Review to **Achieve Educational Excellence** in Australian Schools

Public submissions for the Review to Achieve Educational Excellence in Australian Schools

Submitter:	Australian Research Alliance for Children and Youth
Submitting as a:	Other (NGO research and advocacy organisation)
State:	ACT

Summary

Over the past several decades, our schools have changed -- dramatically, in some cases. No longer bastions of standardisation and mass production, rows of desks and teacher-led lectures but still overly reliant on standardised testing, league tables and siloed curricula. In many jurisdictions, innovation is still considered too risky, the possibility of failure too high. At the same time, the research community has been very active, assessing effective strategies to improve teaching and learning. However, there appears to be a supply and demand imbalance: a high supply of evidence about “what works” but a low demand for it in schools and classrooms.

We need to structure schools so that innovation and evidence-informed teaching are both supported and rewarded. This will involve focusing on a rich knowledge building pedagogy and committing to knowledge mobilization as the basis for building teacher capacity and system level innovation.

There are some important steps that can help promote and scaffold innovation and evidence-informed teaching. For example, informal social support and the culture it creates is critical to supporting or stifling innovative thinking. A high degree of social capital, peer-to-peer support and an acceptance that risk taking is simply part of improving practices that contribute to an innovative ethos. Encouraging the informal sharing of knowledge and practice and the formation of professional learning networks are conducive to experimentation with new ideas.

Of course, formal support or the organisational infrastructure of a school also has a role to play. Giving permission for teachers to innovate through formal mandates and inferred importance and approval can tip the scales toward creativity and experimentation. Access to the resources (eg, technology and linkages with experts outside the school) and forums for open discussion of ideas and sharing of knowledge are also necessary.

Main submission

In a highly influential and prescient report, the OECD framed the challenges confronting contemporary schooling: defining a new role for schools in building and servicing a 'knowledge-based society and establishing a systematic "scientific" knowledge base for its activities (42, p. 11). It is a supply and demand problem: high supply of evidence to improve schools but low demand for this evidence at the school and classroom level.

We argue that these challenges can be met by redressing this imbalance, focusing on a rich knowledge building pedagogy and committing to knowledge mobilization as the basis for building teacher capacity and system level innovation.

Over the past several decades, Australian schools have changed in many positive ways, reflected in above average performance of students on international assessments (TIMMS and PISA). There is also evidence quality instructional practice. However, there is still a great deal of hand ringing -- particularly among some politicians, the media and business leaders -- about the quality of teaching and learning in Australian schools. So, is the glass half-full or half-empty? In our view, it is both: Australia has made substantial progress in some areas of reform, but appears unwilling or unable to take on others that would allow it to become a leading 21st century educational system.

What should educational success look like in Australia? Given the complexity and multifaceted nature of schooling and education and the large number of stakeholder groups that have direct or indirect interests in the outcomes of schooling, defining and measuring success are no easy tasks. Parents, students, teachers, principals, employers, policy makers and politicians all have views about what the key goals of education ought to be, what values ought to guide its processes, and how educational success should be measured. Sometimes these views overlap; very often they conflict.

ARACY's view is that the 2008 Melbourne Declaration or the 2009 Early Years Learning Framework or ARACY's NEST can provide the high-level guidance we need. The problem is not with the goals but rather with the dampening effects of institutionalized assessments (TIMMS, Pisa and NAPLAN) on innovation and experimentation in the classroom (5, 36, 48). This is not to say that assessment is unimportant. It is simply to say that the current organization and politics of assessment in Australia have substantial pedagogical effects that constrain the ability of the Australian school system help all children thrive so that they are prepared for the demands of a global institutional environment. Assessments, when used as diagnostic tools, can be highly effective in monitoring students' learning journeys.

Specifically, we believe the emergent 21st century institutional environment places a particular premium on cognitive depth and understanding, the development of within- and cross-disciplinary expertise, knowledge transfer and a key 21st century skill -- metacognitive self-regulation (learning how to learn). A pedagogy that focuses on knowledge building supported by knowledge mobilization practices at the teacher, school and system level, is well positioned to achieve these goals (3, 4, 6, 8. 9, 12, 21, 22, 25, 26, 27, 24, 29, 34, 38, 39, 40, 41, 43, 44, 46).

What kind of pedagogy will support these learning goals? Arguably, there is an over–reliance on conventional curricula arrangements, standardised testing, school league tables and workshop-based forms of professional development in Australia (Hogan, 2014). ARACY believes that systems need to develop a more balanced pedagogy that engages students in domain-specific knowledge building that goes beyond valuing and transmitting established knowledge and also insists that students be able to do knowledge work: that is to recognise, generate, represent, communicate, deliberate, interrogate, validate and apply knowledge claims in light of established epistemic norms. This would equip young people to have the cognitive and epistemic understandings and skills necessary to effectively negotiate 21st century institutional environments (1, 2, 3, 9, 6, 12, 13, 18, 31, 32 20, 33, 34, 35, 37, 38, 40, 41, 45, 46, 49).

This conception is particularly applicable to knowledge work in conventional academic disciplines that continue to inform the design of the standard school curriculum, but also in applied subjects and the trades. Indeed, the latter areas often exemplify this knowledge building approach far more effectively than teaching in the academic disciplines.

At the classroom level, this means the design and implementation of instructional tasks as multi-dimensional opportunity systems that require students to exercise cognitive, metacognitive and epistemic agency and to work collaboratively to deliberate and debate. This will require the development of new learning relationships between students and teachers. The role of teachers shifts from covering all required content to the learning process itself. The role of the student shifts from passively absorbing transmitted knowledge to actively exploring, creating, representing, validating and communicating knowledge claims (14). Or, as Fullan and Langsworthy (18) write, a “core component of the new pedagogies is what we call deep learning tasks. These tasks harness the power of … new learning partnerships [between teachers and students] to engage students in practicing the process of deep learning through discovering and mastering existing knowledge and then creating and using new knowledge in the world.”

How might we create the conditions for the successful adoption of such a pedagogy? In our view the most promising starting point is a system-wide, single-minded commitment to the improvement of instructional practices in classrooms organized

as epistemic or knowledge building communities embedded in schools organized as professional learning communities supported by a strong commitment to knowledge management and sustainable innovation (29, 33).

A strategy of instructional improvement, in turn, requires a theory of professional learning that treats teachers as active learners engaged in concrete tasks of teaching, assessment, observation and reflection in situ, which is:

- grounded in participants' questions, inquiry and experimentation, as well as research on effective practice;
- iterative and extended over time and supported by follow-up activities, collaborative, involving sharing of knowledge among educators and embedded in schools functioning as communities of learners and communities of inquiry;
- supported by accountability systems that incentivise and reward principled (evidence-based) risk taking and innovation, linked systematically to curriculum, assessment and instructional innovation and cultural change at the school level; and
- focused on developing teacher expertise in content knowledge, pedagogical content knowledge, assessment literacy, classroom inquiry, curriculum knowledge and pedagogical judgment.

This kind of professional learning is obviously very difficult to achieve, let alone sustain. It is least likely happen in conventional forms of professional development (one-off workshops, courses) and most likely to occur when schools are organized as professional learning communities with professional development focused on highly interactive and authentic forms of in situ professional learning. As Richard Elmore (14) noted, "Improvement is more a function of learning to do the right things in the setting where you work. … The problem is that there is almost no opportunity for teachers to engage in continuous learning about their practice in the setting in which they actually work, observing and being observed by their colleagues in their own classrooms and classrooms of other teachers in other schools confronting similar problems of practice." There are, of course, examples of professional bodies promoting such practices, eg, the Australian Institute for Teaching and School Leadership.

In schools characterized by high levels of successful pedagogical innovation and student performance, McLaughlin and Talbot (50) conclude, "a collaborative community of practice in which teachers share instructional resources and reflections … is essential to their persistence and success in innovating classroom practice." But, as Fullen, Hill and Crevolla (17) observe, continuous professional learning "is not just a matter of teachers interacting; they must do so in relation to focused instruction. Professional learning communities … can contribute mightily to

altering school conditions..." Singapore, Finland and Hong Kong are three examples of embedded use of evidence and innovation.

Systems also need to develop knowledge management and sustainable innovation systems within and across schools as aspects of a broader and deeper conception of the school as a learning organization. The OECD (42) puts it this way:

The rapidly rising expectations of parents and politicians about what students should achieve and what educational organisations should do to guarantee these achievements are putting teachers under heavy pressure to find much more effective ways of teaching and of managing educational organisations. Teachers cannot do this by working harder, but by working smarter, which means achieving higher productivity through knowledge creation and application, which in turn is likely to mean re-conceptualising the nature of educational organisations and re-structuring and re-culturing them accordingly" (OECD, 2002: 69; Italics added).

The heart of this new conception of schooling is a vision of the school as an evidence-based and knowledge-intensive community that recognizes that the principal source of innovation is "intellectual capital" and a robust system of "knowledge management" and "innovation" (42).

How can we make it sustainable? From ARACY's perspective, it is important that knowledge management and innovation are deeply embedded in educational systems. Too often innovations are one-off wonders that reflect the well-intentioned (but often poorly designed) initiatives of committed teachers and principals. Instructional innovation is technically difficult and emotionally demanding, institutionally challenging, risky for both teachers and schools since innovations often fail, are hard to sustain and scale-up.

The holy grail, of course, is achieving scalability with sustainability, but very few instructional innovations achieve either. International experience suggests that success in the development of a sustainable system of pedagogical innovation is likely to be enhanced by the development of knowledge management and innovation systems at both the school and system level. However, not all forms of knowledge production in education are created equal: practitioner led classroom knowledge production, the OECD argues, is more directly useful to classroom practitioners and more productive of sustainable improvement in instructional practice.

In our view, there is still considerable opportunity -- and an urgent need -- to codify, verify, disseminate and apply the domain-specific tacit knowledge of expert teachers. Currently, this knowledge pool is a vastly underutilized instructional resource that should be made available to novice -- and even experienced – teachers within and across schools.

It is for no little reason then that Fullan, Hill and Crevola (17) conclude that "We see classroom instruction as an activity that can be improved by making expert knowledge available to all teachers…We believe that there is such a thing as expertise in teaching: that the nature of this expertise can be made explicit, so that it is capable of being replicated and validated; and that expert teaching translates into improved learning."

In the table below, Fullan (16) maps out the drivers that generate innovation and instructional change along these epistemic lines:

- Foster intrinsic motivation of teachers and students.
- Encourage continuous improvement of instruction and learning
- Build social capital and rely on teamwork and collective practices.
- Develop systemic change strategies
- Change the culture of school systems (values, norms, practices, relationships) and classroom practices
- Foster performative orientation to teaching and learning .

Relying on capacity building as a key driver for system reform is demanding and success is not guaranteed. However, it is probably our best bet, given what we know about system reform. Meanwhile, system managers need to strive for the following:

- promote local mediation and adaptation, while acknowledging governmental guidelines for the national curriculum and instructional practice that mitigates against local mediation and adaptation;
- resist teaching to the high stakes tests and the low ceiling effects of NAPLAN which constrains appetite and opportunity for innovation and improvement;
- promote the quality of teaching rather than teacher quality;
- put in place accountability systems that support and promote (principled) risk taking and innovation and respect the learning outcomes values by teachers and the parent community at the school level; and
- recognise the nature of cultural and institutional contexts when "borrowing" practices that appear to be effective in other jurisdictions.

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