers how to effectively implement it is critical. As Warschauer describes: "New technologies are widely viewed as having the potential to either alleviate or exacerbate existing inequalities."

Evidence suggests that even when student—computer ratios are similar, low-SES schools tend to have educators who are less equipped to use technology in productive ways, and differences in how technology is used can translate into unequal opportunities. For example, research has found that schools serving low-SES students are more likely to use technology to drill basic skills related to standardised tests, while schools serving higher-SES students are more likely to use technology to support interdisciplinary research projects and other activities that develop problem-solving skills and creative capacities. Further, to the extent that online access is provided to the most advanced students as a privilege or reward, inequities are increased.

Sufficient school time for learning and development

While the amount of allocated school time is largely standardised across the US, the amount of *quality learning time* varies considerably. Poor children tend to receive disproportionately less instructional time in core subjects and advanced courses, and they are often enrolled in schools where poor educational resources and organisational conditions undermine the quality of learning time. Data from the Program for International Student Assessment (PISA) reveal inequities in learning time among different categories of US students. Compared to students from the highest quartile of the economic, social and cultural status (SES) index, students from the lowest quartile spend an average of 1.45 (19 per cent) fewer hours on mathematics each week.

This deficit of learning time cannot be explained by higher allocations to other subjects. These students also spend less time learning science and language. Students in the lowest SES quartile spend an average of 1.98 (28 per cent) fewer hours learning science each week, and an average of 1.76 (23 per cent) fewer hours learning language. The most significant source of the disparity in average learning time is regular school lessons. Compared to students in the highest SES quartile, students in the lowest quartile receive 26 per cent less regular school lesson time in maths, 32 per cent less time in science, and 29 per cent less time in language.

The disparities in learning time despite relatively uniform allocations of time to schooling may be related to a variety of contextual factors that disadvantage schools serving relatively large concentrations of poor and minority students. For instance, schools that have more skilled administrators may have more efficient scheduling and, consequently, better within-school allocations of learning time. Likewise, schools that are staffed by more effective teachers are likely to make the best use of class time for high-quality instruction. As discussed above in the section on teachers and principals, these factors associated with more and better learning time tend to favour students from more advantaged backgrounds.

Up-to-date facilities and safe environments

In his 1991 book, *Savage Inequalities*, and in several books since then, Jonathon Kozol documented the severe and troubling disparities that continue to exist in the quality of schools attended by students in poor communities compared to those in wealthier neighbourhoods. The schools in his book were segregated and unequal, and Kozol's in-depth analysis revealed a bleak picture illustrating how stark differences in school facilities sent messages to children about their worth and potential.

More recent evidence indicates that poor facilities are related to lower test scores, lower productivity and retention of teachers, and unhealthy environments that affect children's health, motivation, and performance. Facilities are also essential complementary resources for other provisions described in this article. For example, up-to-date and safe environments are needed to attract and retain educators, to accommodate smaller classes, and to provide the infrastructure required for instructional technologies.

Endnote

This article is extracted from the policy brief *Investing in Equal Opportunity: What Would it Take to Build the Balance Wheel?* published by the National Education Policy Center. The full paper can be downloaded at nepc.colorado.edu/publication/balance-wheel where a full list of notes and references can also be found.

References

- i Baker, BD & Green, PC (2009) 'Conceptions, measurement and application of educational adequacy standards'. In DN Plank (ed) AERA Handbook on Education Policy. Routledge
 - Baker, B & Green, P (2014) 'Conceptions of equity and adequacy in school finance'. In H Ladd & E Fiske (ed) Handbook of Research in Education Finance and Policy, 203-221. Lawrence Erlbaum Associates, Inc
- ii Reich, R (2008) 'Introduction to the symposium on equity'. Education Finance and Policy, 3(4), 399-401
- iii Horng, EL, Kalogrides, D & Loeb, S (2009) 'Principal Preferences and the Unequal Distribution of Principals across Schools'. CALDER Working Paper 36. The Urban Institute, 1
- iv Ibid 28
- v Branch, GF, Hanushek, EA & Rivkin, SG (2009) 'Estimating principal effectiveness'. CALDER Working Paper 32. The Urban Institute
- vi Finn, JD & Achilles, CM (1999) 'Tennessee's class size study: Findings, implications, and misconceptions'. Educational Evaluation and Policy Analysis, 21(2), 97–110
- vii Slavin, RE, Karweit, NL & Wasik, BA (1994) Preventing Early School Failure. Allyn and Bacon, 3-4
- viii Gameron, A (1987) 'The stratification of high school learning opportunities'. Sociology of Education, 60(3), 135–155, 135
- ix Carter, PL (2013) 'Student and school cultures and the opportunity gap: Paying attention to academic engagement and achievement'. In PL Carter & KG Welner (ed) *Closing the Opportunity Gap: What America must do to give every child a chance*, 143-155. Oxford University Press
- x Warschauer, M & Knobel, M (2004) 'Technology and equity in schooling: Deconstructing the divide'. Educational Policy, 18(4), 562–588.
- xi Kozol, J (1991) Savage Inequalities: Children in America's schools, Crown

The truth about the Safe Schools Coalition

Anne Mitchell and Lynne Hillier

In the past six months Australia has witnessed an explosion of negative media directed at an evidence-based program (and anyone associated with it) that was initiated in schools in 2010 to combat the damaging discrimination and abuse faced by young people who are same sex attracted and gender diverse. While the Safe Schools Coalition program has continued to flourish in schools throughout Australia, this very public trashing has led to widespread misconceptions about its nature and its role in relation to schools. This article, written by two of the researchers whose work gave rise to the program, looks at where it came from and the reasons for its introduction and uptake by schools.

Despite efforts to discredit the research base on which the program was founded, the evidence remains current and widely respected within the education sector. It has a long history which adds weight to its conclusions. In 1995 the Federal Government commissioned the Centre for the Study of Sexually Transmitted Diseases at La Trobe University to conduct a four-year national research program, the National Centre in HIV Social Research (NCHSR), on adolescent sexual risk-taking and wellbeing. This was in response to the HIV pandemic. Its purpose was to find out what marginalised young people needed to do to keep their sexual lives safe and what factors were contributing to risky behaviours.

The first two research groups targeted were rural (Hillier et al, 1998; Hillier et al, 1999; Hillier & Harrison, 1999; Hillier, 1997; Warr & Hillier, 1997) and homeless youth (Hillier et al, 1999; Dempsey et al, 2001). At the same time national research was being conducted in schools with mainstream young people to gather information about their knowledge,

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Lynne Hillier is a social psychologist and Adjunct Associate Professor at ARCSHS. Her research over the last 20 years has focused on the marginalisation of young people, particularly same sex attracted and gender diverse youth, and the negative impact on their health. Her award-winning national research, the Writing Themselves In reports, has informed government policy and helped reframe same sex attraction as a safety and rights issue rather than a moral one.

attitudes and practices regarding sex (Lindsay et al, 1997; Smith et al, 2002). These research projects included a question about sexual attraction. Young people were asked to nominate which of four options best described their sexual feelings: I am attracted to:

- · the opposite sex only
- · both sexes
- · same sex only
- Lam unsure

A considerable minority of young people – 11 per cent of rural, 14 per cent of homeless (based on behaviour, not attraction) and 9 per cent in the schools' study – did not tick the 'opposite sex only' box. These findings were considered robust because they were consistent across studies and because young people were taking a risk by documenting that they were part of a stigmatised minority. Indeed in some places, at this time, homosexuality was still illegal.

Moreover, other data gave rise to concerns about the wellbeing of this group. In the mainstream study, those young people who did not tick the 'opposite sex attracted' box were more likely to be injecting drugs, more likely to be having unsafe sex and more likely to have had a sexually transmissible infection diagnosed (Lindsay et al, 1997; Smith et al, 2002). In the rural study many of the young men expressed strong and threatening attitudes towards same sex attracted young people. Additionally, same sex attracted young people were overrepresented in the homeless group, suggesting possible conflict with families. It was not difficult to decide that same sex attracted young people should comprise the third research population in the NCHSR program (Hillier et al, 1999).

There have now been three research studies, six years apart, on the sexual health and wellbeing of same sex attracted youth, and their findings have been remarkably consistent (Hillier et al, 1998). Called the *Writing Themselves In* projects, participant numbers have increased significantly with each iteration, from 749 in 1998 to 1,749 in 2004 and 3,400 in 2010. More than 5,000 same sex attracted young people have now added their experiences to the knowledge base. Each study has included the same core items regarding sexual feelings, experiences of homophobia and questions about safety and wellbeing.

Some findings have been consistent throughout all three studies over the 12 years and they are highly relevant to the Safe Schools Coalition. The first is that high numbers of young people experience abuse, both verbal (46 per cent in 1998; 44 per cent in 2004; and 61 per cent in 2010) and physical (13 per cent in 1998; 15 per cent in 2004; and 18 per cent in 2010), because of their sexuality. Verbal abuse can take many forms, often as a series of insults, threats and name calling. For example:

[I've been told] I'm going to hell because I'm gay, a good hard cock will change my mind, that being gay is evolution's way of killing me off, that I should be killed, that I'm fucked in the head because I'm gay. (Chrissie, 19 years, 2010 study)

Physical abuse often leads to hospitalisation.

The second finding is that school is the most likely place of abuse. Of those abused, 69 per cent in 1998, 74 per cent in 2004 and 80 per cent in 2010 reported being abused at school. School was by far the most dangerous place for these young people to be, compared to home, the street, or sport and social occasions.

The final research finding of no surprise to anyone is that the data show strong and significant links between the experience of homophobic abuse and a young person's health and wellbeing. In the 2010 study, from a sample of almost 3,500 same sex attracted and gender diverse young people, those who had suffered verbal homophobic abuse felt less safe in most places than those who did not report abuse, but safer than those who reported physical abuse.

Moreover, those who had suffered physical abuse were many times more likely to self-harm and attempt suicide than those who had not been abused – in 2010, 38 per cent of young people who had been physically assaulted because of their sexuality had attempted suicide. One young woman wrote:

I feel that being treated like dirt re my sexuality added to my lack of self esteem, depression and definitely contributed to self harm and thoughts of suicide. (Tracey, 19 years, 2010 study)

Homophobic abuse is not something that can be ignored if we care about the wellbeing of these young people and students in general because homophobia is bad for everyone.

Importantly for the Safe Schools Coalition of Australia (SSCA), in 2010 we were able to include items about school climate. We discovered that young people who attended schools where they felt safe and supported experienced far less abuse and were half as likely to attempt suicide as those in non-supportive schools. A supportive school had protective policies and acted on them. Sadly, in 2010, only 19 per cent of these young people felt that their school was supportive of their sexuality (Hillier et al, 2010; Jones and Hillier, 2012).

The SSCA had its genesis in a professional development program we ran for health teachers in 2000 (as these research findings were emerging) to implement the national

Talking Sexual Health resource. As we carried out the training around Australia it became evident that the section of the resource dealing with sexual diversity was, without question, the hardest for teachers to deal with. The concerns they expressed were the fear of being on shaky legal and moral ground, being accused of being gay themselves, losing their job or facing disciplinary action, saying the wrong thing which might inadvertently damage a young person, and inflaming homophobia in the school by making it more overt. In short there were all sorts of reasons the health teacher (or in rare cases, the openly gay teacher) might be hung out to dry. Any lone warrior who took on this work in a school would almost inevitably come up against beliefs such as "there are no gay students in this school", "we've never seen one here so why are we doing this?" or "we don't want to be known as the gay school". Like many difficult issues for schools, this one required major cultural change, a whole-school commitment and a multi-pronged approach.

Youth suicide funding in 2001 enabled us to combine this need with the imperatives emerging in our research data to work with whole school staff groups. We used the money to offer a one day training program free of charge to schools which volunteered to take it on. It wasn't much of a carrot and we struggled to get schools involved, but in working with the 20 schools that did volunteer, we learnt a lot. The major lessons from that time flowed on to the SSCA programs today.

The most important was the value of framing any response in a safety paradigm rather than a moral one. The safety approach allowed the many teachers who struggled with doubts about 'encouraging homosexuality' to step outside their moral views and sign on for a project that aimed to make all young people safe. It was a message that came directly out of the research evidence and resonated strongly with teachers and parents alike.

Other lessons were about the value of the evidence base in demonstrating a need in any given school and to justify action, the need for centralised policy support from government to legitimate the activities of teachers, and that a relatively modest professional development program could improve confidence and efficacy in most teachers in addressing the issue.

These lessons went forward into the launch of the Safe Schools Coalition of Victoria (SSCV), with the additional understanding that in 2010 we had only one year of funding promised and that a model which created a network of schools for potential peer support might provide the best long-term value for money. SSCV, which was the first iteration of the program, has enjoyed bi-partisan state government support continuously since its launch in 2010. Its evident success led to the, now controversial, provision of federal government support to the Foundation for Young Australians in 2013 to roll out the program in other states and territories.

The attacks on the Safe Schools Coalition of Australia have been in the face of the successes each new local program has been able to deliver. With sexuality education in Australian schools becoming less contestable, and society polarising over the likely imminent introduction of marriage equality, right wing conservatives have turned their attention to SSCA with unfortunate results. Political pressure on the Prime Minister and the Minister for Education led to the ordering of an independent enquiry into the program earlier this year by experts in education. Despite the finding that there was nothing educationally inappropriate in the program and its materials, conservative pressure from within the government led to the demand for significant changes which are currently the subject of contract negotiations.

The major criticisms of SSCA's work in schools cluster around the misconception that it is a classroom program, that SSCA staff are going into schools and teaching students of all ages a Pandora's box of ill-conceived notions calculated to further a fanciful 'gay agenda'. In fact the program delivers professional development to teachers and support to schools to enable them to combat homophobia and transphobia in their school when they see the need. The SSCA website has a number of resources for teachers, students and parents to access as necessary and this includes a recently acquired curriculum resource, *All of Us*, which seems to have been the source of most contention. It is simply a resource like all the others which teachers can choose to use or not. It is not the program itself and it is not, and never has been, mandated in any way for schools who join up.

Schools access the advice and support of SSCA staff of their own volition and they are provided with what they need without any compulsion to join the coalition. Many more primary schools than are members of the program have sought the advice of the coalition to help with the gender transition of a child in their community. Assisting with this process, which is becoming more common, is typical of the work the coalition does and much appreciated in the face of what many people still find a bewildering process. Young people who are same sex attracted or gender non-conforming, parents of these children and parents who are themselves gay, lesbian, bisexual or transgender see this program as a lifeline. It enables equality of educational opportunities in a world which has traditionally been unable to provide them.

The SSCA has only another year to run under its current funding agreement and, following the demand for changes imposed by the Federal Government, the Victorian Government has picked up funding to protect the program in this state. The future of the fledgling programs in other states and territories must be a matter of concern as we face up to what might be a long battle around marriage equality. There is no doubt that the publicly sanctioned homophobia involved in any debate of the issue will have a profound impact on vulnerable young people in schools, right at a time when their lifeline could be taken away.

References

- Dempsey, D, Hillier, L & Harrison, L (2001) 'Gendered [s]explorations among same sex attracted young people in Australia'. *Journal of Adolescence, Special Issue on Gay, Lesbian and Bisexual Young People* 24, 67–81
- Hillier, L (1997) 'Lesbian, gay, bisexual, unsure: The rural eleven percent'. In J Richters (ed) *Proceedings from the Health In Difference*. Sydney University. October 1996
- Hillier, L, Dempsey, D & Harrison, L (1999) ""I'd never share a needle [but I often have unsafe sex]": Considering the paradox of young people's sex and drugs talk'. *Culture, Health and Sexuality* 1(4), 347–361
- Hillier, L, Dempsey, D, Harrison, L, Beale, L, Matthews, L & Rosenthal, D (1998) Writing Themselves In: A national report on the sexuality, health and well-being of same sex attracted young people. National Centre in HIV Social Research. La Trobe University
- Hillier, L, Harrison, D & Dempsey, D (1999) 'Whatever happened to duty of care? Same sex attracted young people's experiences of discrimination and abuse at school'. *Melbourne Studies in Education* 40(2), 59–74
- Hillier, L, Jones, T, Monagle, M, Overton, N, Gahan, L, Blackman, J & Mitchell, A (2010) Writing Themselves In 3. The third national study on the sexual health and well being of same sex attracted and gender questioning young people. Australian Research Centre in Sex Health and Society
- Hillier, L & Harrison, L (1999) 'The girls in our town: Sex, love & relationships in small rural towns'. In H La Nauze, L Briskman, & M Lynn (eds) *Challenging Rural Practice: Change, Creativity and Diversity in the Australian Context.* Deakin University Press 194–205
- Hillier, L, Harrison, L & Bowditch, K (1999) "Neverending love" and "blowing your load": The many meanings of sex to rural youth'. Sexualities 2(1), 69–88
- Hillier, L, Harrison, L & Warr, D (1998) "When you carry a condom all the boys think you want it": Negotiating competing discourses about safe sex'. *The Journal of Adolescence* 21, 15–29
- Hillier, L, Turner, A & Mitchell, A (2005) Writing Themselves In Again 6 years on: The second national report on the sexuality, health and well being of same sex attracted young people. Australian Research Centre in Sex Health and Society, La Trobe University
- Hillier, L, Warr, D & Haste, B (1998) 'Rural youth: HIV/STD knowledge levels and sources of information'. *The Australian Journal of Rural Health* 6, 18–26.
- Jones, T & Hillier, L (2012) 'Sexuality Education School Policy for GLBTIQ Students'. Sex Education: Sexuality, Society and Learning 12(4), 437–454
- Lindsay, J, Smith, A, & Rosenthal, D. Secondary students, HIV/AIDS and sexual health. Centre for the Study of STDs, La Trobe University
- Smith, A, Agius, P, Dyson, S, Mitchell, A & Pitts, M (2002) Secondary Students and Sexual Health: Results of the 3rd National Survey of Australian Secondary Students, HIV/AIDS and Sexual Health
- Warr, D & Hillier, L (1997) "That's the problem with living in a small town": Privacy and sexual health issues for young rural people'. Australian Journal of Rural Health 5, 132–139

Can money buy you a better education? A comparative analysis of sector VCE results and related financial data

David Zyngier

It is often claimed as fact that private schools outperform public schools. An analysis of My School data and 2015 Victorian Certificate of Education Year 12 results shows that public schools with similar Index of Community Socio-Educational Advantage (ICSEA) rankings have very similar VCE results to private schools. However, public schools achieve these results with far less funding.

My analysis of VCE results grouped all Victorian private and public secondary schools that offered VCE (excluding schools with fewer than 20 students) into bands of 50 (roughly quartiles of achievement), based on their VCE results ranked by median study score and the percentage of students achieving over 40 (out of 50) study scores. I then compared their VCE results to their ICSEA ranking and other My School data including funding.

The average ICSEA score for all secondary schools in Victoria was 1027 (above the national average of 1000). Among private schools, 91 per cent have an ICSEA above 1000 compared to only 32 per cent of public schools. This further confirms the Gonski review finding that over 80 per cent of disadvantaged students attend public schools.

Top performing public schools (excluding select entry schools) actually outperform private schools with similar ICSEA rankings. The median VCE score of these public schools is slightly above that of similar private schools. Public schools had 18 per cent of VCE scores over 40 (out of 50) compared to 17 per cent of private schools with a similar ICSEA status.

The percentage of LOTE (languages other than English) students in the top-performing private schools was 13 per cent compared to 49 per cent in equivalent public schools, while the staff-student ratio for the top-performing private schools was 1 to 10 compared to 1

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to 13 in public schools. The non-teaching staff—student ratio was 1 to 22 in private schools compared to 1 to 50 in public schools.

Private schools in this category on average outspent public schools by almost \$9,000 per student (or 58 per cent). In 2013, through income from parental contributions, government transfers and donations, private schools spent \$21,500 per student (of which \$5,177 was from federal and state government funds). During the same year public schools spent \$12,500 (of which \$10,500 was from government sources).

The same pattern of academic results, funding and expenditure is repeated for public and private schools in the lower achievement bands.

Band 1 (1-50 rank)

The average ICSEA for private schools in this band is 1158 while for public schools it is 1061. Given the very large discrepancy in funding and resourcing of top-performing private schools compared to public schools, as well as the socio-educational advantage of the private schools, the difference in median VCE scores of four marks indicates that there is little return (in academic results) from either private parent or public money invested in these schools.

On average in 2013 private school parents in this category paid almost \$24,000 per Year 12 student while parents in public schools paid less than \$1,300. In terms of capital funding from government (2009–2013) private schools received \$5,000 per student compared to \$10,500 for public schools. However, in 2013 private schools outspent public schools by \$13,000 (or three times) in capital expenditure per student.

Band 2 (51-100 rank)

The average ICSEA for private schools in this band was 1093 compared to 996 for public schools. Given their socio-economic advantage, the difference in median VCE scores of only one mark indicates an extremely poor return (in academic results) on both private parent and public money invested in these schools. More than 50 per cent of these private schools received double the amount of funds from government that they charged parents.

Private schools in this category on average outspent public schools by almost \$8000 per student (or 63 per cent more). In 2013 private schools through income from parent contributions, government transfers and donations spent \$20,200 per student (of which \$7,862 was from federal and state government funds). During the same year public schools

spent \$12,762 (of which \$11,346 was from government sources). In capital expenditure, private schools outspent public by \$7,000 per student (or more than double).

On average in 2013 private school parents in this band paid \$12,854 per student for Year 12 while parents in public schools paid \$807.

Band 3 (101-150 rank)

The average ICSEA for private schools in this band was 1044 compared to 978 for public schools. Given their socio-economic advantage, the difference in median VCE scores of one mark again indicates an extremely poor return (in academic results) on private parent and public money invested in private education.

In 2013 these private schools outspent public schools by around \$2,000 per student while receiving on average only 20 per cent less than the amount of public funding received by public schools. The total government capital funding (2009–2013) on average for these third-ranked private schools was \$3.8 million compared to \$3.5m for public schools. When total capital expenditure per student is compared, private schools in 2013 spent \$11,992 compared to \$5,327 in public schools – a difference of \$6,665 or more than double.

Significantly 90 per cent of these private schools received more money from government sources than from parent contributions, and 38 per cent received more than 75 per cent of their recurrent student funding from public sources. One has to question whether these private schools are actually public in all but name.

Band 4 (151-200 rank)

The average ICSEA for private schools in this band is 1018 compared to 962 in public schools. The difference in median VCE scores of four marks between private and public schools reflects the socio-economic gap between the students in the two sectors. Every private school in this band received more money from government sources than from parental contributions, and 70 per cent received more than 75 per cent of their recurrent student funding from public sources.

In 2013, Band 4 private schools received \$10,473 per student from federal and state government funds while public schools received only slightly more at \$11,936. On average in 2013 these private school parents paid \$4,915 per student for Year 12 while parents in public schools contributed only \$668 per student.

Total government capital funding (2009–2013) for these fourth-ranked private schools was \$3.7m compared to \$4.5m in public schools. Total capital expenditure in private schools was more than double the expenditure in public schools in this band. In 2013 the difference in total capital expenditure between private and public schools was \$4,545 per student, or 61 per cent in favour of private schools.

Conclusion

In 2013 private schools on average outspent public schools by almost \$4,000 per student with almost 50 per cent of private school funding coming from federal and state government funds.

Private school parents paid on average more than 15 times the amount paid by public school parents for Year 12. Significantly, the average total capital expenditure (government funding plus private sources) in private schools was \$14,058 per student in 2013 compared to only \$6,586 in public schools.

Spending more money on students and on school buildings, playing fields, rowing sheds, music centres and swimming pools seems to make no difference at all when students have similar social and economic backgrounds. When all other things are held equal, it seems the only factors that actually make the difference are the teachers and the students in public schools who defy expectations and labels.

End Note

i ICSEA is the Index of Community Socio-Educational Advantage created by the Australian Curriculum, Assessment and Reporting Authority (ACARA) specifically to enable fair comparisons of NAPLAN test achievement by students in schools across Australia. A value on the index corresponds to the average level of educational advantage for the school's student population relative to those of other schools.

Interview: Jane Caro On advocating for the universal public education system

Interview by John Graham

- JG: How did you come to be such a passionate advocate for public education?
- JC: I went to co-ed comprehensive public schools and received an excellent education. I was always proud of my public school education and so never contemplated sending my kids anywhere else. I was astonished when people I knew started to sneer at public schools as somehow inferior to private ones. I decided to get active on behalf of public education because it is too important to allow snobbery and social climbing to destroy it.
- JG: How do you see the public education debate from your background in advertising?
- JC: My advertising background informs my response to the debate in two ways. First, I know that private schools are the branded products and public schools the generic.
 They are made in the same places by the same people with the same ingredients it's just that one has prettier packaging and a higher price.

Second, the high-fee private schools operate in the same way that couture fashion works for French fashion houses. Virtually no-one can afford high-fee schools or couture fashion but they operate as advertising campaigns for the brand.

People buy Chanel lipstick, Dior perfume and so on to buy a tiny, affordable (if still absurdly over-priced) bit of the cachet associated with the brand name. So it is that every 'private' school – even the low-fee Christian and systemic Catholic ones – are still selling a tiny bit of the cachet of Kings, Knox, Ascham ...

JG: What can be done to strengthen the advocacy base for public education?

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JC: Know what its strengths are. Don't allow governments to attempt to turn it into a poor man's private system. As long as private schools are publicly funded in Australia, public schools will have to fight for their image, funding, enrolments etc. Remember that this has its advantages in that it's hard for public schools to become lazy or self-satisfied. The danger is demoralisation, followed by residualisation.

The 'Give a Gonski' campaign was brilliant and should form the template for all subsequent campaigns. We may not have got all the money we wanted but we got the formula and changed the language around schools funding forever. I never hear 'parental choice' anymore (what a relief). I hear 'needs-based funding'. This is a huge change and a huge win.

We must celebrate our successes rather than bemoan that we didn't get everything we wanted.

- JG: What's your view about how our public schooling system has been travelling over the past few years? Are things getting better or worse?
- JC: About the same. Some things have become better in New South Wales we've seen a return by high income families to the public school system, and unequivocal support from the state Liberal and National Party government for Gonski and public schools. The Gonski funding that has flowed is making a real difference.
 - Some things have become worse too much accountability and busywork for teachers that saps energy and morale, too much asked of principals which does the same, too much uncertainty around funding after the re-election of the LNP government.
- JG: How would you explain the link between the health of the universal public education system and the level of educational equity in Australia?
- JC: Inseparable. Without a healthy public education system you cannot have educational equity. Without educational equity - in essence, further handicapping those already unlucky in the lottery of birth (while further privileging those who were more fortunately birthed) – you undermine democracy, equality of opportunity and merit.
- JG: What do you consider to be the interconnection between government social and economic policies and educational equity?

- JC: Any government that was sincerely interested in democracy, equality of opportunity and merit would concentrate on the children we know are at risk from conception all the way through their schooling. We know that is the way to break generational poverty and disadvantage. Trouble is, when our leaders overwhelmingly come from a small pool of talent white, male and private school-educated they don't know what they don't know. They often actively oppose efforts to dismantle generational underprivilege because, consciously or unconsciously, they realise it will also dismantle the system they have benefited from generational privilege.
- JG: What do you see as the greatest threats (actual and potential) to public education?
- JC: See above continuing rule by a privileged few who will perpetuate the systems that benefit them

The continual demoralisation of teachers and principals has been and continues to be very damaging.

The desire by multinational companies to exploit education for profit by controlling all the curriculum materials, testing, textbooks and even teaching programs and selling them to schools.

- JG: What do you think the role of non-government schools in Australia should be? What is the problem with their existing role?
- JC: I have little interest in the role of private schools. I think they should operate as they do in most other countries – as a separate but fairly irrelevant adjunct to a gold standard public education system. They should not receive government funding.
- JG: What do you think about the idea of making public schools more attractive to parents by making them more like private schools through mechanisms such as the Turnbull Government's push for Independent Public Schools?
- JC: Turning public schools into poor man's private schools will achieve nothing as we have seen with the charter school movements in the US and UK. It isn't ownership of a school that makes any difference, it's access. Parents like private schools because of who they can keep out. It's why we like travelling first class rather than economy. The luxury is nice but it's the sense of superiority over others that's the real attraction. Public schools (other than academically selective ones) can never and should never offer that.

We've had a perfect controlled experiment for 20 years in Australia into whether devolution or autonomy actually has any effect on attracting parents or improving student results. Victoria has had one of the most devolved public school systems in the Western world for 20 years, NSW has had one of the most centralised. Is there a vast difference in either enrolments or results in the two systems? Nope – autonomy is busywork. We know it does nothing, it just suits the ideology of LNP governments. A word of warning re autonomy: Victoria's public schools are much less well funded than NSW public schools....

- JG: What do you think now needs to be done to sustain and enhance public schools around the country?
- JC: The full Gonski, plus governments have to overtly and proudly support their public schools. We can see the result that has had in NSW already.

We also need to concentrate on supporting and encouraging teachers. It's the same as if you want to help kids you must support their mothers. If you want to help students you must support their teachers.

- JG: Are you optimistic about the future of public schooling?
- JC: Given the popularity and success of the Gonski campaign, yes.

Professional Voice

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Professional Voice

Back issues

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PV 11.1: School choice

The theme of the Autumn 2016 edition of Professional Voice is school choice. There are four articles directly related to the theme. Two of them describe and analyse research studies of school choice in Melbourne. The other two have an international flavour and investigate charter schools in America and academies in the UK.

PV 10.3: Teaching "teaching"

This edition's focus is initial teacher education. Three authors comment on the national (TEMAG) report into teacher education and give their views about how to improve the quality of pre-service education. There is also new evidence about the decline in equity in Australian schools and an article about diagnosing and accommodating in schools the increasingly common Autism Spectrum Disorder.

PV 10.2 Public, Private and Edu-business

This edition looks at the relationship between the public and private education sectors and busts the myth that education offered in private schools is superior to that offered in public schools. We also examine the alarming rise of edu-business in Australia through a case study of the largest and most influential of the companies involved – Pearson.

PV 10.1: Testing Times

From NAPLAN to PISA, tests have become a defining feature of global education systems. But how much do testing regimes really tell us about education systems and how much do they distort the very thing they report on?

PV 9 3: Global Education Reform Movement

With an editorial overview of the GERM agenda, stories include a look at NAPLAN and assessment, collaborative teaching, class sizes and the models of reform being pursued in America and the UK.

PV 9.2: School Improvement

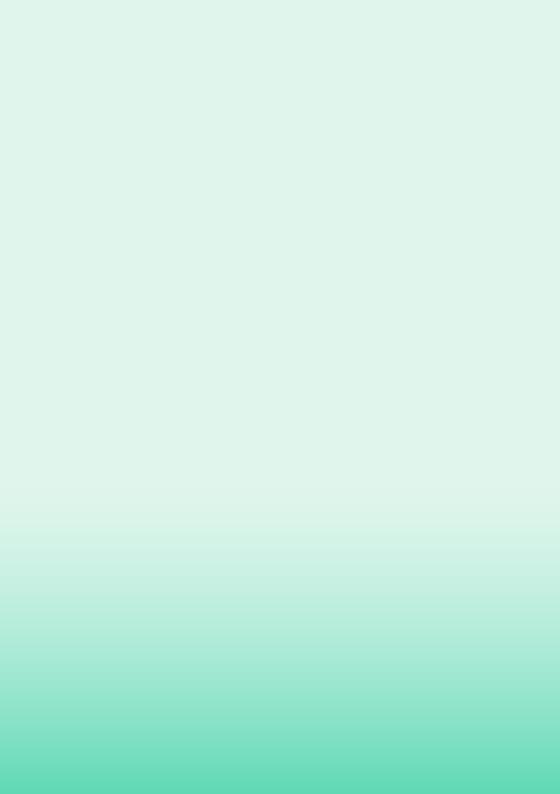
This edition of Professional Voice moves away from the thematic approach we have used in the past and instead highlights quality writing that questions taken-for-granted ideas surrounding contemporary educational discourse.

PV 9.1: Equity and Disadvantage

The autumn 2012 edition takes a broad look at equity issues. Alan Reid argues that governments have fallen in love with quick fixes and easy answers. Alan Smithers notes that choice and standards policies in England failed to increase equity because they were not part of a well-designed system. Tony Vinson says that investment in early years is not only the best investment we can make in society, it is a moral imperative.

PV 8.3: The National Agenda

This edition of PV casts a critical eye at the national schools agenda, from funding to curriculum to the new teacher standards. A strong line-up of writers includes Chris Bonnor, Alan Reid, and Lyndsey Connors. Also in this issue, part one of a major interview with leading US academic Linda Darling-Hammond.



Teaching in context

Editorial: Teaching in context John Graham

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Peter Blatchford

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