



Welcome to the *Research eLert*, a bi-monthly online resource, providing information on the latest research from Australia and overseas. It includes several research studies on the topic of rewards and incentives for effective teaching. These studies informed the new policy trials that will be carried out in Victoria in 2010. To receive a copy of the *Research eLert* in your inbox, register ► [Here ...](#)

## Latest research

### Three Whiteboards, Three Staff, One Classroom: A journey introducing team teaching in an ICT-rich learning environment

Using a refurbished metal craft/graphics room, three interactive whiteboards (IWBs) five desktop PCs, five laptops and a multimedia lab, Dimboola Memorial Secondary College set out to discover if team teaching in an ICT-rich environment could improve student engagement and learning.

The innovation had a strong data basis as the college wanted to track improvement in a measurable way. The leadership team modelled the use of ICT and stressed its importance in bringing about changes and improvements. Support from the school community was gained through an emphasis on teaching and learning that identified student improvement as its central goal. Focusing on integrating technology into teaching and learning, teachers became proficient in the use of the IWBs before they were installed. They undertook professional development in small groups in an environment of trust which encouraged them to take risks.

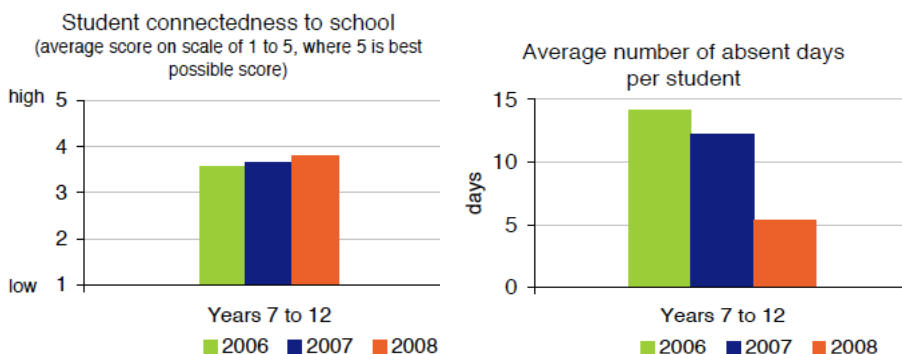


Figure 1: Student wellbeing and connectedness and student attendance

### 0–18 Learning and Development: Researchers' Invitational Forum 2010

This forum will bring together researchers and departmental staff to build linkages between research that is advancing Victoria's 0–18 learning and development agenda. The forum will focus on integrative approaches which address key transition points, place-based approaches and joined-up service models.

Departmental staff, schools, universities and research organisations are invited to express interest in attending this forum by forwarding details to:

[research@edumail.vic.gov.au](mailto:research@edumail.vic.gov.au)

Further information on the forum will be available in February 2010.

**'Innovation is an essential economic imperative, and this can only be achieved through imagination'.**

*Sir Ken Robinson*

The data collected in 2008 from a Year 7 Literacy and Numeracy program showed improvements in both of these learning areas. Other benefits of the program at Dimboola include a decrease in student management issues and absences; improved student respect for teaching and learning; and improved teacher satisfaction. These outcomes are illustrated in figure 1.

The school is preparing for the implementation of an online learning environment and a one-to-one laptop program for Years 7 to 12.

### UK Study of the Impact of Support Staff in Schools

The workforce reform agenda in the UK has included a significant expansion of the roles and responsibilities of support staff and paraprofessionals in schools. The *Deployment and Impact of Support Staff in Schools* (DISS) project investigated the operation and impact of support staff on student outcomes and teacher workloads over a five-year period (2003–08). The study covered primary, secondary and special schools, and involved large-scale (20,000) surveys, observations and interviews involving 5,672 students and 95 staff in 77 schools.

Over half of teachers reported that support staff had a positive effect on their workloads, and two-thirds felt that they improved both stress levels and job satisfaction. Support staff also enabled better teacher planning and preparation. Teachers felt support staff assisted student learning through supporting specific students; offering specialist expertise (e.g. technology skills); having a positive impact on behaviour and motivation; and allowing differentiation.

The report provides useful insight into how support staff can be most effectively deployed, and some lessons to be learned. For example, the researchers found a negative relationship between the amount of support staff support and student progress in English, mathematics and science. Students with more support received more individualised and active engagement with adults, but teachers interacted with them less than with other students. The findings also highlight wide variations in qualifications, experience and preparation of support staff. ► [More ...](#)

### Teacher Supply and Demand Report

The seventh annual *Teacher Supply and Demand Report for Victoria* has been released and provides comprehensive data for the 2008 calendar year and incorporates some 2009 data to provide further insight into the issues identified from the 2008 data. The report focuses on, the composition of the teaching service across all sectors, and the historic trends in pre-service teacher education and the outlook for the next four years. ► [More ...](#)



### Maths 'achievable with effort'

The latest edition of *Better Evidence-based Education* includes a range of maths-focused articles. One article discusses the importance of challenging students' belief that 'maths is not for them – it's for the clever ones'. The author suggests that for students to see themselves as successful maths learners, they need to undertake maths tasks that are challenging but 'achievable with effort'. ► [More ...](#)



## Hot topics- Rewarding Teaching Excellence

### *Rewarding Quality Teaching: Research Report*

This report considers 'best practice pay' for teachers, using analysis of pay reform in Australian and overseas. It provides a good background to the Victorian randomised trials that will commence in 2010. It also considers research about performance pay systems in analogous professions in the public service, armed forces and health. It draws significantly on stakeholder perception of what might be achieved in Australia for teachers and the challenges that face pay reform. ► [More ...](#)

### *Performance-based Pay for Teachers: The Research*

This research paper considers the main arguments both in favour of and against performance-based pay for teachers. The most notable finding is that there is no conclusive evidence as to whether any one model of teacher pay will have positive impacts on all schooling goals. The authors propose that there is a need to improve how teachers are attracted, developed and retained in Australia. Whether performance-based pay can usher in a new era in education reform, and have positive impacts on teachers and students, is still unclear. ► [More ...](#)

### ***Toward a More Comprehensive Model of Teacher Pay***

Several school districts in the US are using multiple measures, including test scores, to assess teachers' contributions to improved student learning and their eligibility for incentive rewards. This paper briefly reviews a range of approaches being taken to reconfigure teacher remuneration. ► [More ...](#)

### ***Evaluating the Effect of Teachers' Group Performance Incentives on Pupil Achievement***

Is money a motivator? This paper provides evidence on the effects of two programs: the first provided the school and its teachers with monetary performance incentives and the second with additional conventional resources. The results suggest that monetary incentives caused significant gains in many dimensions of students' outcomes, and were more cost effective than giving schools more resources. ► [More ...](#)

### ***Teacher Performance Pay: Experimental Evidence from India***

This large-scale, randomised evaluation of a teacher incentive program in India found that students in incentive schools performed significantly better than those in control schools, and their performance on 'conceptual' as well as 'mechanical' components suggests that the gains in test scores represented an actual increase in learning outcomes. ► [More ...](#)

### ***Rewarding Teaching Excellence***

The Blueprint Implementation Paper *Rewarding Teaching Excellence* reflects on evidence and research into different models for evaluating and rewarding teaching excellence, concluding that 'there is no emerging consensus in the international literature on a single, optimal model for assessing and rewarding teaching excellence'. Taking into account the international research and feedback from broad consultations undertaken in Victoria, the report outlines two models for rewarding teaching excellence that will be trialled in Victorian schools commencing in 2010. The report also outlines other models that were considered but not selected for trials.

► [More ...](#)

## **Research partnership update**

### **Literacy Nexus Project**

Dr Pauline Harris and her team from the University of Wollongong will conduct research in Victorian government schools as part of an Australian Research Council Discovery Project titled: *Investigating Relationships Between Literacy Research, Policy and Practice - the 'Literacy Nexus Project'*.

The team will survey teachers and principals on their perspectives and experiences regarding the relationship between literacy research, policy development and classroom practice, with a view to enhancing the relationship.

In a paper presented at the annual conference of the Australian Association for the Teaching of English (AATE) and the Australian Literacy Educators' Association (ALEA), the researchers argue that the fields of literacy research, policy and practice do not interact with one another in ways that are congruent or productive, as evidenced in recent government literacy reports in Australia and overseas. ► [More...](#)

## **Research Learning at the Royal Children's Hospital**

Keeping children connected to a rich learning environment is central to their overall health. The research program at the RCH aims to improve the educational outcomes and wellbeing of children and young people.

*'At the RCH Education Institute we're all about children and their education. When they come to the hospital for treatment they become patients, but they are still learners. Our teachers work to create vibrant and dynamic learning environments where children and young people are engaged, interested and curious ... just as they would be if they were at school.'* Glenda Strong Exec. Director, RCH Education Institute. ► [More ...](#)



## **National Report on How Young People are Faring**

The 2009 *How Young People are Faring* report, published by the Foundation for Young Australians, focuses on the global economic downturn and the subsequent impact on young people's aspirations, employment opportunities and education pathways. ► [More ...](#)



## Research events

### ICSEI Annual Conference 2010 (5–8 January), Kuala Lumpur, Malaysia

The conference provides a forum to share ideas, promote research, and encourage practices that will enhance the quality and equity of education for all students. A DEECD team will present [Signposts: Research points to how Victorian government schools have improved student performance](#)

► [More...](#)

### Australian Research in Early Childhood Education Conference 2010 (19–21 January), Monash University's Peninsula Campus, Melbourne

ARECE welcomes early childhood personnel, researchers, teacher educators, policy personnel, and community advocates for young children to the conference. ► [More...](#)

### ASCD Annual Conference and Exhibit Show 2010 (6–8 March), San Antonio, Texas

For those interested in evidence-based practice, the 2010 conference features a series of meetings on identifying and implementing programs and practices that use scientifically-based research. ► [More...](#)

### IDEA10 Learning Futures: technology challenges (10–12 March 2010), Melbourne

This will be of interest to educators interested in information technology in Australian education. ► [More...](#)

## Research review

### The Link between Repetition and Memory (*Teacher*, October 2009)

Barbara Dykes, an educational consultant and author, discusses the power of repetition. 'I knew that the link between forgetting and remembering was connected with concentration. However, memory in the learning situation requires a more "long-term strategy" than concentrating. For this, "concentrated repetition" is the key.'

Dykes suggests that the use of repetition is now supported by brain studies and references Douglas Fields, author of *Making memories stick*, who explains that 'memories are created when nerve cells in a circuit increase the strength of their connections'. These connections are strengthened by strong and repeated, or 'high-frequency', stimulus. Thus, repetition is the key to making long-term memories and storing information.

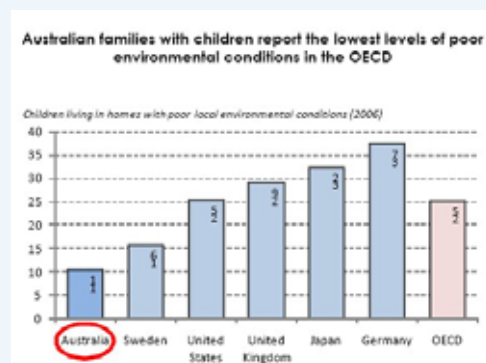
Whilst Dykes effectively promotes repetition, what will resonate for some readers is the 'rebel intellectuals' view that children would learn 'of their own volition, if surrounded with resources and a facilitator'. Today there is also recognition that learning is facilitated or hampered by emotions and that emotions shape learning and memory. So while there is still a place for repetition, educators now look more broadly at the cross-discipline complexities associated with learning and teaching. And as neuroscientists continue to study the brain – which is of great interest to the education community – we watch this space with much interest. ► [More...](#)

## Let us know what you think...

If you would like to share your views on any of the information presented in this edition of the Research eLert, please click ► [Here ...](#)

### OECD Report: *Doing Better for Children:*

This report reviews the range of policies designed to improve the wellbeing of children in OECD countries, and a range of associated child well-being outcomes. The report indicates that Australia does relatively well in terms of housing and the local environment in which children grow up, with one in ten children enduring poor local environmental conditions compared to one in four on average across the OECD. Australian children also do well at school and average educational performance compares well to other countries (6<sup>th</sup> best in the OECD). The gap between low-performing children is smaller than in most OECD countries. ► [More...](#)



### Did you miss the Innovative Learning Environment Design conference?

The DEECD Innovative Learning Environment Design Conference was held on Monday 19 October 2009 and focused on the innovative use of learning environments to support improved teaching and learning. A range of presentations focused on examples of what changes have worked in school and why, adopting a student centred approach and learning environment design. ► [More...](#)

