

Synthesis of Local, National and International Research

The relationship between teacher pedagogy, student engagement and achievement

What does this mean for DECD leaders, teachers and students?

Research basis

- South Australian Teaching for Effective Learning Communities Making a Difference: National Partnerships Research Project 2010-2013 Final Report (**TfEL**)
- Effective Early Educational Experiences Classroom Assessment Scoring System (CLASS) 2010 Results (**E4Kids**)
- Program for International Student Assessment 2012: *How Australians measure up* (**PISA**)
- New South Wales Quality Teaching Project (**NSW**)
- National Assessment Program – Literacy and Numeracy (**NAPLAN**)



Findings

Pedagogy repertoire	TfEL	<ol style="list-style-type: none"> 1. The level of a teacher's pedagogical repertoire has no correlation with their age, gender, experience or academic qualifications. 2. The most highly observed domain of practice, across the whole sample set, was TfEL Domain 2: <i>Create safe conditions for rigorous learning</i>, with an emphasis on creating 'safe conditions' rather than 'rigorous learning'. 3. Teachers' epistemic awareness has an impact on their approach to teaching; a 'teaching as script' approach places emphasis on a controlled, sequential progression and following a pre-planned approach; and a 'teaching as design' approach is characterised by a responsive, personalised approach to learners' to achieve desired learning outcomes. South Australian teachers who have a 'teaching as design' approach demonstrated a more highly developed pedagogical repertoire.
	E4Kids	<ol style="list-style-type: none"> 4. Research demonstrates that quality learning support for children is clearly linked to long term outcomes. The ways adults ask questions, connect them to the real world, help children plan and predict, engage back and forth in conversations of interest and expand children's language/vocabulary all make a major difference. This was reported as low in a sample of 258 Early Years classrooms across Victoria and Queensland.
	NSW	<ol style="list-style-type: none"> 5. The key features of classroom practice that have been linked to improved student outcomes can be characterised as representing three dimensions of pedagogy: <ul style="list-style-type: none"> • pedagogy that is fundamentally based on promoting high levels of intellectual quality • pedagogy that is soundly based on promoting a quality learning environment • pedagogy that develops and makes explicit to students the significance of their work.
Learner disposition to learning	TfEL	<ol style="list-style-type: none"> 1. Approximately 40% of South Australian students believe that intelligence is fixed and display a 'fixed mindset'. 2. The average South Australian student has a low score in resilience to learning compared to UK students.
	PISA	<ol style="list-style-type: none"> 3. South Australian students have the lowest disposition to learn mathematics and the lowest self-efficacy or self-confidence to transfer and apply their mathematical knowledge to real world contexts—the very skills required by 21st century learners. 4. South Australians are the only group to fall below the OECD average index for their intrinsic motivation to learn in mathematics. 5. A greater proportion of South Australian students are likely/very likely to think '<i>I'm not very good at solving mathematics problems</i>'.
	NAPLAN	<ol style="list-style-type: none"> 6. South Australian students fall below the national numeracy results in fluency, visualisation and problem solving – problem solving being the greatest difference. Therefore South Australian students generally hit a 'glass ceiling' compared to their peers nationally and underperform in the higher proficiency bands.
Learner perceptions of pedagogy	TfEL	<ol style="list-style-type: none"> 1. Learners value the opportunity to give feedback on their teachers' practice and consider it important that teachers understand what helps them learn. Learners reported that providing feedback via the TfEL Compass helped them reflect on their own learning. 2. The qualitative difference in the learning experiences of learners taught by teachers who had a highly developed or a limited pedagogy repertoire is clearly evident in the learner perceptions of teacher practice and its impact of the quality of their learning. 3. High quality pedagogy affects the quality of the learning experience and develops reflective, self-directed lifelong learning capabilities.