



Public submission made to the Review to Achieve Educational Excellence in Australian Schools

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Summary

In a future world, we will have progressed beyond the industrial model of schooling with teaching as a craft, to new models of schooling and teaching as a true profession, with lead teachers and specialists and instructors working in teams that cater for learning needs and experiences for all children, through design based curricula developing collaboration, creative thinking, problem solving and deep learning. We will have jumped out of the 'achievement' structure of access to higher education, recognise that knowledge is not memory, and will have taken notice of neuroscience to transform the way we do secondary education. This is a 20-year vision.

Four short-term actions would be

1. Provide schools with a 'success coordinator' (perhaps full time for large schools. 50% for smaller schools, or full time across schools) who receive the levels of professional development required to develop collaborative teams within schools and local school networks and to use data to identify areas of success on which to build and start implement actions related to growth.
2. Every primary school to be provided with a Learning Intervention specialist (full-time or fractional full-time depending on school size) to work with the early years' teachers in particular to ensure every child is 'on track' within the first two years of school entry.
3. Support the development of an Executive Development Program for future and current school principals to lead the changes above. The program developed by the National Institute for School Leadership in Washington (<http://www.nisl.org/executive-development-program/curriculum-course-content/>) is a 12-month programs that is an example of the required preparation.

4. Support the professional development of the 'head of curriculum' (or equivalent person in a senior leadership role) in all secondary schools for the purpose of building the schools' capabilities in well-being, neuroscience and adolescence and human learning.

Main submission

Review to Achieve Educational Excellence in Australian Schools

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Context

In many ways, education is the same 'assembly line' model that has existed for the last 150 years. The constancy of the way schools look, feel, operate and deliver the curriculum has been called the 'grammar of schooling'. It's just the way we do it. It's the way it is. It does not have to be like this.

There are many indicators that suggest it is now time for a 'schooling' revolution in Australia, and probably other like countries.

1. Falling academic achievement (e.g. PISA);
2. increasing disengagement (e.g. <http://news.gallup.com/opinion/gallup/170525/school-cliff-student-engagement-drops-school-year.aspx> , decreasing to 44% school engagement in High School, suggesting that schools no longer cater for the needs of the developing adolescent. While these are US figures, there are studies in Australia that suggest similar findings, e.g. NSW https://www.cese.nsw.gov.au/images/stories/PDF/LearningCurve7_TTFM_May2015.pdf);
3. poor school completion rates (steady at around 80%, with a degraded VET/TAFE system). These three indicators suggest strongly that it is time to reboot.

By far, the most concerning is the increased levels of disengagement as young people progress through school. If students are disengaged, they are unlikely to maximise their learning opportunities at school. Schools achieve engagement in many ways; through curriculum innovations, through a strong community culture that binds all members of the community (e.g. a school-wide music program), school as a surrogate home where there is deep concern and support for every student and in particular those from broken homes, those who 'mix with the wrong crowd' and so on. Schools must focus on the 'heart' first, and then the 'head'. Schools must give students a strong sense of belonging to the school and the community. Moreover, in an age of automation (and with the potential emergence of artificial intelligence),

teachers will need to help students become engaged citizens who, for their own and society's resilience, embrace those things that cannot be automated: creativity, social/emotional empathy, and fine motor manipulation (which becomes even more important in an age of digital fabrication and virtual environments and there is growing evidence that young children are losing these skills). These are areas of expertise that we would expect in teachers and are necessary elements of future schooling.

In some ways, all of us are the same, but we each have unique capabilities, interests and beliefs. Our similarities are greater than our differences, but our differences are sufficiently great that the 'one size fits all' model of education does not meet the needs of every learner. NAPLAN results highlight the differences. In numeracy at Year 7, 50% of students in year are within four grades (Year 5 to Year 9), 25% of students are above the Year 9 median and 25% of students are below the year 5 median. In 2016, 18.1% of students in Australia received an adjustment to participate in education because of disability (physical, cognitive, sensory or socio-emotional). More than $\frac{3}{4}$ of the disability group will be in the regular classroom requiring 'quality differentiated teaching practice' or 'supplementary adjustments' led by the classroom teacher with some specialised support. More 'substantial' or 'extensive' support is required for the remaining students.

A separate set of data, the Australian Early Development Census, which is a national measure of children's development as they enter their first year of full-time school and undertaken in 2009, 2012 and 2015, highlights that 1 in 5 students are developmentally vulnerable in at least one area of development in a way that will impact on learning when they start school. There is ample evidence that stresses the urgency of having all children 'on track' by age eight, when the brain is moving from 'literal' to 'inferential' meaning. Children who have not developed the core foundations for learning by age eight, will struggle to catch up in the rest of their schooling.

Parents, paediatricians, health professionals and teachers all contribute to enhancing the growth of young people along with peers and everyday experiences which are unique to each person. Making sense of the world and the people around us is a challenge. And it starts at birth.

O'Keefe and McDowell (2004) highlighted the gaps in knowledge and beliefs between teachers and paediatricians in the diagnosis and educational management of children with developmental and behavioural problems such as ADHD, autism, language disorders and specific reading disability. The co-management of these children with teams including educational psychologists and speech pathologists is required for optimal outcomes. The mismatch in knowledge and beliefs about diagnosis and management can compromise an individual child's outcomes. Meaningful collaboration is the key.

You can walk into any grade 1 class in Australia and ask the teacher who are the 5 or 6 kids who are struggling and they can identify them with 100% accuracy. But they don't know the underlying cause and what to do next. The step after identification is a 'diagnosis'. Why is the student struggling? Where is the appropriate referral? Psychology? Audiology? Speech Pathology? Too often now it is to the paediatrician. A diagnosis from the specialist will come back, but the teacher typically is not equipped to know what to do next. It is time for teaching to evolve into a true clinical practice profession where teachers have the diagnostic skills to establish what the student knows and understands now, what the student is ready to learn next, determine the appropriate intervention, have the teaching skills to implement the intervention, evaluate the outcome of the teaching cycle, determine if a referral to another clinical specialist is required, use this new information to assist in the next teaching cycle. Moreover, teaching as clinical practice profession requires collaboration with other teachers and 'para teachers' and to solve the complexity of a student failing to learn.

This all provokes many questions. How does one class teacher meet the needs of each learner? Have they been prepared to do so? Do early primary teachers have the knowledge and skills to diagnose and intervene with those children who have developmental and behavioural problems that will impact on their learning and have the intervention skills to have kids 'on track' before age 8? Is the goal of schooling to have each child at the same grade level? Or do we want to see at least a year's growth in every calendar year for each child? Are teachers solely responsible for the growth and development for our young people? Do all teachers have the disciplinary depth and a deep knowledge of the foundations of each discipline to facilitate growth in every student and to understand the misunderstandings in student learning? Do our teachers in secondary schools really understand adolescence? Has system reform killed divergent thinking through accountability measures? Has the focus on academic achievement stifled innovation? Have we given serious consideration of what is good for kids? Schools have become more predictable and lack the imagination required to avoid boredom for students.

Schooling will remain. The value of education is more than skills learned and employability. Great teaching changes lives. It sees the potential in students, respects their ability, inspires a passion for learning, and provides the young with a trustworthy setting in which to set aside personal fears. And it is through education we transmit the knowledge, the virtues and the values necessary to preserve and carry forward our democratic society.

I wrote the following Op Ed prior to the last Federal Election:

"The next Australian government must work together with system leaders, school leaders and teacher education providers, and even their parliamentary colleagues, to do four key things:

First, they need to recognise excellent teachers through new professional structures and pay levels (This was not a proposal for performance pay, but a proposal for the creation of positions for highly skilled expert teachers linked to appropriate remuneration to which only qualified teachers [e.g., Highly Accomplished and Lead teachers (HALTS)] could apply). Second, they must increase the effectiveness of all teachers through initial teacher education and professional development in what I call clinical teaching. We need to develop teachers' capabilities to diagnose, intervene and evaluate a wide range of individual student learning needs. Further training and support is required to ensure all teachers can use evidence about what each student knows and understands to inform the appropriate teaching interventions. Third, teachers must be enabled so they can work in collaborative teams, with lead teachers elevated to support their colleagues. Just as teams of lawyers, engineers and medical staff problem solve difficult issues together, teaching is too complex and challenging to practice in isolation. Finally, school networks can effectively leverage the excellence that exists in each school. Mechanisms for effective networks will enable schools to share success and support continuous improvement."

If I were writing that Op Ed now, I would add that teachers also need to be professionally developed to learn how to deliver learning in a way that engages young people, enhances creative thinking, develops teamwork and communication skills, develops social/emotional capabilities, and fine motor manipulation. These are all critical skills that provide young people with the attributes necessary to thrive and survive in a rapidly changing world. The employment sector wants knowledgeable employees which can work in teams, interpret, collaborate and have social sensitivity. These knowledge AND dispositional skills can be jointly developed in school.

In a future world, we will have progressed beyond the industrial model of schooling with teaching as a craft, to new models of schooling and teaching as a true profession, with lead teachers and specialists and instructors working in teams that cater for learning needs and experiences for all children, through design based curricula developing collaboration, creative thinking, problem solving and deep learning. We will have jumped out of the 'achievement' structure of access to higher education, recognise that knowledge is not memory, and will have taken notice of neuroscience to transform the way we do secondary education.

Submission questions

1. What should educational success for Australian Schools look like?

I would argue that measures of engagement should be the first priority and that improvements in other success indicators (NAPLAN, school completion, PISA etc.) would follow. Is this school an inviting place for all students to come, learn, enjoy,

and grow? The focus on only or mainly test achievement is stifling for teachers and students and the current indicators should be used for tracking and monitoring and not accountability.

2. What can we do to improve and how can we support ongoing improvement over time?

- Initial Teacher Education (ITE). This may be beyond the scope of this review, but the first priority is to focus on the development of the teaching profession through completing the reform of Initial Teacher Education through
 - a. Having a National Accreditation system (this recommendation of Minister Pyne's TEMAG report was not adopted. Or at least a national quality group that oversees the quality of the evidence that is used in accreditation decision by the states. The variability in quality of initial teacher education programs in Australian is high and a rigorous accreditation system is needed. There is too much waste from those who enrol in ITE to those still in employment as a teacher after five years (refer AITSL).
 - b. Consider mechanisms for scaling up quality ITE programs. The reallocation of savings to fewer high quality programs will not lead to greater overall costs.
 - c. Provide adequate funding to transition those universities selected to be responsible for taking ITE forward. ITE should be based at research intensive universities (e.g. Finland, Alberta, Shanghai)
- The second priority is, through professional development, to ensure that every teacher develops enhanced capabilities in the transition to a true clinical practice profession, recognising the unique requirements of early years, middle years and senior years teachers with common capabilities in:
 - a. teaching for growth using a developmental, intervention-based approach; evaluating their impact on student learning,
 - b. teaching skills associated with future student outcomes (such as wellbeing and technology);
 - c. acquiring interpersonal skills to collaborate effectively, and
and
 - d. Be professionally developed to learn how to deliver the curriculum learning in ways that engage young people, enhance creative thinking, develop teamwork and communication skills, develop social/emotional capabilities, and fine motor manipulation. These are all critical skills that will give young people the attributes to thrive and survive in a rapidly

changing world. Too few teachers are prepared to think and teach in ways that develop creativity. It is not easy for most people to think outside the square. The focus for today's teachers has been to become excellent in teaching the curriculum. Strategies for creativity can be developed and integrated with the essential components in the current curriculum.

- The third priority is to recognise Accomplished and Lead teachers through their proven expertise and salary. The identification must be done in a dependable way (e.g., through the national quality process noted above) to maintain the quality standards; and introduced in every state. These teachers must take on the responsibility of leading teams of teachers that have less experience and are less confident of their capabilities. We need to spread the national HALTS movement to create a truly national group of experts in teaching. Teachers must have the confidence to ask when they don't know the answer to a student's learning needs.
- The fourth priority is to provide focussed support for effective school networks to share expertise and success to support continuous improvement. This needs to be based on sharing evidence of impact on students, not compliance with regulations, talking about teaching and resources – but relentless focus on evidence of impact and using this to scale up this success across the network.

These are not short term actions, but are necessary for the step change that is required for Australian Schools. None of the above is possible without expert school leadership. School leaders for change require several attributes including: understanding the global, national and systems contexts on education; instructional design including a deep knowledge of how we learn; the interpretation and use of data for change; how to drive change with understanding managing change, structures for change, ethical decision processes and the moral purpose of education.

Four short-term actions would be

1. Provide schools with a 'success coordinator' (perhaps full time for large schools. 50% for smaller schools, or full time across schools) who receive the levels of professional development required to develop collaborative teams within schools and local school networks and to use data to identify areas of success on which to build and start implement actions related to growth. This strategy has demonstrated dramatic improvement in school outcomes in the University of Melbourne cross sector school networks established four years ago. There are now five networks of 18 collaborating schools that work together to scale up success.

2. Every primary school to be provided with a Learning Intervention specialist (full-time or fractional full-time depending on school size) to work with the early years' teachers in particular to ensure every child is 'on track' within the first two years of school entry. The Master of Learning Intervention at the University of Melbourne is one example of the preparation required to develop this expertise (http://education.unimelb.edu.au/study_with_us/courses/master-learning-intervention).
3. Support the development of an Executive Development Program for future and current school principals to lead the changes above. The program developed by the National Institute for School Leadership in Washington (<http://www.nisl.org/executive-development-program/curriculum-course-content/>) and the Master of Instructional Leadership at the University of Melbourne (<https://handbook.unimelb.edu.au/courses/mc-inslead/print>) are 12-month programs that are examples of the required preparation.
4. 4. Support the professional development of the 'head of curriculum' (or equivalent person in a senior leadership role) in all secondary schools for the purpose of building the schools' capabilities in the key areas to address the issues outlined in this submission including engagement, wellbeing, neuroscience and adolescence, human learning and so on. What schools do must be based on human science and not on tradition.

Postscript

At the Graduation Address at the University of Melbourne in December 2014, I stated:

"I believe we are at a critical time in Australia's education. The OECD PISA results over more than a decade indicate a gradual but consistent decline in the mathematics, literacy and science abilities our 15-year-old students. The causes for this are many; but when taken as a whole I believe our country has become complacent about education. We've assumed that our historically high-performing education system will continue to serve us well into the future, without necessarily changing.

There is another worrying trend in Australia. Over the last thirty years there has been a drift in enrolments from the government to the independent sector. In 1985, 74% of our students were educated in the Government system and nearly 7% in the independent sector. Those figures are now 65% Government and 14% independent. This is significant because what the Top Performing nations have in common is that they have strong public education systems

How do we reverse the trends? The quality of teaching is the most important controllable factor which impacts on student learning. Those of you receiving your

Master of Teaching degrees are the beneficiaries of our high quality innovative program and you have now been equipped to reverse this help trend.

And for those of you, who have extended your knowledge through masters and doctoral studies in education policy, positive psychology, evaluation, literacy, numeracy, well-being, special needs, and instructional leadership; you have demonstrated your commitment to our young people and equipped yourselves with specialist skills to lead change.

There will be a time when our natural resources are not sufficient to sustain our economy. Our main resource will be our people who will need to be knowledge creators, innovators, entrepreneurs. Which brings the onus on to you, as the future leaders, teachers and specialists to ensure Australia's future is secure."