Attachment 2

Submission to the Inquiry into the Academic Standards of School Education, on the Importance of Evidence-Based Research, or Myth versus Reality in Education

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Myths and Reality A listing of the common myths in Australian education.

	Myth	Reality
1	On Learning, Development, and	
	Instruction	
1.1	Children construct their own learning by being exposed to experiences; the teacher's role is to facilitate this learning, not to directly teach specific skills or content.	This belief fails to distinguish between two separate but related processes: development and learning. Development occurs through interaction with the environment, including general learning experiences, but this process does not exclude specific teaching of skills and knowledge. Social transmission of knowledge, including direct teaching of specific skills is a part of every child's social environment, and is typically found in all cultural groups.
1.2	Children learn best when they 'create' their own knowledge through active discovery. Teaching of specific facts, concepts or skills is not good, because this does not lead to true learning or understanding.	Teaching of specific facts, concepts and skills facilitates learning, because it provides the fundamental structures which enable further learning and development to occur.
1.3	Children learn best through minimal or guided instruction.	There is clear evidence to indicate that systematic direct instruction is a more effective way of teaching basic skills and concepts.
1.4	It is more important to teach higher level thinking skills and concepts than facts and content knowledge	Higher level thinking skills and concepts cannot be directly taught in a content-free context. They can only be acquired when dealing with and/or manipulating specific content knowledge. The content knowledge comes first. The higher order thinking skills come next.
1.5	Expertise is based on higher level thinking skills.	Expertise is based on accumulated knowledge. What distinguishes the expert from the novice is how much they know. Not how well they can think.
1.6	What you can do depends on higher level thinking skills, not content knowledge.	What you can do depends on what you know. The more you know, the better able you are to apply this knowledge in a whole range of contexts. Application of knowledge gained in one area can be applied to new areas, and can lead to new insights and novel solutions to problems across different areas of knowledge.

	Myth	Reality
1.7	There is no point in spending too	A broad knowledge base provides a foundation for building
	much time teaching specific facts	new knowledge.
	and knowledge in a particular	
	area, because this area of	
	knowledge is unlikely to be of	
	relevance or importance to the	
	student once they leave school.	
2	On Learning to Read	
2.1	Learning to read is a natural	Learning to read is not a natural process, but an acquired
	process, like learning to talk or	skill that has to be specifically taught.
	learning to walk.	
2.2	Children learn to read by being	Reading to children may develop their vocabulary
	read to.	knowledge and oral language skills, but it does not teach
		them how to read.
2.3	Children's success in learning to	Children's success in learning to read depends on the
	read depends on their early	effectiveness of the school program they are exposed to on
	learning in the home and at	entry to school.
2.4	preschool.	
2.4	the disadvanta as superior and by	An effective school program can overcome the
	a near early learning	has been and the second of the
	a poor early learning	backgrounds. This is the whole purpose of schooling.
2.5	Roading recovery is an effective	Roading recovery is a very expensive program which has
2.5	program for helping children	little evidence of long term effects, particularly for those
	who are experiencing difficulties	children with more serious reading difficulties
	in learning to read in their second	children what more benous reduing differences.
	vear of school.	
3	On school organisation and	
	structure	
3.1	Reducing class size will improve	There is no evidence to indicate that reducing class size
	school outcomes, particularly in	will, in itself, improve school outcomes. Rather than
	the early years of school	reducing class size (say from 25 to 20 in the early years of
		school), resources would be better spent in providing other
		resources, such as specialist teachers or support services for
		students with special needs.
3.2	Multi-age grouping in the early	There is no evidence for the claimed benefits of multi-age
	years of school has social and	grouping in the early years of school, and contrary
	academic benefits for young	evidence that this form of grouping may have some
	children	negative effects on children, and is more difficult for
		teachers to implement than single-grade grouping
4	On school entry	
4.1	Children below the age of five	There is no magic age for readiness for school. Children
	years are not ready for formal	will enter school with a wide range of skills, whatever age
	schooling, so it is better for	is set for school entry, and it is the role of the school to
	parents to delay their entry to	cater for the needs of all children who enter school when
	school until they turn five	they are legally entitled to do so

	Myth	Reality
4.2	In the case of children whose birthdates fall close to the cut-off date for entry to school, it is better to defer their entry to school, because they will be disadvantaged if they are the youngest in their class group	Younger children are not necessarily less ready for school than their older classmates, and any differences between younger and older children on entry to school wash out after the first two or three years of school.
4.3	Children who are among the oldest in their class group are more likely to become leaders in their group	There is no evidence showing a relationship between relative age in grade and leadership qualities
4.4	The pre-school play-based curriculum is more suitable for young children than the formal school curriculum in the first year of school, so it is better for 'less mature' children to spend an extra year at pre school rather than enter school, even though they are old enough to go to school	There is a natural progression from preschool to school, and although the school program is more structured than the preschool program, with more clearly defined learning goals, it is not the formal rigid program that preschool teachers seem to think. Children who repeat their preschool year are often not sufficiently challenged, and likely to get bored by the end of their second year in preschool.
4.5	There is no harm in deferring en try to school	There may be long term negative effects of deferring entry to school. Students who are relatively older for their grade level will reach school leaving age before their younger class mates, and there is evidence to suggest that older students are more likely to drop out of school early. There is also a substantial cost to the government in providing an extra preschool year for children who should normally be in the first year of school (with up to 20 or 25 per cent of children in this category in Victoria and NSW). Children who are repeating their preschool year are also using up limited preschool places which are then not available to younger children who may miss out on a year of preschool.

	Myth	Reality
5	On Assessment	
5.1	The benchmark tests provide a valid indication of student performance.	The benchmark tests do not provide valid and reliable evidence of performance standards. The way in which the tests are designed and the way in which the cut-off scores are set to determine whether a particular benchmark has been achieved are based on arbitrary judgements by 'experts'. Changes in the proportion of students who achieve a particular benchmark do not necessarily indicate a change in the performance levels of students. They m ay simply indicate a change in the difficulty level of the items that are designed to assess whether a particular benchmark has been achieved, or a change in the level at which the cut- off point has been set. The current state testing programs cannot be used to compare performance standards across time, across states, or across years of schooling, since there is no way of knowing whether such differences are related to characteristics of the tests and the way in which the cut- off scores have been set, or to characteristics of the students
5.2	Standardised tests are not useful or valid, because they cannot measure all aspects of students' learning and development.	This is as absurd as arguing that testing blood pressure is not valid or useful because it cannot measure all aspects of an individual's health, and cannot identify every conceivable disease or disorder a person may have. Standardised tests serve different purposes. For example, they can be used to diagnose a reading difficulty, they can be used to assess aptitudes for particular areas of learning, they can be used to monitor performance in a particular area over time, using the same test on a regular basis, and they can be used to determine how an individual stands relative to that of other students of the same age or grade level in a particular area of learning. All of these are useful and legitimate purposes. Tests may not always be perfect, and they may not be able to measure every aspect of human behaviour. However, as noted by Berliner and Biddle, standardised tests provide hard objective evidence on student achievement, and as such stand out as 'rocks of stability in a sea of unanchored opinions'. They provide the tools by which teachers, education systems and researchers can monitor the effects of different variables on student achievement, and are an essential part of the process of moving toward a more scientific approach to the investigation and evaluation of programs and practices that are effective in improving outcomes and raising standards of school education.