

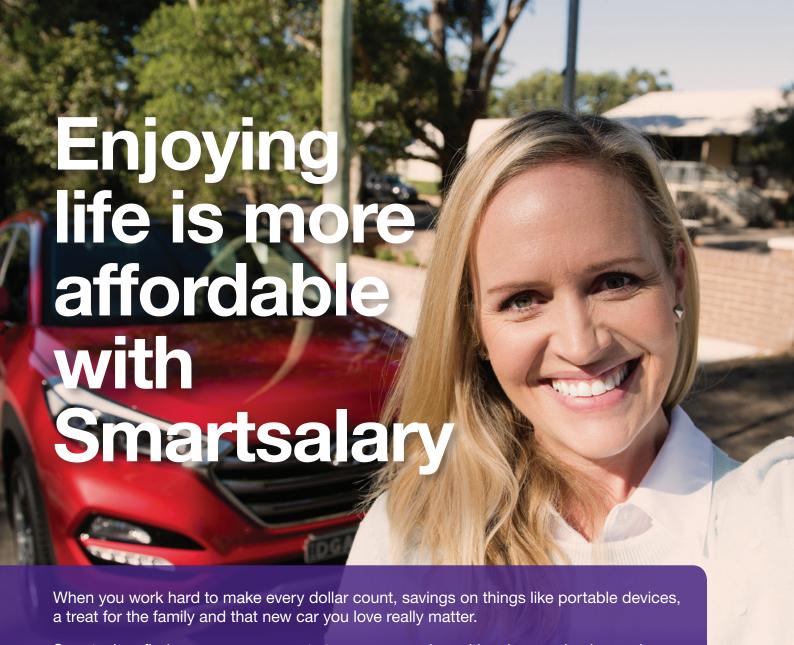
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Term 4, 2017

Issue 06

### news

News Round-up: Education news from around Australia

### education

- Special Report: Disruptive innovation - education experts call for a revolution
- 12 Principal Speaks: It's the best of all worlds at Auburn North
- Author Spotlight: Has "weak parenting" created a teenaged monster?
- Education Research: Parents' report card: how do schools measure up?

### teacher's desk

- 18 **Events Calendar:** Education events around Australia in 2018
- 20 Professional Development: The hightech language of emotion
- 22 Professional Development: What PD do teachers need? Let's ask them.
- Real Schools: Hang in there and reap the results of your new approach!
- Teacher Talk: Art as a conduit for deep, integrated learning

### what's hot

What's Hot: The latest trending education industry products

## profile

30 STEM Education: Remote Aboriginal school takes out science award with bush medicine

# teaching resources

- 32 3D Printing (Part 1): 3D print and education - Empowering today's students to become the innovators of tomorrow
- 34 Virtual Reality: Is the virtual reality revolution upon us?

# **Editor's Note** Term four is upon us, and with

This issue, our 'Principal Speaks' hails from Auburn North Primary (one of our most multicultural schools) where realising "the best of all worlds" is the order of every school day.

it, our final 2017 edition.

Enrichment opportunities for 2018 include expos and conferences, plus new directions in PD.

'The future of our schools' is ever a recurrent theme. What will they look like? What is needed? Our Special Report covers revolutionaries in education, including Sir Ken Robinson, who will inspire delegates as keynote speaker at the Future Schools Expo next March.

Educational tours take us to Old Sydney Town and destinations farther afield, offering more than language learning. It seems anything is possible, from STEM journeys with astronauts to immersion in a climate-affected village in the Pacific, giving students a clearer understanding of privilege and climatic risk.

Teaching resources include 3D printing, e-Learning in the classroom... and is the virtual reality revolution upon us?

School canteens still vex school leaders, as they integrate healthy canteens guidelines. Online ordering can coax families back to the old school tuckshop.

For property maintenance over summer, we look at LED lighting for savings in power and solid performance. Sports surfaces in need of a makeover? Check out sprung timber in our Sports & Recreation section.

From the field, we hear from CAPs Coolgardie: this predominantly Indigenous school in remote WA has collected STEM prizes never won outside metropolitan Perth.

For ways to integrate art and the wider curriculum, Alieta Belle explains how to use art as a conduit for deeper learning.

Last but not least: are you harbouring monsters in your high school? They may be suffering from Prince Boofhead Sydrome. The cause may be weak parenting, but author Dr Michael Carr-Gregg has a possible cure. This last issue is packed with big thinkers and should keep you going for the long(ish) break ahead.

Until next time - noli cedere cognoscere (don't stop learning).



Suzy Barry, editor, School News editorial@school-news.com.au

# 21st century classroom 41 Book Reviews: New to the bookshelf

administration

science'

42 Innovative Learning Environments: Creating innovative learning environments in your school

Cover image courtesy Big Picture Industries Inc.

36 Educational Programs: Educational

tour takes students "to the forefront of

eLearning: Embracing eLearning in the

Marketing, Websites and Apps: Engaging parents of the new world

### external learning

- 46 Overseas Educational Tours: Overseas travel creates adaptable citizens of the world
- Overseas Educational Tours: Global learning builds resilience, broadens world view
- Interstate Travel: Sydney: science, civics and our colonial past

### sports & recreation

- Scoreboards: LED scoreboards enhance atmosphere and sports engagement
- 56 **Sports Flooring:** Sprung timber sports floors for sustained performance

### food & beverage

School Canteens: School leaders influence canteen culture

### property

Energy Efficient Lighting: Large scale lighting that won't break the bank

# Key - For easy perusal

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# Education news from around Australia

# New chair appointed to PAI

**Respected leader Ms** Susan Pascoe AM has been appointed as independent chair of the Australian **Principal Certification** Advisory Board, which is managed by Principals Australia Institute (PAI).

Ms Pascoe has previously held the roles of president of the Australian College of Educators (of which she is a Life Member), chief executive officer of the Victorian Curriculum and Assessment Authority and chief executive of the Catholic **Education Commission of** Victoria



Ms Susan Pascoe AM

# **Phonics test still** divisive

The commotion about the new year one phonics test continues. While assessments from commentators range from 'pointless' to 'harmful', federal education minister, **Simon Birmingham stands** behind the plan.

In a doorstop interview in Adelaide in September, he said, "nothing is more important in our education system than the success of our children," and indicated this success depends upon the early "building blocks" of the basics; literacy and numeracy.

He said, "after much urging, particularly from dyslexia advocates and others concerned about the welfare of children who slip behind," the

government had commissioned a panel of experts to take a look at the possible implementation of a skills check in year one around literacy and numeracy.

"We're very pleased to have received that report and we thank Dr Jennifer Buckingham and her panel of experts, including principals, researchers in disability, who worked together on a report that has recommended we should proceed along the path of taking a look at implementing a thorough, consistent, national skills check in year one across literacy and numeracy."

"Earlier identification can lead to earlier intervention, and earlier intervention can help ensure children don't fall behind, and that's what this is all about," Minister Birmingham said.

"In the UK, where they've undertaken this type of skills check for a period of time, they've seen a real lift in terms of children meeting the skills check and flow on benefits in terms of their literacy skills."

Minister Birmingham called the test a "light touch check", and reiterated that it would be "delivered in the classroom by a teacher known to the child in a verbal, one-on-one manner" and shouldn't cause stress.

Birmingham assures critics that it will remain purely a diagnostic tool, designed to flag the need for additional resources into a particular school. "In no way should it become a public process upon which schools are judged or otherwise," he noted.



# **Australian Capital Territory**

# **ACT schools warned to** remain inclusive



**Education minister, Yvette** Berry, issued a reminder to ACT schools to be inclusive of the LGBTIQ community during the postal vote rollout on marriage equality.

The move followed a Brindabella Christian College decision to urge families to vote 'no' in order to preserve the right to teach biblical views on marriage.

"Of course, school leaders and staff, and parents and carers are free to hold their views on marriage equality but this cannot be allowed to occur in a way that damages the welfare of young LGBTIQ+ people," she cautioned.

The minister announced the impending launch of the new ACT Safe and Inclusive Schools Initiative, which will be made available to schools who request it. The initiative is to provide access to resources and support to provide a safe and inclusive environment for LGBTIQ+ people.

Perhaps predictably, former prime minister, Tony Abbot called the minister's caution an "outrageous interference" with free speech and

# **Public school enrolments** up in ACT

Student enrolments in the **ACT's local public schools** continue to grow strongly, according to the Canberra **Public Schools Census** conducted in August.

The August 2017 census showed there were 46,566 students

enrolled in Canberra public schools, an increase of 1,649 enrolments (3.7 percent) since August 2016. Over five years, from August 2013 to August 2017, enrolments increased by 5,519 students (13.4 percent).

The data showed a continued increase in the number of Aboriginal and Torres Strait Islander students enrolled in ACT public schools.

The census also showed there were 2,313 students accessing special education programs at either mainstream or specialist public schools. This is an increase of 2.6 percent compared with the August 2016 census.

# **New South Wales**



# **School communities** protest against 'failed' new HSC tests

Protesters, including mums, dads, grandparents, teachers and students from H.O.P.E -(HSC, Opportunity, Potential 4 Everyone) met outside **Parliament House in Macquarie** Street in September to protest the new HSC policy, which will preclude students from sitting the HSC based on test results from year nine.

School News caught up with Martine Beaumont, who has been leading the campaign and she said the protest was a great

"The protest was about hearing from the children; we heard amazing speeches from eloquent year nine students, from both public and private; and regional schools, about what this policy means for them and how it was impacting them."

schoolnews

Their other main focus was to get a meeting with education minister, Rob Stokes to present some 15000 comments from families.

Finally, they were granted a meeting and were able to present their case.

Ms Beaumont says something people seem to be missing is that NSW system, which is modelled on the WA reforms, has some vital differences.

She says WA students were given support and training to help them meet the standards, while NSW students have received none of this support.

She added that all the funding directed at early literacy and early intervention, began once the current year nines were in late primary: 'They have had no benefit from any of this funding in early literacy - yet are being asked to meet the same standard."

HOPE representatives discussed alternatives with the minister and advisors, including a separate literacy and numeracy qualification to sit alongside the HSC. Talks continue.

# Religious freedom wins out



Sikh father, Sagardeep Singh Arora, has won the right for his son, Sidhak Singh Arora to wear his traditional patka to the school of the family's choosing.

Melton Christian College in Melbourne's western suburbs issued a conditional offer of enrolment to Sidhak.

The boy must remove his traditional patka (small turban) in order to attend.

Mr Arora took his concerns to the Victorian Civil and Administrative Tribunal (VCAT) and received a ruling in his favour.

# Autistic boy regularly strapped to chair

The treatment of an autistic boy at Manning Gardens Public School at Taree on the NSW mid- north coast is under investigation. His mother, Georgina Maker-North told the ABC she was "gobsmacked" to discover her son was being restrained in a chair with straps.

Another boy at Pennant Hills High School was moved from room to room using boxing pads. He had been coming home with blood all over him from the struggles. Investigations continue amid growing demands for better treatment and resources for children with ASD and other disabilities.

# **Northern Territory**

# Teaching the teacher

How did the mob in Maningrida stop the revolving door of teachers in their community? Through culture!

With so many different clan and language groups in the Arnhem Land community of Maningrida, students are thriving on an education that includes language and culture. "The main language is Ndjebbana, and the second language is Burarra, but we've got other formal languages as well as Kunwinjku, Rembarrnga and Wulaki, and Djinang," Lurra Language and Culture teacher, Cindy Jinmarabynana, told NITV.

Cindy's colleague, linguist and teacher, Mason Scholes, said, "with our Indigenous Language and Culture Unit that we run here at the college we teach five languages across the school, from preschool right up to the senior years. And we go on camps throughout the year with our five language groups."

To solve a teacher turnover issue, the language and culture staff have implemented cultural training to ensure teachers make more meaningful connections with their community. Without this training and inclusion, the complexities of the culture, language and kinship system can cause feelings of isolation. A new teacher to Maningrida told NITV the induction process "really helps you get a bigger picture of the whole context, understand what [sacred] places you might be allowed or not allowed to go to". She says by learning kinship rules, teachers know where they fit in to the community, and feel more included, which leads to more attachment to the community.

Look out for our Maningrida school profile in Term 1, 2018 for more on how this mob successfully integrate the Australian education system into the diverse sociolinguistic fabric of Maningrida.



Cultural education at Maningrida, students learn how to find mangrove worms.

# NT govt open to sniffer dogs in schools

In a bid to combat the growing problem with drug addiction in schools in the NT, the territory government has indicated it might consider police sniffer dogs at schools if current strategies don't yield results soon.

Independent Terry Mills told the NT parliament that "bold measures are required" in the face of drug issues that are predicted to worsen. He asked if sniffer dogs could be considered.

Minister for education, Eva Lawler said she would be willing to look at it, "but first and foremost I think it needs to be starting at the beginning working with those young kids in primary schools," she told Parliament.

# Queensland

# Funding boost to support home tutors



Education minister, Kate Jones has announced the government will invest almost \$1.5 million in home tutors to help students read as part of their strategy to improve rural and remote education.

"The Partners in Learning program will help home tutors of children enrolled in the Schools of Distance Education to support children's reading development," she said. Isolated Children's Parents' Association state president Kim Hughes welcomed the announcement and said the program would provide valuable assistance for home tutors across Queensland.

"The program will help tutors to build their knowledge and understanding of how to improve the reading of students enrolled in distance education," said Ms Hughes.

It will be delivered as a residential program of up to four days with participants from six Queensland Schools of Distance Education – Cairns, Capricornia, Charleville, Charters Towers, Longreach and Mount Isa School of the Air.

# Autism Queensland calls for input

Autism Queensland is calling on families and individuals living with autism across Queensland to have their say about the support services they deserve.

The 2017 'Have Your Say' Survey is being conducted by researchers from Autism Queensland,
The University of Queensland and Queensland University of Technology. "We hope to gather detailed information about the educational support and service needs of people on the autism spectrum and their families, and to identity the gaps in service provision.

The online survey is anonymous and takes approximately 20 minutes to complete. It will be available at www.autismqld. com.au until Friday, 12 January 2018. Teachers and principals are advised to communicate with affected families and encourage participation.

# **South Australia**

# Space Mission shortlist announced

After presenting their initial designs at the 68th International Astronautical Congress, seven school teams have been shortlisted and selected to build and send experiments into space as part of the SA Schools Space Mission, following the theme 'Innovation for a better future'.

Projects ranged from analysing magnetospheres using mobile phones to growing mushrooms in space.

The shortlisted teams will receive industry specific professional learning and equipment through Neumann Space so they can begin to build the first physical prototypes.

At the start of term four next year, three successful entries will be sent into space, where high tech sensors and receptors will be used to stream data back to schools for recording analysis over a 12-month period.

The schools are: Australian Science and Mathematics School, The Heights School, Le Fevre High School, Mawson Lakes School, Norwood Morialta High School, The Pines School, and Two Wells Primary School.

# SA govt plans to 'move on' bullies

The SA government wants more control over where students are placed in SA public schools. They have proposed new legislation, which would allow "the chief executive the power — in very serious cases — to move the perpetrator to another school," a department spokeswoman said.

Parents of bullying victims often complain it is unfair that the bully gets to stay, while they have to move to protect their child. The department would use the policy as a last resort, pursuing all other anti-bullying measures first.

The new legislation would also

allow them to redirect parents who have been caught giving false information to a department-nominated school. At present, when caught lying, schools generally do not disenrol the students, and lying parents cannot be forced to enrol their children in another school. A department spokesperson has said, "the measure is designed to discourage people from fraudulently attempting to enrol their child in a school".

# **Tasmania**

# **Energy Maker Fair**

To help people understand how to conserve and generate



energy, Greening Australia held an "Energy Maker Fair" in October at the Sustainability Learning Centre, Olinda Grove, Mt Nelson.

The 'energetic' presenter of Gardening Australia, Costa Georgiadis, hosted sessions that had school students from Hobart and surrounds enraptured. The Energy Maker Fair promoted Energy Wise, a partnership with Greening Australia and TasNetworks to support energy literacy in secondary schools and the community. The Energy



Wise program involves schools engaged with practical STEM curriculum challenges such as designing wind turbines and energy assessments. A trial unit has recently been run at New Town and Huonville High schools and students showcased their work at the Energy Maker Fair.

The Department of Education and the Environment Protection Authority collaborated on this inaugural event to bring together an exciting mix of energy makers and opportunities to find out about the latest technology, and be involved in creative solutions to energy challenges.

# Tasmanian teacher awards

Whole school awards included the Principals and Teachers of the Year for Primary and Secondary schools won by staff from Nixon Street Primary School, Bayview Secondary College, East Devonport Primary School and Elizabeth College respectively.

"All the winners of the 2017
Department of Education Awards
for Excellence exemplify the highquality work that is undertaken
every day by staff and volunteers
from across the Department," Mr
Rockliff said.

Delivered in partnership with Tasplan, Teachers Health Fund and Telstra, he said, "the awards recognise excellence across our diverse education system and the variety of roles supporting Tasmania's next generation within schools and school communities".

He says the government's goal to "lead the nation in education and create a job ready generation" will



Australian Mathematics and Science School with defence and space industries minister, Martin Hamilton-Smith and their 'Growing Mushrooms' project.

be achieved "through the talented and dedicated people working in public education, and their focus on improving learning outcomes for our young people". A full list of the winners is available on the Tasmania education department website.

# **Victoria**

# VIC students get full voting rights on school council

Minister for education, James Merlino, has announced students would soon be on every government secondary school council with full voting rights.

Consultation with students, parents, principals, teachers and support staff is about to start to finalise the details of this initiative, ahead of its rollout in 2018.

Students elected to school councils will get training to help build their leadership capacity, so they can become better leaders both at their school and in the broader community. "

This has been an issue that students have repeatedly raised with me in my time as minister, and I am very proud to say we will be taking action," the minister said.

# Victorian China Program Wins Top Education Award

The Victorian Young Leaders to China Program has won the International Education Association of Australia Excellence Award for Best Practice in International Education. The program is the single biggest investment by an Australian state or territory government in a program to send school students overseas.

The Victorian Young Leaders to China Program enables Victorian year nine students from government





and non-government schools to travel to China to complete a sixweek immersion program. About 940 students and 115 teachers from some 70 Victorian schools have taken part in the initiative so far. "It forms an important element of our China Strategy to foster strong partnerships between Victorian and Chinese schools and universities," minister for education James Merlino noted.

# **Western Australia**

# WA students youngest Antarctica adventurers

Six WA primary students are off to Antarctica. The year five Secret Harbour Primary School students will be the youngest children ever to make the trip to Antarctica under the Australian Antarctic Program.

They're going because the name they chose for a new icebreaker ship was selected. No, they didn't suggest a name such as 'Boaty McBoatface' - it seems the children were more sensible about it. The students will share the honour with another team from Hobart who happened to choose the same name. They chose 'Nuyina', which means 'southern lights' in the Tasmanian Aboriginal language, Palawa Kani.

# Sex offending children banned from school

Children charged with sex offences will no longer be allowed to attend West Australian schools if they are deemed a risk to other students.

According to a Perth Now report, education minister Sue Ellery was advised as a result of a March 2017 review that no protocols were in place to manage the risk an alleged perpetrator posed, nor was a notification system to inform a school when the child was

under investigation. This has been remedied: "Immediately police will notify schools when a student is charged and in some cases, depending on their circumstances, if a child is under investigation," Ms Ellery told 6PR radio in Perth.

She says the Department of Education, Corrective Services, Child Protection and police will assess the child's risk to other students and remove the child if necessary – "either temporarily or permanently". She says the child would need to continue their education via distance education or homeschooling, but that offenders often come from homes where adequate supervision is not possible.

However, she has assured concerned parties that "if it is not safe for other children for that child to return to school then the child will not be returning to school."



# Disruptive innovation: education experts call for a revolution

If the media and politicians are to be believed, we are hurtling backwards at a startling pace, and will end at the bottom of the educational dung heap, if we don't immediately "raise standards" and improve our test scores. Is this our future? What would this lowly future mean for our economy? **Commentators bay for** teacher accountability and improvement; they push for crisis talks about the state of education in Australia - "we are slipping; it's disastrous; it requires immediate change," they lament.

They're right of course. Change is required, but according to a host of the world's most celebrated thinkers and innovators in education, when student results in standardised testing slip, the actual crisis is not the sliding PISA ranks; that's just a symptom. The real disaster is the evident disengagement of learners.

As everyone with an opinion scrambles to cure this degenerative condition, some air their opinions on the cause. Everyone has a theory - often informed by their area of expertise and resulting agenda. The Sydney Morning Herald (SMH) published an article on September 28, 2017, titled, 'Australia's 'tolerance of failure' behind declining PISA results, says test co-ordinator.' Yes, it was as bad as it sounds. The Australian education system was blasted by Andreas Schleicher, who is head of the OECD's education directorate. According to SMH, Mr Schleicher attributed our steady decline in all three test areas of maths, reading and science to the country's "tolerance of failure" in schools.

Naturally, the article elicited the usual animated criticism from the general public, replete with slights on teachers' lack of focus

on extending bright students, and on gaps in their LOTE vocabulary - with one member of the public deploring their use of Google to quickly look up a word.

There was an actual high school teacher who responded, and he offered contextualisations for the 'failure'. He said teachers are stymied by political correctness ("prohibited from using words like 'lazy', 'uninterested' or 'antisocial' on school reports"). "Parents need to be told the truth so that they can act accordingly at home," he wrote. Though many would argue name-calling is not a necessary ingredient of constructive feedback, it does speak to the ofttouted dearth of resilience-building constructive feedback blamed for mental health issues in our young

In addition, he says professional development plans are full of adjunct skills, none of which are aimed at improving practice. "We are never, ever, taught how to motivate or inspire," he complained.

He also suggests that if you want to understand why students are not chomping at the bit to proceed in our system, take a look at what they are learning: "The curriculum is 1cm deep but 1m wide. Hence, it is superficial, boring, uninspiring, and contributes to student disengagement. Too many interest groups have had an 'input' into its design".

If he is correct, and teachers are never taught to inspire, and the curriculum is devoid of anything of interest, reported disengagement of Australian students is hardly surprising. So, while teachers drown in the quagmire of frustrations, our politicians often speak in bright orations about creativity.

'Creativity and critical thinking' has become a favourite strap-line for Australian politicians. They say our students need to be creative and be able to think critically; they say our education system needs to foster these attributes, because that is what the future requires. Well-meaning projects



Sir Ken Robinson

are developed and implemented, and funding is rolled out to achieve 21st century learning for a 21st century future economy. Yet, still we slip. Despite "record funding from the Turnbull government", we slide backwards, past the Slovenias of the world, as agitation builds at home. 'What are we doing wrong?', people might wonder behind closed doors.

According to prolific educationalist Sir Ken Robinson, we can't evolve the current system into an adaptation that will survive, let alone thrive. He says that what is required "is not evolution, but a revolution in education". "This has to be transformed into something else". He seems to be suggesting that twiddling knobs and rearranging the deck chairs just will not do. Sir Ken will be in Melbourne next March at the Future Schools Expo, and it's likely many will search amid his words for a key to release the deadlock, which is our current impasse between standardised testing and the world's thirst for 'innovative solutions.

So, what will this 'new world' economy look like, and can our current education system actually prepare them? The educational researchers and innovators I bring before you think not. Futurists and

business leaders have confirmed that they want employees with the capacity for innovation and a knack for divergent thinking. They want them to be able to collaborate in a way that allows employees with complementary skills to devise the solutions that will be required for the 21st century world we have created. They are asking for what one of our home-grown educationalists, Adam Voigt calls "collaborative, creative problem solvers"

Sir Ken also knows a little about creativity...He was knighted for his contribution to creativity and the arts in the UK. He has received accolades, formal academic acknowledgements, and honorary degrees (not to mention over 48 million views of his TED Talk, 'Do schools kill creativity') for his tireless crusade to make education more relevant, interesting and productive for children – and therefore, life more engaging and fulfilling for the adults they will become.

He stands firmly against standardised testing and firmly behind teachers. "There is no system in the world or any school in the country that is better than its teachers. Teachers are the lifeblood of the success of schools," Sir Ken has said.



He also said, "the emphasis on testing comes at the expense of teaching children how to employ their natural creativity and entrepreneurial talents – the precise talents that might insulate them against the unpredictability of the future in all parts of the world".

He says that while politicians emphasise 'standards (and standardisation) in education,' citing 'business interests' as a motivation - actual business people are looking for very different qualities. "They want people who can innovate, who can think differently, who can work in teams, who can collaborate, communicate and are quick to respond to change. Well, you don't get any of those things encouraged or inculcated in a school system that is predicated on testing and standardisation."

So why are the standards slipping? Why did it work before? Sir Ken says it's because the 'carrot' is gone. He says an education used to be a sure pathway to a job: "when we went to school, we were kept there with a story, which was: if you worked hard and did well and got a college degree you

would have a job. Our kids don't believe that—and they're right not to, by the way. You are better having a degree than not, but it's not a guarantee anymore."

Sir Ken also says that the current system was "designed in the image of the universities" and efficiently produces a specific output: the university professor, which he says is "just one form of life" and not for everybody. Of course, not all university graduates go into academia; there are professions, such as teacher, nurse, doctor, lawyer and so on. The general degrees used to be a guarantee of a job in business, publishing, or government, now, with over 35 percent of the population graduating with a bachelor's degree, a master's degree might set you apart.

If students are not drawn to academia, and with university fees on the rise, students might question the point of engaging with the education system at all. This is especially the case for students whose talents and aptitudes are undervalued and side-lined by the system. In any case, as Sir Ken said, "human communities depend upon a

diversity of talent not a singular conception of ability".

Children can do amazing things when motivated by some intrinsic desire, even when the reward is extrinsic. If you tell a child there is chocolate on the top shelf, they will work out a way to get up there, but will they do the same if you say, "just see if you can reach the top shelf"? They might say: "why?". Could the disengagement just mean these 21st century students are asking themselves "why?".

Professor Sugata Mitra is another 'education revolutionary'. He is founder of The School in the Cloud and most well-known for his 'hole in the wall' experiments, and has also presented TED talks viewed by millions. In a past issue of School News, we published an interview with Professor Mitra in which he said, "our education today is mostly about knowing things just in case we ever need that knowledge. It is a 'just in case' education - the kind that needs to reside in our heads because we might be stranded on a deserted island with no technology or internet. That kind of world does not exist anymore. We need to change to a 'just in

time' education, where we have the capability and the means to know when we need to. Knowing in advance would be a luxury not worth having."

For Professor Mitra, filling your head with facts is pointless when you have the internet at your fingertips. His School in the Cloud organisation is responsible for setting up self-organising learning environments (SOLEs) all over the world. Students research and problem solve. They pose, (and then answer), big questions and use 21st century resources (the internet) to educate themselves enough to present the answer to the question. They work in groups, think on their feet, and evaluate sources and solutions. They hypothesise, they problem solve. They are pods of collaborative, student-led learning, and he says the students develop the skills required to operate in a 21st century economy.

Innovation consultant, Charles Leadbeater is another TED veteran and his talk titled, 'Education innovation in the slums' had been viewed 778,022 views at the time of writing.



Charles Leadbeater was financed by Cisco to go looking for radical new forms of education, which he found in the slums of Rio, Brazil and and Kibera in East Africa - where he says some of the world's poorest kids are finding transformative new ways to learn. He says this "informal" and "disruptive" kind of school is what all schools need to become. He delivered a strong message about the relevance of education. He says that while "the trendiest schools in the world" are espousing "a philosophy of learning as productive activity", in the slums, survival depends on the individual's productivity so "learning has to be productive in order for it to make sense". He says in these places the challenge is not so much to get to university but to survive and make a living. Perhaps the lesson to be learnt from these informal schools is that to engage students, there must be a perceivable point to it all.

"Most of our education system is push," he said. "I was literally pushed to school. When you get to school, things are pushed at you: knowledge, exams, systems, timetables." To truly motivate

learners, he says education must "work by pull, not push".
As educators wait for PD that motivates, (or even a revolution), perhaps Sir Ken, Sugata Mitra, and Charles Leadbeater can offer some interim erudition.

While we all acknowledge that our much-maligned education system needs a rethink, we are far from consensus on what form and structure this might take. What to change? What to fix? Sir Ken has a deceptively simple sounding suggestion: "the simple way to solve all these problems is to stop causing them. Don't do that, do something else." After all, as Einstein said, "insanity is doing the same thing over and over again and expecting different results".

So, what is that "something else" that we should do? And who is qualified to decide? Sir Ken says that "education doesn't go on in the committee rooms of our legislative buildings; it happens in classrooms" and "the people who do it are the teachers and students, and if you remove their discretion it stops working – you have to put it back to the people."

By Suzy Barry, Editor



# It's the best of all worlds at Auburn North

**Auburn North Public** School is a multiaward-winning school in Sydney's western suburbs. As one of Australia's most multicultural schools, we have students from more than 55 different countries who speak more than 45 different languages. 97 percent of our students are **EAL/D students. Since** 2004, at least 20 percent of students and their families have been from a refugee background.

Our learning community believes we are multiculturalism at its best and most successful. Our school's theme for the past 17 years has been 'Auburn North is the school that provides 'the best of all worlds' This theme means that our students, our parents, and our staff come to Auburn North from all around the world to learn one of life's most important lessons, which is: regardless of a person's religion, colour, or background, we are all essentially the same.

We believe our school models community cohesion, social harmony and unity. We believe we are the United Nations.

# Stripping away disadvantage

Theoretically, all of our families are socio-economically disadvantaged. However, at Auburn North, we believe we have been successful in wiping away any disadvantage and our refugee families are just like all our other families.

Our ability to strip away this disadvantage and treat all our families the same has been the result of the following eight main factors.

 The development of a strong collective school community efficacy, where we all believe we are capable of achieving our school Vision and Mission and our aspirational



goals and targets.

- The development of a research-based, evaluative thinking culture.
- Our 4Ps: people, policies, programs and practices.
- Strategic utilisation of our human, financial and physical resources.
- Successful engagement of parents.
- 6. The selection of each teacher, ensuring that they are an excellent teacher at the time of selection - or will be within 12 months given the quality of training, mentoring and coaching

they will receive from our 10 outstanding school leaders. The teacher must also be a beautiful person with whom our students will want to spend 1000 hours per year and they must have the attitude and skills to be able to develop trusting, respectful relationships with our parents.

- Our trusting and mutually respectful relationships between all members of our learning community.
- And finally, our values of respect, kindness, fairness, friendship, honesty and responsibility, which underpin everything we do

and say.

From research, it seems to the Auburn North staff that a high percentage of Australian and overseas schools with refugee students:

- allocate a disproportionate amount of their resources to ensuring refugee students are safe and happy, while placing insufficient emphasis on facilitating their academic achievements;
- see barriers to engaging the parents of refugee students in their children's education and in the operation of the school; and
- function under a version of what one writer calls a 'deficit hypothesis', which assumes that refugee parents lack the skills to promote success in their children.

Research clearly demonstrates that the three factors that have the greatest impact on student outcomes are the:

- 1. Family
- 2. Individual teachers
- 3. School leadership



Mark Harris, principal, Auburn North Primary School



# **Evidence-based practice**

Our school is research-based, data-informed, and action-planned. We have used world-wide research to develop what we believe to be the 'best of all worlds' in terms of programs to maximise the impact of family, individual teachers, and the school's leadership on student outcomes.

Three recent examples in terms of the school's leadership and individual teacher's impact on student outcomes are:

- All members of our distributed leadership team have completed a seven-month leadership development program, including coaching and mentoring courses. Skills and knowledge gained are applied to their supervisory role, which involves two hours per week mentoring each teacher they supervise. Strategies used include developing lessons collaboratively, teamteaching, and the filming of lessons for review and feedback.
- The development of the award-winning Auburn North instructional model (IM). This model is based on Professor John Hattie's research that identified the teaching practices that have the greatest effect on student learning. Our model incorporates aspirational mindsets, teaching clarity, feedback, and classroom cohesion.
- The implementation of our video lesson study program: teams of teachers observe, review and give feedback on videos of each other's lessons. They exchange

feedback and collaboratively develop future lessons.

# Parent engagement

Research shows that increased parent engagement increases student academic, social and emotional outcomes. It also shows that schools with high levels of parent engagement are often high performing schools. Therefore, parent engagement is a priority at Auburn North.

We draw on our parents' commitment to developing the knowledge and skills that will enable them to support their children's learning. We also draw on the value our parents place on education and their inherent respect for teachers to help our students love school, love learning, and become successful learners.

In a typical day at Auburn North, you will see hundreds of parents attending assemblies and participating in a range of programs.

Our school culture and an integrated set of initiatives have dismantled any 'theoretical' or perceived barriers that may have existed to engaging our parents

- especially our refugee parents
- in their children's education and in the operation of our school. We have empowered our parents to be significant contributors to their children's education and to the success of our school.

Our 'schools as community centres' program or, Harmony House as we call it, is a home-away-from-home for many of our refugee parents. We utilise the skills of our four community language teachers and interpreters to ensure all our parents become vital, knowledgeable and skilful members of our learning community.



At Harmony House, we offer programs in education, health and well-being, culture and recreation. Programs include a number of weekly small group classes in English, as well as maths, technology, parenting, health, yoga and cooking classes. There are also information sessions and workshops about their children's education system and the ways in which they can support their children with their learning.

In response to requests from our refugee parents, our school leaders and teachers have coordinated a broad range of other programs for parents. These have included hands-on literacy and numeracy workshops, where they learned how their children are being taught in class. Through these sessions, teachers supported them to develop the knowledge and skills to assist their children at home.

At Auburn North, we continue to utilise our parents, our teachers, and our leaders to help our students develop excellent emotional and social skills. We impart excellent 'basic skills' and exemplary '21st century skills' to

ensure they are healthy and happy students, who are successful now, and for the rest of their lives.

Our students usually achieve excellent NAPLAN results. In 2017, our year three and year five students outperformed students in similar Australian schools in 11 from 12 literacy and numeracy areas. For the past three years our students' growth from year three to year five and from year five to year seven has remained in the top 10 percent of all NSW schools.

Students from kindergarten to year six have also develop authentic 21st century skills in areas such as real-life problem solving, communication, collaboration and critical thinking. They have developed these skills simply by learning and playing with children from all around the world.

We never become complacent at Auburn North. Our school motto is 'forward' and we are always searching for better ways of doing things, so that all members of our school learning community (students, parents, staff) continue to connect, succeed and thrive.



# Has "weak parenting" created a teenaged monster?

Psychologist, Dr Michael Carr-Gregg, has been working with adolescents for three decades and he reports a proliferation of teenaged boys presenting with aggressive, contemptuous and entitled demeanours. It was this trend that compelled Dr Carr-Gregg to write Prince Boofhead Syndrome with coauthor, researcher and writer, Elly Robinson.

It seems that an epidemic of "weak parenting" has created a monster. The monster's name? Prince Boofhead Syndrome (PBHS), and it is probably affecting teenage boys in your school. The clinical examples in the book ranged from disturbing to chilling, such as the mother trembling in the face of raw aggression when she informs her son he won't be handed yet another latest model iPhone after losing his second one in a month.

While the name might lend itself to some tongue in cheek comments, the situation is no laughing matter, and Dr Carr-Gregg lays the blame squarely at the feet of parents.

Along with co-author Elly Robinson, Dr Carr-Gregg has indicated that the 'child-centred parenting movement' has gone too far, disrupting necessary patterns of authority and boundary maintenance in the home.

Dr Carr-Gregg told ABC reporters in an August 2017 interview that parents reap what they sow. He says that if from an early age, parents don't ask children to do anything around the house, allow them to speak disrespectfully, they are actually encouraging this contemptuous attitude towards the adults in the child's life.

The PBHS 'sufferer' will also display misogynistic tendencies, according to Carr-Gregg, with mums copping the worst of it. He said, "many of us in psychology believe the same-sex parent is the





Authors, Elly Robinson and Dr Michael Carr-Gregg

most important. So, for boys, their template on how to be a man, how to relate to women is learnt through watching the father."

"While boys are not as verbal or vitriolic as their sisters, they are physically stronger and can be terrifying in their anger, especially when it is directed towards their mothers, as it so often is," Mr Carr-Gregg and Ms Robinson wrote in their book, *Prince Boofhead Syndrome*.

He says that if the father perpetrates these behaviours (that

is aggression and/or contempt towards women), contempt for female family members will be mirrored in the son. Absent fathers leave a gap in male modelling, and when contact is limited, they can be reluctant to enforce boundaries - opting instead for what Carr-Gregg calls 'the popularity contest' that often ensues between separated parents, "leaving the child with no moral compass". This is not to say that only single parent families are creating PBHs by any means - but the book quotes research arguing that the

absence of *any* male role model is problematic.

The book urges parents to enforce boundaries, limit screen time so as to maximise mental and physical health, and to protect vital sleep time. It says fathers must engage in any way they can, and that boys must be taught to contribute energy to the household and speak respectfully. There's a special mention for the benefit of 'delayed gratification'. Teachers will be painfully familiar with the challenge of managing students who have never had to wait for more than a few minutes without playing Where's my Water on the iPad.

Parents have their role in managing Prince Boofhead, yet, for 30 hours per week, he is at school. What do schools need to know about dealing with these princes of darkness? School News caught up with Dr Michael Carr-Gregg for advice and a suggested blueprint for referral and notification if teachers see the signs of this very modern condition.

Suzy Barry: Is this just a disease of 'affluenza' or are there cases of PBH in all socio-economic situations?

Dr Michael Carr-Gregg: While there is a predominance of the PBH syndrome in the upper and middle classes, I have heard many cases of the lazy, entitled, disrespectful boy amongst the battlers. It is largely a product of poor parenting and the Toorak and Vaucluse set do not hold a monopoly on that.

# SB: In your experience/view, do the issues differ between a single sex school environment and co-ed? Does single sex schooling compound it?

MCG: No, I think the peer group can compound and reinforce it. In adolescence, the desire to be with one's age mates is a major driving force. The peer influence is very strong and if a young man sees his mate being allowed by his parents to treat them like a psychological doormat, then that can cause contagion - especially if the parent doesn't call the behaviour when it first occurs.

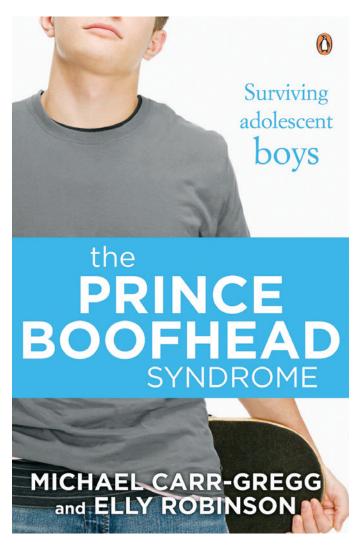
# SB: How can teachers support parents to work collaboratively to treat PBHS?

MCG: Teachers are often the goto person for many exasperated parents. Providing them with good fact sheets, literature and reinforcing the message that parenting is not an exercise in martyrdom; all parents have a right to a quality of life; there is no shame in seeking professional guidance, and above all having a developmental perspective.

# SB: Any advice for teachers who need to break it to parents that their son has a problem?

MCG: Teachers need to avoid sugar-coating the issue. If a student is behaving in an unacceptable manner, then it has to be named. No parent will thank you for hiding the facts.

SB: Do they act out at school as well, or is it just the parents who suffer the brunt of the anger and disrespect?



MCG: Many will be quite delightful at school and reserve their aggression, frustration and anger for home. The disrespectful attitudes that PBH engages are generally not tolerated at school. If they are, the school needs to look at its respectful relationships policy.

SB: Have I correctly perceived that women are more targeted for the abuse of the PBH? You mention mothers - is it just because they are statistically home more or is it a misogynistic condition?

MCG: Both factors are important, often the misogynistic attitudes are inherited from the males, but it upsets me to think of the number of mothers who have told me that they feel frightened and intimidated in their own home. I also think this does not bode well for future relationships with members of the opposite sex or their own fathering trajectory.

## SB: Do female teachers cop more from the PBH than male teachers?

MCG: It depends on the school; good school environments are ones in which female teachers feel safe to teach. If that is not the case, the school has a potential legal problem.

# SB: How can schools nip the trajectory in the bud at an early age – say age 11 when high school starts?

MCG: The main role is the parent one, so parent education is crucial in the form of parent nights, fact sheets and resources like schooltv. me, which give parents skills, knowledge and strategies for intelligent authoritative parenting.

SB: What is the role of the guidance counsellor in this? Is it sufficient to process at school? What factors indicate that the student should be referred to a clinical psychologist?

MCG: The counsellor needs to assess and refer. Firstly, any referral should be made to a child and adolescent psychologist, as they specialise in young people. As long as they are members of the Australian Psychological Society, they will be properly trained and qualified to help.

Second, the factors to look for are withdrawal from friends, poor sleep, change in appetite, decline in academic performance, feeling miserable most of the day most of the time, irritability and absence of hope.

# SB: Do you have any anecdotal experience about the reaction of parents when schools raise concerns about a student?

MCG: Many initially get defensive, but with time come to a realisation that the school is just trying to help.

# SB: The book outlines the type of parenting that contributes to PBHS - is there a style of education that contributes as

MCG: I think an education system that focuses solely on the ATAR and ignores social and emotional competencies, especially respectful relationships, contributes. I also believe that the lack of resilience we are seeing in young people can be fostered by schools providing too much support, not allowing boys to experience adversity.

# SB: What else should school staff know about dealing with this phenomenon?

MCG: That it appears to be on the rise and that they need to invest in parent education, particularly around transition. Trying to fix the problem in year 10 when the psychological horse has bolted is often very hard. ■

By Suzy Barry, Editor

# Parents' report card: how do schools measure up?

The Australian Scholarships Group (ASG) supports more than 90,000 families across Australian and New Zealand. Families use the financial service to prepare for and meet the needs of education in all sectors of education – across public, independent and systemic.

ASG has partnered with Monash University to research parental perceptions about education in Australia. The research was undertaken by Associate Professor Sivanes Phillipson and Associate Professor Shane N. Phillipson at the Faculty of Education at Monash University.

School News caught up with ASG CEO, John Velegrinis to hear more about what parents want. "From our perspective, part of the reason for the report is about giving parents a voice, because they're not getting enough airplay."

So, what did parents raise? Parents want teachers to do more when it comes to teaching their child about social and life skills inside the classroom. "Historically, social and life skills are taught within the home and the development of skills and knowledge needed for a successful career have been taught in school. However, perceptions about what equals academic success is changing and so, for today's parents social and life skills are becoming an increasingly important element in education," said Mr Velegrinis.

He says parents' expectations range from "reasonably basic life skills like cooking, financial literacy, to areas where more emphasis is apparent; social and emotional learning skills.

This includes dealing with stress. He said, "parents are recognising that social structures are changing, and irrespective of how well parents might be doing at home, the social setting at school is quite different. They're acknowledging that they can't possibly prepare their kids for everything they're going to face in the classroom".

"I don't feel that they are abrogating



John Velegrinis with Lauren Reynoldson-Ross (far left) and Meth Prathapasinghe (far right), who were the only Australians selected to attend International Space Camp. Jacob Windle (2nd from left) chose to attend Space Camp as his ASG NeiTA prize.

their responsibility; they're not asking teachers to do their job for them. They're saying, 'we'd like the learning at school to be an extension and support for what we are providing at home," he remarked.

# **Public vs private**

The report read: "Interestingly, just 67 percent of public school parents believe today's current curriculum is better than when they were at school, compared to 81 per cent of private school parents. According to the survey, 14 percent

more private school parents than public school parents believe their children are receiving a better education than they received a generation earlier."

That's a significant difference between the satisfaction levels of public school parents and private school parents, but is it an accurate representation of the quality of education between the sectors?

"Clearly this is their perception, and not necessarily a matter of fact. What it's telling us is there is a widespread belief that, on balance, the government school system is not performing as well as the private school system," Mr Velegrinis said.

He says ASG sees examples where government schools perform as well, if not better than, private schools, yet, he is not surprised by the findings: "The reality is we've drifted to a 65/35 split. We have 65 percent of our children in government schools and 35 percent in systemic and private. What that's telling us is that parents are consciously making choices based on those beliefs."

He noted that in New Zealand public schools have 87 percent of the school enrolments; Australia's picture is quite different.

So, how has this perception proliferated? People talk, and when clear, concise and open communication is lacking between home and school, assumptions are made and opinions exchanged – possibly in the absence of facts.

Mr Velegrinis says disparate parental viewpoints also arise from different lived experiences within each sector, as well as divergent priorities.



Take homework for example. The Parents' Report Card indicated some strongly held views about homework, however, they were diametrically opposed. One view was that too much was sent home, while others complained there wasn't enough.

"Unambiguously, ethnicity plays a part," he acknowledged, "Indian and other Asian parents have a different attitude towards scholastic achievement, and how it might be attained." He says parents who share this cultural viewpoint value maximum effort and input: "Some parents have the belief of 'work them as hard as you can,' and the result will be better."

And from the 'too much homework' camp? Mr Velegrinis says the overriding desire from parents was to understand the purpose of the

assignments: "They had no idea what the homework being sent home was trying to achieve. If they had an understanding of what the teacher was trying to achieve they would be a whole lot more supportive, and certainly more comfortable with it."

"I think it's symptomatic of a communication issue, parents are just uncertain, they're not necessarily against it, they're not necessarily for it, they just want to understand."

What do they think of NAPLAN? "They absolutely understand NAPLAN, because most things in life come down to a numeric hurdle, and the school system has always been based on things like that," Mr Velegrinis advised.

"The concern they have is that there is an overemphasis on NAPLAN, when it is only one form of assessment." "They're starting to see things more holistically, and thinking 'there's more to life than just NAPLAN! NAPLAN is great in so far as it is a limited sense of what a curriculum based outcome could look like, but it doesn't guarantee that we are going to get the best quality young adults out of the system." The upshot of the report is this: parents want to work more closely with their schools and teachers. "What parents are really espousing is that they see the partnership between parents and school as absolutely essential to achieving the best results."

"They want the partnership to be the best it can be - and I'm sure some school communities do an exemplary job, but these results show that the optimum situation is not universal," Mr Velegrinis noted. "Fundamentally, I think the teachers are in the same boat. For the most part, teachers love to have engagement with parents, because the job is made easier where there is a continuum of the learning between home and school - instead of a certain view on one side, and a disparate view on the other side."

"Quite often in the education debate, we hear from policy makers and/or educators, but that's only two legs of the stool, so we've had a rickety stool. Now we've got the third leg with the parents and children involved in the conversation, and that will absolutely get a better outcome because we've got the right voices being heard and all the right issues being put on the table."

By Suzy Barry, Editor

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# Education events around Australia in 2018

# ICDEVL 2018 - 20th **International Conference on Distance Education and Virtual** Learning



1- 2 February 2018



Hotel Grand Chancellor Melbourne

The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of distance education and virtual learning.

www.waset.org

# **National FutureSchools Expo** and Conferences



20- 22 March 2018



# Melhourne Convention and **Exhibition Centre**

The National FutureSchools Expo is Australia's largest education showcase, bringing together 80+ suppliers over two days. The event will feature world-class speakers such as Sir Ken Robinson, and five conferences have been designed to cater for senior leadership working in different roles within K-12 education.

www.futureschools.com.au

# **Beyond the Digital Revolution** in ELT: NEAS 2018



9 - 11 May 2018



NEAS is excited to present the theme for the NEAS 2018 Management Conference - Beyond the Digital Revolution in English Language Teaching. NEAS would like to hear from students, teachers and professional staff about their experiences inside and outside the classroom with technology.

www.ieaa.org.au

# 2018 ASEPA National **Conference**



16 - 18 May 2018



Stamford Grand hotel, Glenelg, SA

Exploring their theme, 'Turning Tides. Inspiring Minds': The South Australian Special Education Principals' and Leaders' Association offers the opportunity to learn, improve and lead outstanding practice within the field of education for students with disability.

www.asepaconference.com.au

### **Positive Schools 2018**

Q WA

Queensland 17 - 18 May 2018 24 - 25 May 2018 31 May - 1 June 2018

Ō Victoria Ō NSW

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For two days, more than 30 leading experts from around the world will challenge us and inspire us to create exceptional education in exceptional schools. Education that supports equity and diversity - with real advice on how teachers and school leaders can support self-determination and wellbeing in every young person.

www.positiveschools.com.au

# **EduTech International Congress & Expo**



7- 8 June 2018

International Convention Centre,

EduTECH is an annual event where the entire education and training sector gather together to learn, debate, exchange ideas and be inspired by the very latest in education thought leadership. It's the only event in the country that brings together schools, tertiary education, VET and workplace learning

www.edutech.net.au

### **QLD Schools VET Conference**

III 10 August 2018



Hilton Brisbane

The Conference will bring together both leading experts and industry bodies to educate, empower and inspire VET practitioners from QLD schools. Streams cater to RTO managers, vet teachers, principals and deputy principals. (Preapproved 25 Right Way Professional Development Points.)

www.velgtraining.com

### **The National Education Summit**



31 August - 1 September 2018



Melbourne Convention and **Exhibition Centre** 

The National Education Summit is a meeting of educational minds. The summit draws principals, school leaders, business managers and educators from K-12 to share ideas, problem solve and learn.

www.nationaleducationsummit.com.au

# **The Education Show**



31 August - 1 September 2018



Melbourne Convention and **Exhibition Centre** 

Part of The National Education Summit, The Education Show includes 100+ exhibitors showcasing school resources, products, services and technology for classrooms, schools and careers.

www.theeducationshow.com.au

# **Australian Council for Computers in Education (ACCE) Conference**



2 - 8 October 2018

Royal Randwick Racecourse, Sydney

The theme is ImpaCT, and presenters will demonstrate how we can ensure maximum effect on student learning using the technologies we employ. The conference will also undertake a 'health check' on the rollout of technology curriculum and ensuring the many resources produced to support this can be shared.

www.acce2018.com.au

# **Australian International Education Conference (AIEC)**



9 - 12 October 2018



The theme of AIEC 2018 will be 'Empowering a new generation' and will feature a host of sessions, workshops, roundtables, an exhibition and social events attracting worldleading experts and representatives from all education sectors as well as government, NGOs and private providers. The call for proposals will open in January 2018, and registrations open in June 2018.

www.ieaa.org.au

# ICME 2018: 20th International **Conference on Mathematical Education**



3 - 4 December 2018



Sydney, NSW

The conference aims to bring together leading academic scientists, researchers and research scholars to exchange and share their experiences and research results on all aspects of mathematical education.

www.waset.org/conference/2018/12/sydney/ **ICME** 

# **Transnational Curriculum Inquiry: Challenges and Opportunities in a Changing** World

10-12 December 2018

The University of Melbourne, Victoria, Australia

The conference, under the auspices of the International Association for the Advancement of Curriculum Studies (IAACS), will be co-hosted with the Australian Curriculum Studies Association (ACSA) and the Australian Association for Research in Education (AARE). The conference will have an explicitly international orientation, with a view to furthering the project of transnational curriculum inquiry, albeit drawing on what are often distinctively national perspectives, and working within and across them.

www.iaacs2018.info

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# The high-tech language of emotion

Just 20 years ago, sharing pictures meant ordering double prints from a roll of film - a laughably antiquated notion for your average digital native. But the way images are now exchanged instantly and effortlessly online has led to a huge shift in how we communicate, and it's a change that's left children from disadvantaged backgrounds particularly vulnerable.

According to Professor Kathy Mills from Australian Catholic University's (ACU) Learning Sciences Institute Australia (LSIA), these kids need critical literacy skills to help them express their emotions through digital modes and media in order to thrive. Enter the SELFIE Research Project.

Professor Mills' Strengthening
Effective Language of Feelings
In Education (SELFIE) Research
Project gives primary school
students from low socio-economic
backgrounds the opportunity to
learn how to express their emotions
through digital technology. Working
closely with teachers, principals,
and the not-for-profit media
company Big Picture Industries,
young project participants are
being taught how to professionally
produce their own digital images,
as well as posters, animations and
films.

"In this day and age, it's really important for children to be able to communicate in the online world, where emotional expression is not about writing with a pen and paper," Professor Mills said.

While it's easy to assume these kids are just playing around taking selfies during class, the project runs much deeper. Professor Mills' aim is to improve long-term academic and social outcomes for these children because often they encounter more threats to their emotional wellbeing.

"The research shows that middleclass children have a much higher linguistic vocabulary," she said. "It's



Image courtesy Big Picture Industries Inc.

the kids from low socio-economic and socially disadvantaged backgrounds that actually need a broadened repertoire of vocabulary to discuss their emotions."

While the kids have fun taking part in SELFIE Research Project activities and relish the chance to work with experts and use professional equipment, Professor Mills and her team ensure everything they do is purposeful and connected to the students' regular school work.

"What we're teaching them to do with digital imagery, animations, and activities on the iPads relates back to what their teachers are working on with their writing," she said. "It all links to their curriculum. Using different modes and media, it's about these children learning to show their emotions in new ways."

Primary school is tough for any child, not to mention their parents

and teachers, but Professor Mills and her team are seeing big results from the project.

"We know with NAPLAN that kids have to be able to write well. This means creating characters that show emotions," she said. "So, instead of the children just writing 'The boy was sad,' we're teaching them to show how the character was sad. They've learnt to write things like he turned away, he slumped forward, or tears began to well up and trickle down his cheeks. We also work a lot on body language and facial expressions in their descriptions and visual work, teaching them how to actually show rather than just tell how a character feels."

Teachers working with Professor Mills have noticed the project making an impact. "They've told me their students' vocabulary has really improved and they don't have to do as much of the heavy lifting," she said.

Professor Mills said these children are living in a very different world to the one many of us grew up in. "If you ask the kids in this age group what they want to be, many of them will say something like 'I want to be a YouTuber'".

And while they may not be old enough for social media profiles, sharing images among their friendship networks, often through iPads, has already begun.

"In today's society, kids are bombarded with more images than ever before, so they really need those critical literacy skills to be able to discern what's useful and what's appropriate," she said.

By Australian Catholic University





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# What PD do teachers need? Let's ask them.



This year marks the end of new enrolments into the one-year teaching diploma. 'Teacher quality' has become such a focus in recent years, that the course required to turn a specialised degree into a teaching qualification has now doubled in length. Will bigger equal better?

Well that remains to be seen, but as long as there is a hefty practical component, and most importantly, adequate mentorship and support, they will probably enjoy their first years of teaching a whole lot more than they might have.

Will it raise the NAPLAN scores? Not on its own, no - but you know that as well as John Hattie, Adam Voigt, and a host of other commentators, who have all spent time teaching real students in real classrooms. It's not solely up to teachers to improve outcomes; yet, research shows that high quality professional development does enhance outcomes, and build confidence in teachers. As calls for reduced teaching hours continue to go unanswered, teachers have the pleasure of finding time to incorporate professional development into their busy schedules. Lucky teachers love

learning, because there are so many ways to tick off those PD hours and upskill in something that interests you, or address an area of practice you find a challenge.

Professional development (PD) can take many forms; registered teachers can upskill in specialisations like autism pedagogy, or special education. Training is available in technological literacy, cyber safety, student wellbeing and the 21st century classroom. For knowledge-seeking teachers, every angle, subject area, and mode of study is available. Universities and registered training organisations generate courses and programs that bend the parameters of traditional teaching practice and cover topics such as innovations in pedagogy, program design and education research.

There is growing interest in the quality of PD, with researchers and educators interested in the delivery, form and structure, and the pedagogical approach of teaching the teacher. In a 2015 article titled, 'Extending experiential learning in teacher professional development', published in journal Teaching and Teacher Education, Girvan et al. pose an extension to that which we already know:

teachers constantly self-improve, self-analyse and learn through experience.

Drawing on the experiences of secondary teachers negotiating a recent curriculum overhaul in Ireland, the authors proposed that, when new and different requirements are introduced into teacher practice, teachers should undergo 'experiential learning', by way of on-the-job training and expert feedback. Early career teachers face the same task, which is 'to learn new things, quickly.' The article suggests such PD activities would suit both situations and offer much-needed support to teachers tasked with fielding the constant externally mandated 'updates' to requirements and 'overhauls' to their practices.

A paper titled 'Supporting Teachers, Supporting Children' was released in March this year to report on research undertaken by the Centre for Community Child Health on behalf of the NSW Education Standards Authority (NESA). The report found that "across all topics about which respondents were questioned, interest in professional development was consistently high". The research also looked at what teachers were asking for. The report said, "three professional

development topic areas emerged most strongly from asking both primary school and early childhood teachers about their interest in professional development. They were additional learning or support needs in relation to behavioural or social-emotional difficulties; learning, language or cognitive impairment, and problems in the home environment."

These three areas where teachers want PD might indicate that teachers feel required to act as 'specialists' without the specialist training. While the pressure on teachers shows no sign of abating, a focus on researching the nature and scope of PD opportunities (by actually talking to the teachers) will be welcomed by many. So too will teachers welcome an emphasis on specialist training for the management of issues that are often a result of the social issues of our times.

Teachers may also appreciate the calls for mentorship for educators charged with adopting new approaches and strategies every time a panel of 'experts' has a new plan to save our OECD slipping skins.

By Suzy Barry, Editor

# **Great leaders understand the law**



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# Hang in there and reap the results of your new approach!

This issue, Adam
Voigt encourages
us to persevere with
new approaches to
behaviour management.
After all, we chose
them carefully, based
on evidence and
research. When you
'try' something new,
he says, don't give
up the moment it
becomes difficult, real
change takes time and
perseverance.

New things can be a bit scary. As a pertinent example, we recently replaced the dishwasher in our home. It's been months now and I still haven't turned it on. I can stack it, empty it, but its new and unfamiliar buttons confront me - and convince me I'm about to make a mistake. I pine for the old dishwasher that had one dial. Sure, it didn't actually clean the dishes anymore...but at least I understood it. I know that right now many of you (just like my wife) are smacking your foreheads in disbelief at my antiquated and unproductive approach.

But this is just how it is with teacher practice. For decades, we've given punitive and outdated practices a consistent, clear run, despite mounting evidence that it just isn't working. We might 'try' something new, but the moment it becomes difficult we're tempted to assume the default 'adversarial position' (the usual teacher role), and previous patterns of negative student behaviour are now likely reinforced.

It's time we backed ourselves a little more. It's time we understood the way that behaviours change – gradually and individually. It's time we acknowledged our own intellect and creativity, and the knowledge of our students. It's time to make a smart change and stick to it – even with our most difficult students.

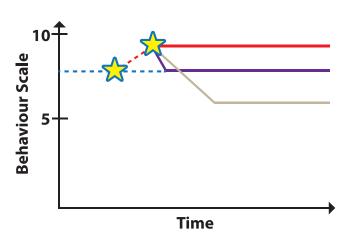


Figure 1. Behaviour tracker chart Image: Real Schools

# THE CHEAT SHEET

Don't have time to soak in the whole article today?

### Here's the big points...

- 1. Stick with good practice until it works
- 2. We've run with punitive measures for a long time
- 3. It's going to get worse before it gets better
- 4. Don't give up before things improve
- 5. You're already good at creative interventions

### You can be forgiven

The reason we sometimes struggle to sustain changes in our practice is that it often triggers a spike in the undesirable behaviour. Consider the graph above for a moment.

Imagine one of your most challenging students is tracking along the blue dotted line at around 8 out of 10 management difficulty. At the first star, exasperated, you try something different - something you thought deeply about, perhaps shared with a colleague and came to a conclusion that it was solid practice. The high likelihood is that the student will resist this change, (for instance, ignoring, calling out - you know what's coming!) and you'll see an increase in problem behaviour, with the student travelling the red dotted line.

At the second star, we make a fundamental decision. You will be tempted to scream, "I tried that and it didn't work!". If you give up at this point, and revert to default measures, then only two things can happen. If you are fortunate, the student will quickly travel the purple line and re-establish their desired classroom norm. If you're not so lucky, you just established a brand-new norm – the red line.

Ouch.

# **Adam Voigt**

Founder and director of Real Schools



That's a lot of pain and effort for a negative result.

However, if you persist with your well-considered approach that matches your personal and school values, then the rewards will come.

Over time the target behaviour diminishes (follow the green line), crosses the point of the old norm and plateaus as a new, improved norm. You'll notice that the new horizontal version of the green line is not a miracle.

There are still behaviours to address, but you can now apply this successful method to old and emerging target behaviours for sustained improvement and relief.

You're already good at this. Teachers are remarkable at creative intervention design – we just need to be strong and forthright enough to see the application of that design through.

This isn't just about your students, but about you. Focus in this area will increase your effectiveness and decrease your stress.

As a particular cosmetic company would tell you ... it's because you're worth it.

What's your default position when things go wrong? ■

Adam Voigt is the Founder and Director of Real Schools. Built upon years of experience as a successful Principal, Real Schools helps schools to build and sustain strong, relational school cultures. A speaker of local and international renown, Adam has delivered a TED Talk and is the schools/education expert for *The Project*.

## **AITSL STANDARDS FOR PRINCIPALS...**

and you addressed them by reading

The Big One – 4.3 Manage challenging behaviour. But also ...

1.5 Differentiate teaching to meet the specific learning needs of students across the full range of abilities

- 3.3 Use teaching strategie
- 3.5 Use effective classroom communication
- 71 Meet professional ethics and responsibilities

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# Art as a conduit for deep, integrated learning

Alieta Belle Art Teacher



I teach visual arts, media arts, and cultural studies at the River School, an independent Queensland school, educating students from early childhood to year six.

Our school has its own open-air art shed and all students enjoy a 1-1.5-hr art lesson per week with a dedicated arts and cultural studies teacher; that's me. I'm here because, at the River School, the arts are highly valued and are integrated into other subject areas across the school to enhance learning. This is achieved through cross-curricular collaboration.

Art is not just a specialist area of study at the River School; it's a context through which other learning outcomes can be realised, and core skills such as critical thinking and problem solving are developed.

Each term, I consult with class teachers to familiarise myself with their unit focus for the term, so I can plan art lessons that not only exercise the students' artistic expression and teach new visual arts skills, but also enhance the synthesis and integration of class learning, using a different pedagogical approach.

Harnessing the potential of art in this way results in richer and more meaningful learning experiences for students. In their art classes, students are able to engage with new ideas and concepts in diverse ways, using hands-on artistic processes and materials to integrate and extend their learning.

For example, to support the historical focus of the prep to year two multi-age class this term, we explored colonial arts and crafts; that is handicrafts that would have been a necessity for early settlers. Once students were taught the basic stitches, they became self-directed and began to innovate; making everything from bags to dog blankets - with some students extending their learning during lunchtimes and making their own shirts! This young





cohort was excited and engaged by this hands-on craft. They used embroidery hoops, recycled wool blankets and learnt how to ecodye the material, using the natural colours from native eucalypts.



Our year five students began a focussed study on the life cycle, habitat, and ecological situation of whales. The class decided they wanted to make a whale calf to scale, so, in art, we did just that! Why not? This ambitious art



idea, generated by the students, became a community-building exercise, calling on the skills of talented parents and staff within our school community to support our students' vision. Our young

artists learnt completely new skills during the building phase of this sculpture, and their expert knowledge about the humpback whale is now deeply embedded.

After being showcased to wider audiences at public events, 'Alberto' the whale now inhabits a special platform on top of our school rainwater tank; a permanent installation to remind students and visitors about the need for custodianship of the earth. It's also an everyday reminder to our students that art is a powerful means of communication and inspiration.

Students from year two to six participate in the media arts curriculum through engagement with stop motion animation projects. Students love to work with this technology and model their representations of the world using plasticine.

Students work with the theme they have studied in class, and use the technology to creatively communicate a concept or viewpoint, or to tell a story. This process fuses hands-on learning with technology and can be a powerful way to complete a unit of work and show student understanding.

Currently, students in year three are making an animation about 'nomads of the world' and the year two students are making an animation featuring 'inventions of the world.' Other past examples include animation projects retelling the story of the Lorax, showing how humans have migrated across the world, and sharing facts about endangered animals.

Our 'piccabeen fibre art project' integrated biological science with art. Classes across the school harvested and soaked the native fibre in the 'outdoor classroom' of our rainforest creek. They sat together to sculpt the fibre into boats, then tested their craft on the water! Our year five students ran workshops for their same-aged peers at the 2017 Sunshine Coast Kids in Action Conference, using this material. They used the arts as







the communication tool, to engage students with environmental learning about our local ecosystems.

My quest is to draw out the innate creativity of my students. I take the view that all students are innately creative; all of them. As a teacher, I create the 'space' for my students to experiment with materials and engage with a range of quality activities that allow for self-expression and innovation. I love observing the transformative power of art in action. Observing these 'magic moments' during the artistic process, is what inspires me in my role as teacher.

It is important as a teacher of art, to be responsive to any artistic ideas (which may seem like tangents) that flow from a child's engagement in the initial art activity. I see this regularly in art class; the students use art to make sense of their world and express their ideas. When students feel supported to explore their artistic ideas, they extend the activity and

create work that is astoundingly better than the original idea initiated!

It is not the teacher-taught technique that creates great art. Instead, it is offering students the opportunity to engage with quality art experiences that inspire and ignite their creative response. If a teacher sets the parameters too narrowly, art-making and the joy and discovery will be inhibited.

For a long time, art has been undervalued, and often reduced to prescriptive aspects of fine arts, such as 'learning to draw realistically' or learning the principles of texture. This places far too much emphasis on the product – not on the artistic process of engaging in creative expression.

The sensory experiences offered through art practice are important for primary school children.

Offering students an opportunity to work with their hands and cater to this developmental need is critical. Often times, learning in classrooms can become 'too head

focused, and fails to engage the body, emotions, and creative spirit of our students.

Embedded in the experience of a quality art process, is the opportunity for students to problem solve, think critically, follow ideas, and innovate. Art is a powerful medium of expression, discovery and a way to experience connection (with self, others, materials and big ideas).

These are essential skills that our students need for the future and can be facilitated by ensuring quality arts education happens in your school.

Arts teacher Alieta Belle has a Bachelor of Visual Arts, majoring in sculpture, performance and installation. She also holds a Grad Dip Teaching. In 2016, ACARA collected work samples from her year two media arts unit to use on the national ACARA website as a guide for best practice.

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# Remote Aboriginal school takes out science award with bush medicine

**CAPS** Coolgardie is an independent school with 110 students enrolled (85 percent Indigenous). Principal, Mr Kurtis Leslie, told School **News that the school** was started in 1981 by a group of Christian **Aboriginal parents who** wanted a high school where their kids would be encouraged to go to university. The vision was to create pathways so students could pursue careers and go back to their communities to make a difference to their people.

The school began as a boarding school, and now enrols both day students and boarders, and has expanded to include primary years. Mr Leslie says the K-12 school has boarders coming from communities in the Northern Territory and the Kimberleys, and local students from Kalgoorlie, Coolgardie and surrounds.

The parents involved raised money to purchase a building, they had to buy their own bus, and the first teachers didn't know if they would be paid or not but they came because they believed in the school."

Christianity is at the core of the school's foundation, and this group



Students winners in Perth

of Aboriginal Christian parents decided that "the Lord could do more" for their children. Well, these parents decided to do more for their children as well. "They didn't have high school education, only reading and writing, but they came with a real desire to create something. It was a huge achievement," Mr Leslie said.

The parents had to raise the establishment funds; manage negotiations with the education department about their program; and liaise with local council for permits to purchase the buildings, before opening the doors as a registered school.

The school has been producing graduates set for success ever since. The school values innovation and student engagement and has programs in everything from coding and robotics, to sports courses and specialised arts program.

The school is now preparing for their recycled fashion extravaganza - all the clothing modelled by the students will be produced using recycled materials and designed and made by students.

"We also run our life skills curriculum program, Amazing Shake. Kids get used to being interviewed by professional people they don't know, such as board members." The program offers students valuable training in professional communication and confidence.

With so much going on, it's a wonder they have time to pursue an innovative science curriculum, but Mr Leslie says that since Mr Allan Alipio joined the school, science curriculum at CAPS Coolgardie has exploded into a project based learning bonanza that has students coming back to school again and again to participate.



Constructing a bioreactor that can process organic kitchen waste into fertilisers



Testing the quality of the biodiesel

"I've always loved science," Mr Alipio admitted, but the understatement of his galvanizing influence is obvious, when you consider their STEM success. Mr Leslie said, "we've always focussed on literacy, numeracy and science as really important subjects, but Allan made it exciting and offered the kids all these opportunities. We wouldn't have had the success we've had without him - once he came with a vision of how to do it...he changed everything for us."

Mr Alipio was adamant that it had been a team effort and attributed much of the success to the leadership of the school's principal: "It wouldn't have been possible without the support from our principal, Mr Leslie - our success has been a collaborative effort."

Among their achievements are eight place awards at the 2017 STAWA Science Talent Search Awards, State Level; and at the 2016 STAWA Science Talent Search, they took first place for 'scientific investigation'.

The school was named Secondary School of the Year by The WA Science Teachers' Association. The competition, now in its 59th year, had never been awarded to a school outside Perth before CAPS took gold.

Mr Leslie says the experiences open students' eyes to possibility: "They think, hey, if I can do this, it means I can do other things. I can compete on the same level as everyone else."

"They've been on the news, in front of cameras, politicians have visited, they've had an opportunity to talk about their projects. They're growing in confidence, which is encouraging to see. This is what we want them to see; that they are capable and success is possible."

Mr Alipio says the students focussed their research on the antimicrobial properties of Aboriginal bush medicine. "We worked with maroon bush, sweet potato leaves and crimson turkey

bush. We extracted the chemicals and then tested those chemical compounds against E. coli bacteria." When the compounds were successful in inhibiting the growth of bacteria, the CAPS research team could conclude they could fight other pathogenic microorganisms as well.

"They are also excited to show the results of the experiment and that the knowledge can benefit a lot of people in the Aboriginal community."

Mr Leslie said, particularly in science, there's so much knowledge there about bush medicine in their communities, so let's celebrate what they possess on their own Country.

"Let's test it out and see the properties and what can be cured. They know what is needed in their own community, they have that knowledge - they can create things that they know their people need."

"They are excited about their achievements and looking to the future. Most of the kids are planning to go to university to study medical related courses to become nurses or doctors and one would like to become a vet," Mr Alipio reported.

The school has been supported by industry through sponsorship from the mining companies that operate in the region. "We have had sponsorship from the Australian Institute of Mining and Metallurgy to assist with purchasing some equipment."

"We held a science fair locally this year for our high school students, who showcased their experiments," Mr Alipio said. He says the 22 judges from private companies donated their time as well as prizes for students.

So, what's in store for CAPs in 2018? Next year's vision includes expanding further into the field of medicine and technology. "We want to research about cancer, and conduct malarial research," Mr Alipio revealed.

"We will enter seven investigation and engineering projects into the 2018 BHP Billiton Science and Engineering Award to represent Western Australia. Winners of the BHPBSEA will represent Australia to the 2018 INTEL ISEF Grand Finals in Pittsburgh, Pennsylvania USA."

They won the secondary science award in 2017, and in 2018, Mr Alipio wants to add the primary division to their list of achievements: "We also plan to enter engineering and robotics

competitions." The school plans to upgrade their science space to a purpose-built laboratory, to give students a taste of science beyond high school. "We want to them to learn how to use certain equipment, because we are about to add more research areas including looking at diabetes and cancer cells," said Mr Alipio.

"We want to be the school of science and medical research and have these pathways in place for our students to go on to bigger and better things," said Mr Leslie.

"We will partner with the University of Western Australia next year through a program that will allow senior students to complete a one week residency at the university and work with a mentor from the university: "They will do lab testing and work with university level equipment - it's a chance to be a scientist for a week."

Mr Leslie wants the same opportunities for his little school in remote WA as "the big wealthy schools" around. "Our students deserve the same opportunities, just like every student in the country deserves the best start from their education."

"We don't have the resources some of these schools have though, so we just have to find creative ways to make that happen."

Caps students never too young for science.

By Suzy Barry, Editor

# 3D print and education - Empowering today's students to become the innovators of tomorrow

# Part 1 of 3 - Getting started with 3D printers in Education



# If you are reading this article today you are likely to be in one of three situations with regards to 3D Printers in your school.

- You have never thought about investing in 3D printer technology.
- You are thinking about investing in 3D printing technology.
- Your school already has 3D printing technology installed yet you may or may not be using it to capacity.

# Why invest now?

The fact is, 3D printer technology is upon us, and to stay competitive as an educator in this day and age, you need to think about 3D technology as an investment. The question is what exactly should you be investing in and how do you make it work effectively for your organisation?

At the time of writing this article, a quick search on Seek.com.au displays 735 jobs currently on the market in Australia with a prerequisite for people to have 3D print design and experience. As a young emerging technology, this is only going to increase

exponentially with time. Think carefully about this fact, which was uncovered in a study by the World Economic Forum in 2016: "65 percent of children entering primary school today will ultimately end up working in completely new job types that don't yet exist".

The evolution of 3D design and print is going to be a vital attribute to your students' employment capabilities, in ways we may not have even thought of yet. 3D print is the next revolution, like the iPhone was to mobile phones - and your students could be the catalyst for amazing worldwide change stemming from 3D in your classroom.

The question is can your school afford not to be a part of this revolution?

# **How 3D printers easily** integrate for education

3D printing technology for education has come a very long way since its humble beginnings. The technology is faster, more affordable, and better quality than it has ever been. 3D printer technology has evolved into machines that are quicker, quieter, higher quality and easier to use. Best of all, manufacturers are focusing all of their energy into making it easy for you in the education sector to implement and teach this technology to your

students.

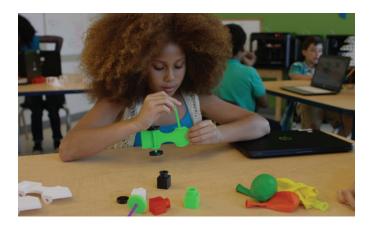
# Why are certain manufacturers focussing on education?

Ultimately, they would like to empower today's students to become the innovators of tomorrow. Through 3D print, learning becomes immersive through the use of both sight and touch, making it fun and easy for students and teachers alike.

Those who have already invested in 3D printer technology will know some of the pitfalls and frustrations involved with buying a 3D printer, and then implementing the technology into the classroom.

So many schools are not happy with the quality, speed and local support that comes with their current fleet. It is all well and good to have the idea of implementing 3D printer technology into the classroom, however the success of the implementation depends on a number of important factors.

These considerations will determine whether your investment gathers dust in the corner, because it is too hard to implement, or becomes the most



important and fun teaching tool you have. By surveying educators in Australia, we have determined that the factors that matters most to educators in implementing 3D technology are reliability, ease of use, implementation, classroom ready resources, learning community and local product support. It was amazing to learn how similar the responses were from all teachers in relation to these issues.

First and foremost, teachers told us that the product has to be reliable and easy to use. Too often today new technology implemented into schools is complicated and unreliable. Teachers need to be an expert in the field to use it, and with brand new technology, they often lack the skills to use the equipment, let alone teach others how to use it.

With effective classroom time

at a premium, teachers will not risk losing valuable time with unreliable technology. Chances are if you already have a 3D printer in your school you may have encountered this problem.

Second in importance is the availability of classroom-ready resources, activities, and project ideas to integrate the technology into real teaching practice, in real classrooms.

Finally, with the new 3D technology, there also has to be some level of community and support. When a teacher is developing new technological aptitude, access to comprehensive support is invaluable. Networking with other teachers using 3D printers in their teaching, as well as tech providers from all over the world can alleviate frustrations, and allow you to 'phone-afriend', (or message one) and learn from others' experiences. Manufacturers have directed extensive research development towards 3D print solutions in an educational setting, in order to address the key issues presented above. These solutions can be divided into three key areas:

### Content

Including complete STEM graded lesson plans with easily downloadable classroom-ready 3D printable content that is directly related to education. Also creating a community available whereby teachers can talk directly to other teachers who are implementing the same technology in a similar fashion.

## Software

The interaction between designing and the 3D printer itself needs to be easy to use and control so that teachers can get printing quickly. Obtaining 3D designs and models from the students' computers or the internet/Cloud is easier than ever, and can be printed in only a few clicks. Numerous proprietary apps and software allow this to be done easily by students and teachers alike.

### **Hardware**

Creating classroom-friendly and student-safe hardware and consumables is vitally important for education. There are printers available to the education sector that are designed for minimal maintenance where the teacher can easily change consumables with the magnetically swappable extruder and rolled filament.

By Jason Spark, Quality Printers & Cartridges

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- ✓ Start, stop & view print jobs with Makerbot App
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# Is the virtual reality revolution upon us?

Fancy a trip round Musée du Louvre without leaving the classroom? Do you want to arrange a ride in a space shuttle for a ten-year-old girl who dreams of a future as an astronaut? Imagine taking 7B across turbulent seas on a Viking longboat - 'row, row row!'.

Virtual Reality (VR) makes all of this technically possible in schools, but the question is really 'is it feasible?'.

The idea of using virtual reality in schools is fast gaining attention, as some more comfortably resourced schools in Europe and the US are experimenting with its applications. The technology exists, but until recently, the cost has been prohibitive. Individual teachers can bring in a headset, but the cost of the phones (at four times the price) can be prohibitive. These can be sourced second hand if schools want to incorporate VR into some lessons.

# So, where are we with VR?

The technology has been around for decades, but until quite recently, commercial viability has eluded developers. In 2014, Google launched their Cardboard Headset, (often handed out free, but available for \$20 online). Google has also released educational content; 'Expeditions', which is now available for Australian schools as of March 2017.

In 2016 Oculus (a Facebook subsidiary) launched the Oculus Rift using funds from a 2012 Kickstarter campaign. After releasing a prototype in 2015 with indications of some potentially prohibitive minimum hardware requirements; these were then downgraded in the 2016 release to "Intel Core i3-6100 or AMD FX 4350 CPU, at least a GeForce GTX 960 or equivalent graphics card, two USB 3.0 ports and one USB 2.0 port, and Windows 8 or newer," according to technology publication, Ars Technica. Kyle Orland, Ars Technica's senior gaming editor, concluded that



"within a few years there will be hundreds of laptops that meet the Oculus Ready spec".

Could this mean BYOD could morph into 'BYOVRD'? Could students even be issued with an inexpensive Google Cardboard Headset and traverse the Gobi Desert from their desks? Does a teacher's future involve looking out at a sea of heads, eyes obscured by robotic looking head gear? Or will this mean students learn from home, 'clocking on' in to the VR network each morning? No buses, no human contact, no jostling in the halls, no incidental jokes, no human touch.

Not likely, according to educationalists and futurists, who still predict that robots and other technology will replace neither the teacher, nor school itself. Instead tech is set to enhance learning, and perhaps create flexible pathways to learning for those disadvantaged by distance or disability. The human touch of a teacher cannot ever be replaced.

The power of VR is actually about content. It's about the format

and scope of learning materials, or educational stimulus and the degree to which teachers can dial up immersive content.

However, a 'VR movement' or even 'revolution' will only occur once VR is accessible to all students, and as commonplace as YouTube has become. If VR is to be a teaching tool, professional development is a key ingredient to success. Professor David Ainge of James Cook University wrote an article back in 1997 titled 'Virtual Reality in Schools: The Need for Teacher Training', Professor Ainge predicted that the technology would become "a common tool in the not-too-distant future". While the timing of his prophecy is conveniently vague, recent developments in the accessibility of the technology might just indicate we are on the cusp of a plunge into more rapid and widespread uptake.

The benefits of immersive educational experiences are well understood by educators. In fact, they inform the rationale behind overseas language trips, practical lessons and the school excursion.

The possibilities are endless. Students can experience another time and place without leaving the classroom. Activities that would never pass a safety assessment can be incorporated into a learning program - no travel, no permission slips, no fundraising.

The potential for anatomical exploration is a fascinating thought. Students could take a virtual tour through the human body. They could travel the path of their breakfast through the digestive system. They could even surf the reproductive system in a more accurate depiction of the sperm journey in *Look Who's Talking*.

They can fly; swim with sharks; fight in the Colosseum. Students can experience 'a day in the life' through the eyes of a firefighter, a surgeon, a country vet or a pilot, furnishing them with a more accurate understanding of professions, and generally making classes that little bit more interesting.

By Suzy Barry, Editor



# CLASSVR – INTRODUCING THE FIRST VIRTUAL REALITY DESIGNED SPECIFICALLY FOR THE CLASSROOM

Discover how to increase your classroom engagement, create immersive and engaging experiences and increase knowledge retention all with virtual reality, all in the comfort of your own classroom.

Students gain the ability to visit places, or enjoy experiences that may not be practical or even possible. Those immersive experiences can be used as part of a structured lesson to enrich and enhance the learning experience. ClassVR comes with a portal containing over 500 pedagogically sound, AR and VR classroom resources and can also use third party VR videos. Schools have the ability to create their own content as well.

Teachers create playlists of the experiences they want to use in the class and can push out the resources from the portal to the headsets in real time; A class studying World War I would benefit from the resource that places the student in the trenches while bomber planes are flying overhead.

This managed solution allows teachers to control what the students can see. Headsets can be remotely disabled, locked to a specific experience and can also guide students to a specific area within an experience. For example, if a class studying the solar system is discovering Pluto and one student has found him or herself on Saturn, the teacher can assist by creating a trail for the student to follow to get where they need to be.



# Educational tour takes students "to the forefront of science"

Latitude Group Travel is a curator of educational experiences, and in 2016, Rosebank College took 50 students on a Latitude STEM tour with a difference.

If Sir Ken Robinson was correct when he said, "we are living in revolutionary times, and that is why we need a revolution in education" – and he usually is... then the revolution must include engaging and relevant experiences. Rosebank College's science coordinator, Jason Smith, says the most inspirational learning activities often occur "beyond the four walls of the classroom".

"Our STEM tour to Europe with Latitude Group Travel inspired and engaged students to appreciate that science is more than text books and classroom experiences," he said.

Mr Smith says STEM education is now focussed less on the regurgitation of facts, and more on the process of working scientifically: "In the NSW syllabus in particular, it's about a series of steps in the scientific process. It is a way of thinking".

Mr Smith says the resulting Latitude tour was customdesigned to map onto the progression of scientific thinking of the last 300 years. "We looked at early ideas of science around the 1700s in London, right through



to the forefront of science. Logical thought process hasn't changed, but the idea of seeing it over 300 years is quite exciting," he said.

Latitude CEO, Jenny Murphy, said, "most educational tours seem to be loosely linked to a subject title, but we feel it's important to actively use the specific school curriculum to research and identify existing curriculum-linked activities, and for designing our own hands-on activities."

She said, "the Rosebank STEM tour included nearly twenty STEM curriculum-linked activities, including a wide range of STEM-focussed guided tours in some amazing and unexpected locations, plus genuinely

engaging, hands-on, experiential learning through workshops, experiments and Q&As".

She says educational tours should be inspired both by a 'learning-bydoing' mentality, and a desire to engage students. "You can jampack your tour with educational experiences, but it's important not to overdo it. We find having a dedicated knowledgeable tour director means the schedule runs like clockwork."

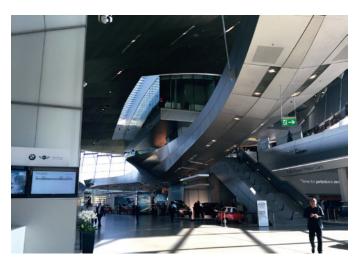
"As a school teacher, it's a scary thought taking 50 kids to Europe, but everything they did reduced my stress levels," Mr Smith added.

From a pedagogical perspective, Ms Murphy says educational tours should have educational outcomes: "We strongly believe experiential learning delivers these." Mr Smith says the scope of the activities went "way beyond a standard educational tour".

A highlight for Mr Smith was the large Hadron Collider in Geneva. "There aren't many Australian students who can say they have talked to an actual scientist at the Hadron Collider about the work they are doing there. This is at the forefront of science," Mr Smith enthused. "It's all happening here!" Students attended a presentation by a practising scientist, - with a Q&A session, followed by a guided tour of the facility. He says students returned able to conceptualise potential career paths at the cutting edge of

Another stand-out for Mr Smith was their visit to the BMW assembly plant in Munich. "Australian kids in Munich seeing BMWs being manufactured; it's unheard of! BMW is at the forefront of technology in manufacturing, with an entirely robotic system, programmed by humans."

He says the connection with what the kids were learning in class wasn't immediately obvious, yet, during a presentation about the required attributes and skills for employment at the high-tech plant, students began to see the connection to science, and maths and engineering, and where it can lead. He says this is part of









Latitude's approach, to expose students to what's possible for them in the future: "They started projecting themselves into various career paths."

Did it result in lasting STEM engagement for students? Mr Smith says 100 percent of the year nines and tens who joined the tour have pursued a senior science subject. "It's sparked their imagination enough to pursue science in senior years,

and a lot of them have picked out [STEM-related] university courses because they saw something on that trip that allowed them to project themselves into a career path."

He says the tour was of such high quality, and so minutely managed and organised that they are already planning their next Latitude STEM adventure for 2018!

By Suzy Barry, Editor





#### Embracing eLearning in the 21st century classroom

**According to** demographers, if the parents of your 2017 prep cohort think they have the smartest kids ever, it's not just parental bias. Professor of Demography and **Director of the Australian Demographic and Social Research Institute, Peter** McDonald, told reporters for www.news.com.au that 'generation Alpha', which began in 2010, will be the smartest generation so far: "Their access to information is huge compared to the past, it is at their fingertips."

It's not all milk and skittles for these little treasures though; the research suggests they will be lonelier, spend more time in childcare and probably miss out on some family support. While they will probably require a good dose of those 'social learning' and 'life skills' priorities on everyone's lips, they will not need you to show them how to use an iPad. They will probably be familiar with computer-based literacy and maths programs, and they may have a mish-mash accent from a



variety of international content educational and otherwise.

As always with this topic, resistance must be acknowledged for its utter futility; change with the times we must. The good news is the absolute array of educational benefits these programs can provide includes enhanced uptake of new concepts and considerable power to engage digital natives.

An August 2008 article released by the Queensland government in their journal, Smart Classroom Bytes, titled 'Advice for schools on the latest information and communications technology (ICT) research for education' was already arguing for a blurring of boundaries between curriculum and ICT, in order to effectively integrate the digital world into the classroom - as a context, rather

than a discrete 'computer studies'

The document, which draws on and references considerable research, contextualises eLearning into a few main categories: digital pedagogy, digital content and eLearning spaces. The divisions pertain to how we teach, what we teach, and 'where' learning occurs. The report states that "these components co-exist to create the

#### An online tool for learning to love reading

#### Ziptales is an online literacy resource designed specifically to get children hooked on reading.

The extensive content - more than 300 stories, poems and puzzles - has been commissioned from authors all over the world, and arranged in genre categories for all levels of the New Zealand curriculum. Founders Valerie and Richard McRoberts say they set up Ziptales to give children access to authentic literature so they could learn to love reading rather than being forced to read a text.

"If the children don't enjoy the reading, they're not going to get it. The reward for reading needs to be intrinsic."

Content includes deliberate categories for reluctant readers such as Scary, Yucky and True Tales, and all stories have voiceover to promote oral language development. Schools can access Ziptales firstly through a 30-day trial and then through purchase of an annual licence. Regular professional development sessions are included. The program can be accessed on all devices and includes online worksheets which can be completed at home.



conditions for a new generation of digital learners. If one component is missing the approach is unbalanced and less effective."

Almost a decade on, where are we with eLearning? You'd be hard pressed to find a prep class that didn't at least flirt with an online learn-to-read program, while online memberships to maths and literacy programs are supplied to students for home and school use.

With so much on offer outside of the traditional ICT integrations, instead of waiting for it to be rolled out nationally, a famous Sir Ken Robinson directive might be relevant. He says if teachers or school communities want to see change in education, they should change what they're doing in their own little world (read: classroom). "If enough people change their worlds, we change the world."



A 2008 article titled 'E-Learning pedagogy in the Primary School Classroom: the McDonaldization of Education' published in the Australian Journal of Teacher Education, posed a sobering question: "If eLearning is the new medium deemed to provide a new form of social interaction why

have we seen minimal changes to teachers' pedagogical practices?" While this may have been the case in 2008, uptake of eLearning applications is strong in 2017. The authors also expressed concern that eLearning would come at a cost to the social contact of faceto-face teaching; that it would

lead to the "homogenisation and dehumanisation" of primary education. This thesis will likely have proponents both for and against, yet the benefits of eLearning are notable. A paper by Zhang et al. published in Communications of the ACM (A publication for the Association of



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Computing Machinery) indicated that "in an e-learning environment that emphasizes learner-centred activity and system interactivity, remote learners can outperform traditional classroom students".

What are the implications of this success? Why must the experiences of remote learners be applied to a classroom setting so face to face students can benefit? In 2013, the Digital Education Advisory Group (DEAG) released a report titled, 'Beyond the Classroom: A New Digital Education for Young Australians in the 21st Century, which argued, "the internet and digital technology are democratising content, enabling individuals to do many things that were once brokered by third parties (or not available at all)." Indeed, this concept has underpinned the

work of Professor Sugata Mitra ever since his 'hole in the wall' experiment that provided access to the internet (and by extension, content for learning) to the slumdwelling children in New Delhi.

The DEAG report says the challenge will be to extend students' existing capacity to innovate through digital education. "Teachers, too, need the capacity to design and implement new ways of learning and should be supported in the development of innovative teaching practices underpinned by digital technology," the report reads.

From foreign language learning and literacy to maths, architectural design, and biology programs, nearly everything is covered by digital content, and there is an interactive digital learning tool for most curriculum areas. Either synchronous or asynchronous, eLearning can engage a whole class simultaneously, or individually with differentiated practice.

The flipped classroom deserves a mention here. Class time and 'student concentration tokens' can be preserved by explaining the complex stuff in a YouTube video. Sydney maths teacher, and founder of Mister Wootube, Eddie Woo, is an excellent illustration of what a digital platform can do for maths. More at: www. misterwootube.com.

The benefits of eLearning tools are numerous, but some notable advantages include:

Student engagement: interactive tools are

- enjoyable and speak the students' digital native tongue.
- Flexibility: digital tools can be differentiated seamlessly for a mixed ability cohort; they can be set for homework in many cases; they are portable and 'on tap.'
- Individualised learning: digital tools can be selected or manipulated to suit the learner. If the fit is still wrong, they can be discarded and replaced with a more suitable program at a low cost.
- Tracking progress: online learning tools and programs send reports of progress, making data collection and tracking a breeze.

By Suzy Barry, Editor

### Literacy for every learner





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# Technology to support teaching, not replace it

During the past few years, teacher and parents have been deluged with new technological options for teaching, particularly for literacy and language teaching.

A vast array of apps and programmes have appeared, many quite flashy looking and impressive sounding. However, there are several key principles to bear in mind when using technology. Technology needs to supplement and support teaching, not replace it.

- A well-designed programme should enable each learner to progress at his or her own speed
- A good program will also analyse each learner's performance and create individualised reinforcement, as well as analytics for remedial and class teachers.

These are the key points of the New Zealand-developed literacy program,



StepsWeb, which provides structured courses, but also the facility to create your own materials. You can enter any word, include a sentence and definition, and then record the word yourself – in any text-based language. In this way, you can customise the programme to an individual learner or adapt it to support any aspect of the curriculum.

# New to the Bookshelf

#### **Danny Blue's Really Excellent Dream**

By Max Landrax



Now here's a book that takes colour mixing to a new level. An excellent look at creativity versus conformity and sticking with the status quo, told through the concept of a mythical

monochrome world. Danny Blue's vision of something yet uncreated becomes a reality with courage, tenacity and industry. The book has levels of humour for all ages.

For readers 5 to 9 Hachette

#### The Wizards of Once #1

By Cressida Cowell



From the author of How to Train Your Dragon, this quirkily illustrated first book in the new series had two 7-year-olds enthralled, twisting their heads to read the handwritten captions scattered across pages and mystified by the world Cowell creates. This is

the story of a young boy wizard and a young girl warrior who have been taught to hate each other like poison; and the thrilling tale of what happens when their two worlds collide.

For readers 7 to 12 Hachette

#### What's Going On Down There?

By Karen Gravelle



A book to leave lying around the place and possibly share with a child who needs it. The book covers physical changes during puberty, emotional wellbeing through transitions, as well as sex, sexuality and

contraception. It's accessible - and apparently, "only a little bit 'cringy' in places".

For readers 9 to 12 Bloomsbury

#### The Goldfish Boy

By Lisa Thompson



Matthew has OCD. He hasn't been to school in weeks. His hands are cracked and bleeding from cleaning.

He spends his days peering out of his bedroom windows at the neighbours, making mundane notes about their

activities. When a toddler staying next door goes missing, Matthew is the last person to see him alive. He is now at the centre of an investigation and must step up (and out of his bedroom) to help a child.

For readers 9 + Scholastic

#### Dog Man - A Tale of Two Kitties

By Dav Pilkey



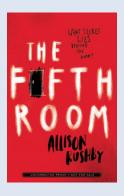
Dog Man, the newest hero from the creator of Captain Underpants, is still learning a few tricks of the trade. If only the chief would throw him a bone every once in a while... Can the canine crime biter unleash justice on this ruffian in time to save the city, or will

Petey get away with the purrfect crime?

For readers 6 + Scholastic

#### The Fifth Room

By Allison Rushby



When brilliant highschool student Miri is invited to join an international secret society, she leaves everything behind in pursuit of the high-stakes rewards it offers. In a secret bunker, four selected students are pitted against each other to push the boundaries of medicine using illegal self-experimentation.

Another student is secretly experimenting alongside the others, and suddenly the stakes are much higher, and much more dangerous.

Miri is forced to question the true purpose of the society, and who lies behind it..

For readers 11 to 15 Scholastic

#### The Awesome Book of Animals

By Adam Frost



Did you know that there is a treeclimbing fish?

Or that some bees drink crocodile tears?

Or that a jellyfish was sent into space?

I bet some kids in your class know!

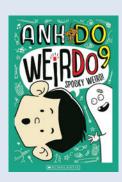
Test their knowledge

and have them test yours with this encyclopaedia of disgusting, hilarious, weird and wacky facts about animals, dinosaurs and other obscure critters - always a winning subject with early primary students.

For readers 5 to 9 Bloomsbury

#### Weirdo 9 - Spooky Weird!

By Ahn Do



Halloween's coming up and Weir and Bella are having a ball working on their funny costumes, but things are about to turn topsy-turvy for Weir.

His family is moving and he is going to be the new kid in school.

With an unforgettable name, a crazy family and some seriously weird habits, fitting in won't be easy...

But it will be funny!

For readers 6 to 9 Scholastic

# Creating innovative learning environments in your school

Innovative learning environments (ILE) may have seemed like fad for a while there, but schools are getting results from loosening and dynamising their learning spaces to support true 21st century learning.

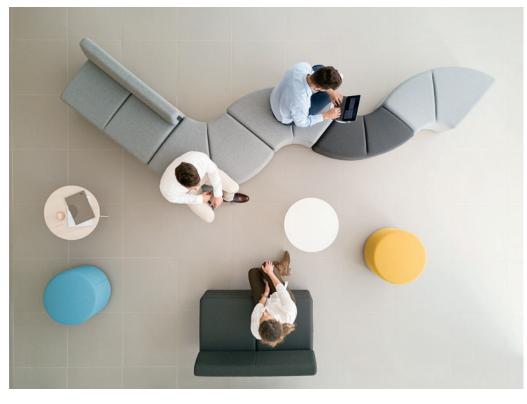
Sir Ken Robinson famously said, "If you sit kids down day after day indoors at desks, doing what often amounts to low-grade clerical work, then don't be surprised if they fidget, don't achieve a great deal, and don't feel very good about themselves."

While the outcomes of reading writing and arithmetic must still be taught, we don't need rows of desks, and actually, we don't even need sit down to achieve it.

Last October, an innovative learning makeover at Coatesville Primary School in East Bentleigh, Victoria was featured on Channel 9. The school is one of 6000 schools across Australia and New Zealand to have taken part in a study conducted by the University of Melbourne to illustrate the benefits of creating ILEs in schools. Project head, Associate Professor Wesley Imms, who describes traditional classroom as 'cells' says their research has produced some promising results about the benefits of ILEs for student learning.

While students were predictably impressed with "movable walls and cushions in place of desks", the school's principal, Louise Pearce was adamant that the learning outcomes had far from suffered, and stakeholder satisfaction was at an all-time high. "We haven't thrown out literacy, we haven't thrown out numeracy, we still teach the three Rs; we just teach it differently," she said. One teacher in the short segment said, we don't want our students to be passengers in the new world we want our students to be leading that new world".

If we want graduates who have



developed skills in collaborative projects, have an ease with communication, and are practised in thinking creatively, we can't rely on traditional pedagogy. If we want adaptability and creativity as key attributes, we need activities that promote the development and/or preservation of these qualities. The good news? ILE proponents are resolute that these spaces are designed to support exactly these aims, and schools are taking note. While a total overhaul might not be possible, a few adjustments to current furnishings can go a long way in supporting learning activities associated with collaborative, creative problemsolving education.

For a clearer understanding on how to design an ILE, we called on Resource Furniture director, Scott Reed for some industry insight.

#### **Industry View**

Mr Reed says it's vital that schools engage in adequate planning prior to establishing an ILE. "From a design point of view, it is crucial that schools provide as much information as possible. A design brief should be developed that outlines how they would like the space to work for both students and teachers, as well as the teaching style they would like to implement."

"From there, we start to space plan with suitable furniture and consideration to learning styles, acoustics and even the flow of foot traffic throughout the space," he advised.

A common criticism of modernised learning spaces is that open plan areas lead to 'cross-disturbance' from diverse activities, especially when the pace and exuberance of activities are ill-matched.

While early 'modern learning space' initiatives in the 70s and 80s may have felt like learning at a subway station, innovations in acoustics, and clever furniture design have the power to turn a noisy 'mess hall' ambience into a beehive of specialised activity spaces.

How can ILE design accommodate diverse learning activities occurring in the same space and time? Mr Reed says simultaneous learning activities can be facilitated through furniture designed with inbuilt visual and aural buffers.

"Collaborative learning pockets in open learning spaces are best treated with low-walled booth systems," he suggested. "In-built acoustic panels that surround the working area help to drastically reduce noise and provide privacy for small group collaborative work."

He says for best results in ILEs, the layout should encourage a range of learning styles that are flexible, encourage collaboration and adapt with changing technology. "For example, research has shown that combining a mix of flexible desking options and breakout soft seating is effective, because it allows classes to adapt their layout to accommodate both a lecture-style configuration and a group collaboration layout. As such, desks that nest together to form interesting and functional work spaces, yet also pull apart to support individual work, are ideal."







Another key feature of the ILE, especially for schools on a budget is the versatility factor. Mr Reed says offering a range of desk options coupled with soft seating is key. "Also, including either height adjustable surfaces or fixed height options at both seated and bench height is also proving very popular."

And who says learners need to sit down at all? Some children just prefer standing or wiggling or balancing. Some people have to move to think. "Having the choice to sit a desk or stand at a large table to work collaboratively provides another element in facilitating a better learning experience."

Libraries have featured heavily in education discourse of late, as literacy figures continue to suffer, and research into the link between school libraries and literacy supports their importance.



A Softlink research project in 2010 "found a correlation between high NAPLAN literacy results and a well-resourced library". The recurring theme however is that libraries must appeal to our

'digital natives' and incorporate technology into (but not replace) the existing physical resources.

Mr Reed says the provision of soft seating that includes

power inputs is essential for this generation to adopt the library as a "social hub". It's likely a decent wifi connection will also assist in luring them to your house of letters.

Students these days are also used to having things displayed for them, as visual merchandising and constant internet marketing proliferates. Mr Reed says library shelving units "that present books in a more retail style of merchandising" can engage young people, and increase loan rates.

If we want to turn out people who are creative innovators with strong social skills, and the ability to adapt, we may have to 'tear down the walls' of these cells and start designing schools to look like the offices of our progressive industry players.

By Suzy Barry, Editor

#### School apps for convenient, customisable communications

Active School Apps general manager, Leigh Kostiainen is passionate about the importance of school to parent communication. Her first-hand experience with wasteful paper note systems led her to "seek a solution that would incorporate simple, easy-to-use technology".

Active School mobile apps are customisable to school branding and

functional requirements. "Whether it's to announce a rained-out sports event, an upcoming mufti day, or to provide the latest school newsletter; our apps provide schools with an intuitive and cost-effective way of keeping parents informed," Ms Kostiainen explained.

She says push notifications are the most widely utilised functionality; they can be dispatched to the whole school or a specific group. These can be sent instantly or scheduled for later transmission.

"School lunches and uniform ordering, as well as absentee notifications, are also popular features with parents. Other popular features include the newsletter and calendar tabs, which enable parents to consume the communications at their convenience," Ms Kostiainen noted.

"Active School apps are module based and fully customisable, enabling us to provide a cost-effective communication tool for schools and parents," she concluded.



#### Engaging parents of the new world

In an increasingly digital world, schools are turning to integrated school management systems to organise communications and newsletter content, complete administrative tasks, and manage data.

In this digitalised context, not to mention a world where inefficient and wasteful use of paper is no longer tolerated, technology has stepped in. With Australia having one of the highest percentages of smartphone users worldwide, using apps to manage communications can streamline notifications and permission note protocol, giving everyone a break from note chasing.

Modern families occupy a more complex space than ever before. The work-life balance juggle



combines with an over engineered schedule and, in many cases, a career that follows them home.

As fewer households include a stay-at-home organisational agent (parent), notes pile up under magnets on the fridge, and unless 'Thursday is swimming day' is manually loaded into the calendar and an alert set, it may be overlooked.

Some teachers overcome this by setting up a 'closed' or 'secret' group on Facebook to ping parents with 6am reminders, but most teachers have their own version of organisational mayhem going on at home.

It's really needs to be the domain of the school management team to implement school-wide comprehensive systems, which operate using the same channels as the rest of our digital-dominated existence.

Apps with push notifications can track attendance, issue reports, send meeting requests and flag upcoming events for parents. Special announcements such as school weather disruptions or special events can also be communicated via the school app, reaching anyone with access to the internet.

Government agencies and mental health organisations haven't changed their tune about the importance of the homeschool partnerships. Schools that have embraced technology to bring school and home into partnership report an ease and connectedness has resulted. Does your school use its Facebook page for alerts? Do class teachers have their own closed page for parents? What platforms do your parents use? Can you send out a survey to see if you are a Twitter or Facebook dominated community? The tech is there for the taking - and with most parents already active-social-media-using-smartphone-aficionados, apps and social media might just make your school community 'come together, right now'.

By Suzy Barry, Editor

#### **Active School Apps**

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- Maja Nova, Toongabbie Public School



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www.activeschoolapps.com.au

#### Overseas travel creates adaptable citizens of the world

#### Technology is expanding the range of possible stimulus for learning that teachers can dial up for their students.

Teachers can beam experiences into the classroom - from virtual tours of international monuments or museums, and exploring the geometry of the pyramids, to a virtual tour of a busy South East Asian floating market. Students can access the colour and sounds, and experience teeming life of humans and animals from all corners of the world through video, interactive apps, and virtual reality - but can they taste it? Can they smell it? Not quite yet, though some developers are offering a mask with ready-made smells and wind simulation.

Happily, educators still believe in the real thing and schools are not travelling less with their students as tech advances; they are travelling more! Clearly, educators understand the power of natural immersive learning, and as travel becomes cheaper, students from all over Australia are taking to the air.

Overseas educational tours are no longer the dominion of the well-resourced school with fees at a premium. Schools experiencing tighter financial constraints are increasingly prioritising travel and rewarding students motivated to engage with the wider world with actual experiences. The trips can be financed through dedicated fundraising activity and school P&Cs often contribute to these aims.

So, what sorts of trips are out there? It's not all languages other than English (LOTE) and geography. Excursions can be focussed on anything from social work and service to the architecture of Angkor Wat in Cambodia. While LOTE based curriculum certainly accounts for a large proportion of overseas school trips, the humanitarian project is becoming more prevalent, as well as sustainable agriculture and comparative civics and history.

In 2008, a document was prepared in Melbourne by a working group on behalf of federal and state education ministers. It was called



the Melbourne Declaration on Educational Goals for Young Australians. The report includes the following quote.

"Global integration and international mobility have increased rapidly in the past decade. As a consequence, new and exciting opportunities for Australians are emerging. This heightens the need to nurture an appreciation of and respect for social, cultural and religious diversity, and a sense of global citizenship."

A document released by the Victorian Department of Education, titled 'Overseas learning experiences – a resource for schools' states that "the provision of an overseas learning experience supports students to consider and engage in the role and responsibilities they have as active and informed global citizens through connecting with peers in other countries, experiencing new cultures and developing new understanding of their place in the world".

For Australian students, exposure to a range of cultures may need to be consciously arranged. The sheer tyranny of distance means that we do not, like the English might, 'pop over to Perpignon in a caravan for 15 days of baguette and brie' while our children devise Pidgins with French kids. Naturally, not all families take holidays outside the UK, but the Australian equivalents often travel within Australia – simply because this island we call home is enormous, offers varied ecosystems and climates; and is quite expensive to exit.

We speak English, which is

the dominant language for entertainment, so we also do not grow up bopping at the school dance to foreign songs like the Germans, French and other Europeans who know an approximation at least of all of our hot hits, and actually grow up to write some of their own songs in our language as well. This sort of linguistic privilege becomes a handicap when we are looking to turn out adaptable resourceful citizens of a global collective. We are charged with preparing students for the future, and overseas travel is one of the most immediate and efficient ways to foster a sense of global citizenship. (Naturally, there are exceptions; the multilingualism of Indigenous Australia provides an excellent example of intercultural competence. Children who have arrived as first generation new Australians have had plenty of time to flex those adaptive muscles and appreciate diversity.)

How schools will approach the pursuit of international education will vary. A proliferation of sister school arrangements is a fantastic start, and the use of technology to

'beam' international sister classes into the language lab has created plenty of cross-cultural learning.

Schools are also forging relationships with these sister schools to facilitate extended student exchange programs. The Victorian government document on overseas learning experiences also said:

"Many schools have discovered that learning while living in another country is one of the most powerful catalysts for effective international education. The positive impact of learning in another country is profound; students return home with enhanced intercultural understandings, sharpened self-awareness and emerging leadership skills.

Educators are aware that the current generation of students will emerge into a hyper-connected world where they must operate collaboratively, creatively, with flexibility - and above all else, they must adapt with a most 'unevolutionary' agility, in this rapidly changing planet.

Schools from diverse backgrounds and resource levels are pulling out the stops to get their kids on planes and tasting, smelling, feeling and meeting the world at large. Whether it's through a cultural and historical tour through Europe, or an arduous tribute to diggers on the Kokoda Trail, or a visit to the windfarms of northern Europe to study sustainable and renewable energy; it's become a priority. Teachers and parents report that students come home with an enhanced sense of perspective, new ideas and a more realistic sense of their place in the world

By Suzy Barry, Editor





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#### Global learning builds resilience, broadens world view

Year nine to 12 students from Highvale Secondary College participated in community service projects to Fiji in 2016 and 2017. All travel aspects of the expeditions were organised by Global Learning Expeditions (GLE) and all of the projects were done through the Global Learning Foundation (GLF).

"The project work enabled the students to see 'at first hand' the impact of poverty and climate change on whole villages, families and children," said Highvale's assistant principal, Heather Carr.

Australian students study the impact of poverty and climate change, through the disciplines of geography, outdoor education, civics, and science. However, no documentary case study or class lesson can achieve the impact of total immersion into a poverty and climate-affected community far from home.

"Highvale Student Representative Council has a long tradition of fundraising and supporting charity organisations that directly involve young people," Ms Carr noted, but until now, they had looked locally for their change-making. "Working



with GLF has given the school the opportunity to be involved in an international program and project," she said. Students participated in three Fijian-led projects: an educational project involving one-to-one reading and tutoring; a sustainability project to develop a rainwater harvesting system; and a marine regeneration programs led by a marine biologist.

Highvale students have returned with a broader world view and a deeper understanding of how the human experience can differ around the world.

"The project gave students and staff 'real life' opportunities to

engage with communities, and, as 100 percent of funds raised goes directly into the project, it's a powerful way for us to maximise making a difference," said Ms Carr. She says seeing how happy the villagers were with so little caused students to re-evaluate the money-happiness equation. The simple but joyful way of life in the village, (and very little access to internet), brought the students closer together. With no Instagram to distract them, they simply had "to converse and participate in activities where they could laugh, support, and engage with one other".

Ms Carr says the support offered

by GLE "took the worry out of organising the minute details that such a tour entails". The dedicated liaison representative ensured that the accommodation, dietary needs of the group and all requirements were met.

Ms Carr says students have gained confidence and developed resilience. The lasting impact on students is evident, with the groundswell of service-oriented school culture now enveloping younger students, inspiring them to participate in future Global Learning Foundation Projects to make a difference.

By Suzy Barry, Editor







#### Students say "G'Day World" with Educational World Travel

G'Day World tours are tailored to each school's individual needs and curriculum requirements. "After 30 years designing student-based tours, we know what works and what doesn't!" director, Ross Camfield explained.



So, where can G'Day World take you? "G'Day World says it all; worldwide destinations include North America, South America, Asia, Europe and the Pacific," replied Mr Camfield.

G'Day World tours achieve rich learning outcomes across all areas of the Australian curriculum, including cross-curricular priorities and social and emotional learning.

"Our G'Day World tours teach students to value cultural diversity, understanding and promote social responsibility," Mr Camfield noted.

With many former teachers on staff, G'Day World understands the demands placed on teachers during overseas travel. Staff strive to ensure overseas trips are a fun, safe, rewarding, and stress-free activity.

Mr Camfield said, "our local guides and tour leaders are an extension of our G'Day World family, and schools request the same guide year after year, as they become an integral part of the tour by ensuring a seamless experience and a big smile!".







#### Sydney: science, civics and our colonial past

You've visited the nation's capital and your students have had their enthusiasm for the arts, culture and politics successfully ignited. What's next? Last issue, we explored Victoria, and this issue, the Sydney sequel will cover some of what Melbourne's sunlit sister has to offer.

Sydney's beaches could be an excellent (and popular) place to start, especially if you time your school trip for the warmer months. Surf Lifesaving Australia offers school groups surf skills programs in surfing, surf skills and safety, lifesaving award programs, and general programs in surf awareness and importantly, rip identification; vital for teenagers. (Research shows the most common drowning victims of rips are young men who are confident swimmers).

These workshops are available at iconic beaches, like Manly and Bondi, and offer an educational experience that covers the history of the surf clubs, followed by a demonstration by qualified surf lifesavers including resuscitation, oxy viva, tube rescue and other life saving techniques. The sheer beauty of the harbour is worth risking a bit of motion sickness to travel to Manly by ferry.

#### Science and nature

The Royal Botanic Gardens offers an astounding array of educational tours prepped to perfection with curricular correlation, and tailored activities. It's not all labelling leaves and petals either. The programs cover mathematics, bush medicine, Indigenous first contact encounters, sustainability, art and, naturally, botany.

#### Science Museums

There are multiple small and specific science museums tucked away in Sydney's universities - such as Sydney University's



Learn about adaptation and survival over millions of years in Australia's changing climate and landscape in the Surviving Australia exhibition at the Australian Museum, Sydney. Photo: James Horan, Australian Museum

Macleay Museum, which has Australia's oldest natural history collection. The museum features the Tasmanian Tiger, Woolly Mammoth and Sabertooth Tiger, as well as a history of tools of the natural scientist through history.

The Powerhouse Museum at Darling Harbour is one arm of the Museum of Applied Arts and Sciences (MAAS). Hands-on practical educative experiences engage student in 'the big questions.' Even better, it's free for students 16 and under.

Another MAAS facility is the Sydney Observatory at Millers Point. Here, you'll be observing the night sky with Australia's oldest telescope. The site is home to Australia's most accessible telescope domes, a 3D Space Theatre and the Sydney Planetarium. Explore Australia's long history with the stars -Indigenous Astronomy interprets the constellations quite differently and the stars are integral to the dreaming.

School programs for 2018 offer a year-round selection of on-demand and scheduled experiences, across the three MAAS venues; the Powerhouse Museum in Ultimo, Sydney

Observatory in Millers Point, and the Museum's Discovery Centre in Castle Hill. Search our program by topic, stage, venue or date." More at: www.maas.museum/learn/

The Australian Museum at Hyde Park is Australia's first museum. Within the sandstone walls, the bones of a giant whale will greet you, and reproductions of extinct megafauna might make the students shudder just a little.

Aside from the general exhibition and regular special events, students can touch real artefacts, discover museum treasures and go behind the scenes of the Australian Museum. More information: www. australianmuseum.net.au

#### **Blue Mountains side trip**

If you're willing to travel from Sydney, the Blue Mountains can be reached in a 2.5-hour train ride from the city centre. The breathtaking ridges with sandstone formations were a mystical blue barrier that taunted the Europeans - and have claimed the lives of many intrepid hopefuls. Many say there is an eeriness about the Blue Mountains and the remnants of Aboriginal settlements; dreadful stories of dispossession,

and intense tales of hardships overcome by settlers make the complex history of this Sydney satellite well worth exploring.

The Three Sisters is the Blue Mountains' most spectacular landmark. Located at Echo Point, Katoomba – there are two dreaming stories circulating and plenty of information to spark discussions on history and culture.

Scenic World offers student groups a fun, educational introduction to the World Heritage-listed Blue Mountains. The 2.4-kilometre Scenic Walkway is ideal for observing the temperate rainforest's flora and fauna and discovering the site's coal mining heritage. The Scenic Skyway cable cars offer a bird's eye view of Katoomba Falls, The Three Sisters and the forest canopy through a glass floor.

#### **Civics and politics**

Parliament of New South Wales (NSW): curriculum-aligned school tours are free but must be booked in advance. Make sure you book your tour of the Legislative Assembly when parliament is not in session, as this will generally be restricted to viewing parliament in session from the visitors' galleries.

# A M O THS Giants of the Ice Age

Exhibition 5 hay 018 Lexhibition 5 hay 018

Mammoths – Giants of the Ice Age transports students to a world dominated by these colossal creatures which roamed the earth for millions of years.

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An aerial view of the Royal Botanic Garden

On non-sitting days, conducted tours will normally include visits to both houses of parliament and a role-play. Teachers are advised to allow 2 hours when planning nonsitting day tours, and some groups will get lucky and members of parliament will be available to meet groups from their electorates. For primary schools, the maximum group size for each time slot is 60. The recommended maximum for secondary school groups is 50. A calendar of sitting days and extensive information about the tours, curricular links and how to prepare students for the big day are available from www.parliament.nsw.gov.au .

The Sydney Jewish Museum offers a diverse range of educational programs and opportunities for secondary and primary school students. All education programs are curriculum linked and can be tailored to meet class needs. Most programs include personal testimony from a Holocaust survivor or descendant of a Holocaust survivor. More at: www. sydneyjewishmuseum.com.au

# Rocks Walking Tours Educational Program

Tour content is tailored to the current school syllabus and covers stages 1-6. Our popular school tours include our famous Arrival of the First Fleet tour with costumes, Beattie Bow's Sydney, Past & Present Times and The Way Life Was. Please call or email so we can help you select the right excursion for your class.

#### For more information please contact:

E | info@rockswalkingtours.com.au

W | www.rockswalkingtours.com.au

T | (02) 9247 6678 A | Argyle St, The Rocks, NSW 2000

#### **History of Old Sydney Town**

The CEO of the Australian National Maritime Museum (ANMM), Kevin Sumption was quoted in a *Financial Review* article as saying: "Always make an effort to learn about the history of a destination. You cannot truly appreciate a place today, if you have no concept of its past." What excellent advice. So, where can a teacher facilitate this process for their students in Sydney?

With Sydney's maritime beginnings, ANMM has educational outreach at the core of its mission and runs a popular educational program for schools. The museum is not all riggings and portholes; anything to do with the sea can be featured at ANMM. A current exhibition will showcase the journey to winning Indigenous sea rights travelled by the people

of northeast Arnhem Land, featuring the historic collection of Yirrkala Bark Paintings of Sea Country. More at: www.anmm. gov.au

For a unique historical experience that may make you feel like you've stepped into an episode of ABC's educational history production, My Place, Sydney Living Museums manages access to a group of "12 of the most important historic houses, gardens and museums in NSW on behalf of the people of NSW". As part of the NSW Ministry of the Arts, the organisation preserves heritage listed sites around the city. More at: www. sydneylivingmuseums.com.au. The concept of 'living history' seeks to revitalise actual people's lived experience and offer visitors a window into the historical Sydney-siders' lives. Having grown up in Sydney, I have memories of peering into a drawing room at Elizabeth Bay House, and through a temporal window into the life of someone who was desperate to turn this new land into the motherland.

Sydney's funny like that, there are places where if you turn up the air conditioning and don't look too hard out the window, you might be in England. There are plenty of discussion points for students about reluctant settlers, colonisation and the British patriotism that led to the paternalism that led to, well, everything else that's happened. Certainly, the major museums are a must, but there can be a lot to learn from the city itself.

The Rocks, for example, could be visited after a thorough reading of Playing Beatie Bow, by Ruth Parks. Still a feature on many NSW reading lists, this time travelling novel is a captivating bridge for a young mind to appreciate the cobbled together society, as accidental and shoddily combined as the cobblestone roads.

By Suzy Barry, Editor

#### supplier profile

#### THE ROYAL BOTANIC GARDEN SYDNEY

## Connect with Aboriginal Excursions at the Royal Botanic Garden Sydney

For many teachers, meeting the new Australian Curriculum priorities for Aboriginal Histories and Culture can be a challenge.

Concerns around the delivery of culturally sensitive and relevant content, combined with a lack of personal perspective often results in teachers lacking the confidence to effectively teach Aboriginal curriculum content.

The Royal Botanic Garden Sydney is supporting teachers by delivering authentic excursions experiences with Aboriginal Educators.

Located on the traditional land of the Cadigal of the Eora Nation, the Royal Botanic Garden Sydney is a culturally significant site for Aboriginal people and an important location in Australia's



modern history. Aboriginal Educators take students on a journey, explaining the complexity of connection to Country through stories, bush foods, tools and weapons, plants and textiles.

Excursions cover the three key concepts of the curriculum of Country/Place, People and Culture where students can:

 Investigate a wide variety of local native plants which provided the raw materials needed for survival by the first Australians.

- Be guided through hands-on opportunities to investigate Aboriginal peoples ways of sharing ideas and information through dance, stories, music and art.
- Explore the impacts of British colonisation on the local inhabitants of Sydney Cove, the Cadigal people.
- Appreciate the length of Aboriginal settlement in Australia.
- Engage with artefacts and

identify a range of natural materials used by Aboriginal peoples.

Structured around designated learning outcomes for Stages 1 through to Stage 5, the hands-on programs provide a conceptual framework for learning, allowing students to deepen their knowledge of Australia by engaging in the world's oldest living culture.

The Garden also offers a diverse range of educational programs and subsidies for eligible schools are available through the Gardens Open Access Learning initiative.

The Royal Botanic Garden Sydney is conveniently located in the heart of the CBD, easily accessed by train or bus.

Visit rbgsyd.nsw.gov.au/learn for more details.



# Aboriginal Histories and Culture

Join an Aboriginal Educator for an authentic and culturally relevant school excursion experience. Discover the rich Aboriginal heritage of the Garden and connect with the tradition and culture of the Cadigal people.

Bookings essential: rbgsyd.nsw.gov.au/learn





#### LED scoreboards enhance atmosphere and sports engagement



When selecting the perfect new scoreboard for your school grounds there is no substitute for quality. We believe LED scoreboards that are Australian-made are an important investment for schools as sport is a big part of students' passion and growth. The importance of sport encompasses more than just physical activity it develops mental growth and teaches life skills such as team work, leadership, and patience.

Electronic scoreboards increase the fairness and atmosphere surrounding gameplay for students, staff and parents, encouraging participation and the sporting community. The user-friendly components can be tailored to different sports, ranging from basketball, rugby or cricket to multi-sport, and the customisation



allows buvers to tailor their scoreboards with logos LEDs in their school colours.

Developments in school sporting technology mean units now provide high-resolution displays, with the option of either a computer-based or hand-held

wireless controller - with most remotes having the ability to reach over 200 metres, requiring only a power source to the board itself. It is also important to ensure the scoreboard controller is easy to use, as you don't want to train new people every sports game.

Many buyers choose to purchase overseas-made scoreboards due to the insubstantial price difference, however purchasing Australian-made products ensures construction knowledge and maintenance facilities are easily accessible for quick and reliable servicing of equipment. Australian made ensures quality sourcing of scoreboard components and LEDs. Schools should opt to buy high quality displays ensuring vibrant visibility in the harsh Australian sun during the day. Quality LEDs will stay vibrant throughout their lifespan of around 50,000 hours, compared to cheaper comparisons with components that deteriorate quickly in the harsh Australian climate.

One of the initial roadblocks for prospective buyers is cost; schools may ask for government grants or alternatively ask for sponsorship from local businesses in return for signage or display advertisement.

This can increase the community support for the schools sporting community and give the students greater support in the future.

There are many things to consider when buying the perfect scoreboard to suit your facilities. Any scoreboard can be easily mounted on the side of a building or free standing in a customised frame of your design. It is important to first consult an engineer and electrician to ensure your ideal location is suitable for the board's function. With the growing range of scoreboards customised to different sports and areas of installation, it is important to consider the size of the display appropriate for viewing. The wrong size scoreboard for the space is one of the most common mistakes, with sizes often ranging from 100 - 380mm character displays.

For example, a basketball court will only require a 100mm-150mm high character display board, which can be viewed up to 50m-100m away however for a viewing area the length of a rugby field, buyers would need a board with 300mm display or bigger. To ensure 100 percent viewing angle, we recommend placement opposite the spectators and enough height from the ground to avoid damage.

Additionally, due to the Australian climate, we suggest sourcing a waterproof scoreboard with quality aluminium as it resists corrosion. Heavy gauge polycarbonate windows enable protection from sporting equipment and vandalism and can be easily replace if damaged.

**By Bronte-lee Brook,** Southern Cross Scoreboards



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#### Sprung timber sports floors for sustained performance

In term four it's time to regenerate sports fields and empty your school pool for cleaning (if you have one). This is the period for any largescale maintenance to occur, while the clatter of not so tiny feet is heard elsewhere, and the school is quiet.

Multi-purpose sports halls take some punishing traffic throughout the school year and require constant attention. The life expectancy of sports surfaces ranges from 15 to more than 50 years, with various options available to suit a multiplicity of sports. Each substance requires a material-specific maintenance and replacement regime - and all will underperform if this is not adequately managed.

Sharing the mantle with Christmas and New Year, summer holidays in Australia can be a difficult time to get things done; thinking ahead is imperative. School News consulted Rik Allen from Nellakir, for the lowdown on a maintenance schedule for existing sprung timber floors, and what's involved with installing new timber flooring for your sporting facility.

#### **Industry View**

Mr Allen says indoor sprung timber flooring is gaining popularity, and that government subsidies have mitigated the drain on the budget, making it well worth a look, "In Victoria, for



Knox Basketball Stadium. Photo: Nellakir

example, the Private Partnership Project (PPP) has facilitated the construction of new sprung timber sports floors at government schools across regional and Metropolitan Melbourne."

He says the Victorian government has undertaken to co-fund facilities at primary schools that will be available to local sporting competitions outside school hours. "The rationale behind the PPP is to fully embed the school in local community and neighbourhood life."

"Nellakir has constructed sprung timber floors for eight of these new PPP sports facilities since the PPP began in 2016, and the the courts are used by the schools as well as for the broader local community."

"Sprung timber sports floors

are shaping up as the top pick for government initiatives, and the trend is extending to other states," he said. "The Victorian government has commissioned the construction of the state's first 'vertical' school in Ferrars St, South Melbourne. Nellakir is providing a multipurpose, sprung timber sports floor for the school - with a full size indoor court suitable for basketball, netball, volleyball, gymnastics, and for school assemblies."

Mr Allen says the reason for the shift towards sprung timber is its high level of resilience, durability and sustained performance. "Its long life expectancy is an attractive prospect, especially when dealing with a provider that can offer schools a life-time maintenance service."

"While installing sprung timber flooring ensures students are playing on surfaces primed for premium sports competition, these school gyms do draw a crowd. With local basketball, netball and volleyball competitions using the facilities, they sustain heavy traffic, which makes for real wear and tear."

"Timber is a 'living' material," he continued. "It requires regular treatment, to ensure it maintains bounce and surface regularity."

"The surface of the court has a specialist coating of oil modified urethane that enables the

glide, the speed, and reliability players depend upon in all levels of competition. On busy court surfaces, re-application should occur annually." Mr Allen says superficial maintenance requirements should be minimal: "Line markings should only be required at re-sand, except in cases where regular maintenance has not occurred."

#### **Maintenance schedule**

Sprung timber floors require a simple re-coating every 12 months to maintain the high level of surface quality and slip resistance - while a complete re-sanding should occur every seven to 12 years. The annual re-coating replenishes the floor, according to Mr Allen, though regular examination of the surface is advised. "Sport finishes are designed for grip, and the time it takes to wear will also depend on the extent and frequency of use."

"Re-coating maintains the grip required from the floor for elite sports action, maintains essential safety features especially important for schools - and lastly, it maintains the aesthetic appeal."

"With wear and tear and the build-up of finishes (coatings), re-sanding brings sports flooring back to the original brand-new state," he explained.

The process involves a total sanding back of the floor. The



Sprung Timber Flooring at Parade College. Photo: Nellakir

Knox Basketball Stadium. Photo: Nellakir

surface then requires reapplication of the finish and protective coatings that give sprung timber sports floors that sleek, polished appearance.

Long-range upkeep, will eventually involve removal and replacement. "After a specified period of time, which will depend on usage, upkeep, and wear and tear, sports flooring will need replacing," Mr Allen advised.

In the 'cosmetic repair' category, line markings may need to be refreshed. A variation in line markings may also be required, when new sports are embraced by the school community.

#### Stadium seating

Specific seating designed to sit safely atop the gloss finish of the sprung timber flooring is also

recommended. To guard against slip-related accidents, as well as damage to the flooring from abrasive materials, seating can be sourced from timber floor providers.

"Regular safety assessments of flooring and seating should be conducted by your provider," Mr Allen noted. "From a public liability perspective, this process is highly

recommended."

Receiving monitoring and maintenance on both flooring and seating from the original installer means "all repairs to stadium seating are based on original specifications, ensuring required integrity and functionality". Mr Allen says sprung timber sports floors have gained the confidence of schools; sporting clubs and

associations, and governments, due to their versatility, long product life, and aesthetic appeal. He said, "if an experienced supplier with a comprehensive service package is involved, the installation takes the skinned knees out of netball and the headaches out of maintenance for years to come".

By Suzy Barry, Editor

#### supplier profile

**KELLY SPORTS** 

#### Keeping students active a breeze

**Kelly Sports in-school sports** programs are designed to inspire students to improve both their fitness and basic movement and gross motor skills. All programs come with in-depth support for teachers, designed to furnish educators with resources required to run programs effectively.

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## School leaders influence canteen culture

School canteens are still a hot topic. Parents, health advocates, teachers and principals continue to puzzle over the necessary transformation of that iconic food outlet.

The research has shown repeatedly that healthy eating habits in childhood correlate to health and wellbeing in adulthood. Research also links the consumption of sugar, preservatives and colours in processed food with behavioural issues in children. The PISA report wasn't too glowing regarding Australian student behaviour, so a healthy tuckshop seems a win-win.

Canteens are a unique business – they are under ownership of the school and are generally operated by the P&C, yet, the ultimate responsibility for what is sold and how it runs lies with the principal.

In an article titled 'Is the banning of unhealthy foods at school canteens associated with principal influence or school policy?', published on www. obesityresearchclinicalpractice. com, authors, Reilly et al. concluded that "principal influence and supportive school policy are important factors in canteens restricting the sale of unhealthy food items".

A 2014 paper titled 'Australian school canteens: menu guideline adherence or avoidance?' published in *Health Promotion Journal of Australia* found "the majority of school canteens were not complying with relevant state or territory guidelines, particularly those schools in which no monitoring or enforcement of the guidelines was conducted". Government initiatives, like the National Health School Canteen



(NHSC) provide frameworks and checklists for canteen coordinators to develop menus that provide good nutrition for the school day.

This all sounds great, but the changes are triggering some transformational difficulty in some school cultures, and issues such as collective heel digging, or just canteen abstinence are endangering the viability of a number of school canteens. While some schools have managed the transition smoothly, with adaptability and enthusiasm, some schools are struggling to engender a transformational attitude within

canteen management, and/or their customers.

In May this year, an article appeared on www.news.com.au , titled 'School canteens risk closure due to loss of profit.' The article discussed the plight of canteens "faced with pressure to serve healthier food for students", which were "struggling to remain open".

A spokesperson for the Australian Schools Canteen Association (ASCA) was quoted, saying "63 percent of secondary school canteens believed the government's healthy food guidelines were causing the



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decline in profit". The message was clear: the phasing out of unhealthy items had caused sales to plummet. It's not clear if ASCA chief executive, David Edwards considers this necessary transitional pain, but he told reporters that "since the government put out the guidelines and forced schools to stop selling products, a lot of canteens are going out of business".

Perhaps against the backdrop of childhood obesity statistics, the growing furore regarding junk food advertising aimed at children, and type 2 diabetes cases appearing in younger and younger patients, it's time to let go of a harmful business model and refashion to suit the times

Regardless of the legitimacy of the old school canteen, schools have responded in a variety of ways. Some have embraced the new guidelines in-house, with canteen staff churning out salad wraps with freshly poached chicken breast, fresh fruit salads, and sushi rolls. They're replacing hot chips with jacket potatoes; and holding the icing on home-made cupcakes.

Some schools have outsourced the whole operation, taking a commission for each order placed. A school can sign up to an external provider: parents place orders online. The menu can be a combination of in-house food production, local suppliers, or pre-packaged foods that meet the health canteen guidelines.

For some schools, the convenience of these systems is enough to engage busy parents. Most schools have implemented healthy lunchbox guidelines, and ordering online from a selection of school-friendly foods allows families to manage their children's lunch needs on the run. For parents who may not have the time or expertise to prepare healthy lunchbox-friendly meals, this can be a modern family's saviour.

The online interfaces of these providers include features where you set up each child, record their 'regular orders' or preferences, making re-ordering a one or two click affair.

Students with food allergies can also be accommodated. For example, schools can elect to be a 'peanut free school' (where no item containing peanuts can be ordered for delivery to that location).

The solutions are varied, and range from shutting up shop in protest, to operating an in-house extravaganza with organic raw vegan and paleo options, but the revolution is here - and there is no turning back.

How well this transition is managed depends on the culture of your school; the skills and knowledge of your canteen coordinator, and the expectations of your school community.

By Suzy Barry, Editor

# The ultimate canteen ordering system



Ultimate Schools has been taking canteens online since February 2014. Founder, Andrew Docherty says the service means the mad scramble for correct change on tuckshop mornings is in the past. "It takes only five minutes for parents to set up an account and the convenience appeals to busy parents."

"It also averts the risk of lunch orders getting lost or money being spent by students before it even reaches the canteen," he added. The benefits extend to canteen operators who are saved the tedium of issuing change to families, not to mention deciphering the hieroglyphlike handwriting of parents on the run. "The app manages all payments; it issues refunds and clocks cancellations automatically. Canteen coordinators can

update the menu for parents to access in real time," Mr Docherty explained.

Inbuilt reporting can show total turnover and performance of particular product lines, removing the guess work from decisions about how many sandwiches to make.

Mr Docherty said, "the current system will easily link into any school management system via a hyper-link, and we're on the cusp of a 'one-stop-shop' update to include any school payments, like fees, uniform shop, or excursions".

Canteen operators can code ingredients so food allergy warnings appear on certain items. Families can log their child's food allergies so warnings or order blocks appear.

"Canteen sales invariably go up when the system is adopted. It's easier to order, and families order more when they are not restricted by the physical cash on hand."



#### Large scale lighting that won't break the bank

In past issues, we have explored the ideal lighting environment to optimise student learning. Assessing the quality of your school lighting involves asking questions like 'can they see the board well enough?' or 'is it too bright?' or 'is there glare that strains the eyes?'. This issue, we discuss how to illuminate larger multipurpose areas around the school grounds without breaking the bank. For an industry perspective, we called on Mahmoud Kebbi of Legrand, Australia.

#### **Industry view**

#### Is LED the best choice?

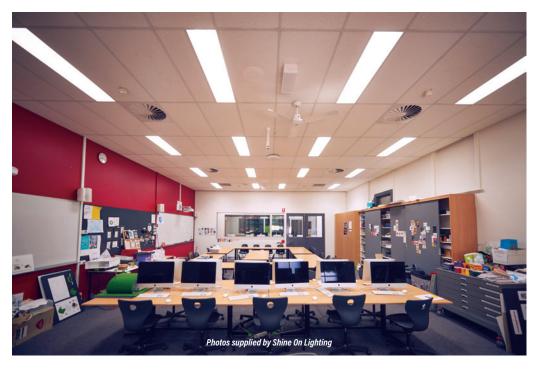
"Generally, any new school or refurbishment in an existing school will favour LED technology due to the impressive energy savings and maintenance cost reductions it provides. The only time I have seen fluorescent lighting in a school is due to legacy installations or if a luminaire needs to be replaced and no budget is available to replace all luminaires in that particular area," he said.

The market has spoken: "It is interesting to note that I have not seen any major developments in fluorescent technology from any of the major manufacturers of light sources. They are all focusing on LED technology."

#### For the multipurpose hall?

Many schools rent out their facilities for after-hours activities such as sport, martial arts, dance and circus skills and Mr Kebbi says lighting must be fit-for-purpose.

If a school's gymnasium is used for professional sports, Mr Kebbi says "it will need to be designed in such a way to ensure comfort



for not only spectators but also for players to clearly see the ball, for example".

"Placement of luminaires is also crucial, especially if players need to look up when playing in sports such as volley ball or badminton."

The Australian / New Zealand standard 1680.2.3 'Standards for interior and workplace lighting – educational and training facilities' (section 10.15) recommends that multi-use areas be "carefully planned to suit each of the diverse applications". The document also suggests that specific stage lighting requires a lighting engineer, and is outside the scope of the governing guidelines.

"Generally, in a multi-purpose hall, I see dedicated lighting for

general illumination plus sports lighting, and completely separate lighting installed for stage lighting," said Mr Kebbi.

He also noted that the systems must be designed to work together; when the stage lighting is in use, the main lighting will need to be dimmed or switched off (depending on the mood of the performance).

"One must understand the application and activities being performed in the area and consult a lighting engineer to ensure a satisfactory outcome that will not disappoint," he said.

#### For outdoor sports

According to Tennis Australia, outdoor court lighting must "control the brightness of the ball, and the background against which it is viewed, so that the ball is visible, regardless of its location and speed, while simultaneously minimising any potential adverse effects of obtrusive and spill lighting". Similar requirements will apply to basketball, and for social or amateur level play, the Tennis Australia recommendation of '250 Lux for social tennis' seems appropriate.





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Mr Kebbi says regulations regarding control of obtrusive effects of outdoor lighting (AS/ NZ 4282) must also be noted: "We don't want light to spill into neighbouring areas, or in the case of boarding schools into the bedroom windows of younger students."

Effective outdoor lighting provides adequate backlighting for the social tennis fundraiser, but also ensures the safety of bleary-eyed teachers heading to their cars after a night of collaborative marking. How welllit are your outdoor areas, such as stair wells, carparks, rubbish disposal areas, or externally located storage sheds? How safe do your staff feel? Academic journal, Urban Studies published research in 2015 indicating that lighting "normalised a site by deterring potential wrongdoers".

The report, titled 'Fear of crime and affective ambiguities in the night-time economy', argued that a person's ability to decipher the appearance of "moving bodies" in their proximity created a greater sense of safety. Adequate lighting can also improve security and reduce vandalism.

#### Carpark access

Mr Kebbi said, "the Australian/ New Zealand standard (AS/ NZS1158), which regulates lighting for roads and public spaces, provides recommendations for the lighting levels for carparks and pathways".

He explained that lighting should "provide enough light to guide late night staff, (such as cleaners, or teachers working late) to their vehicles, but also enough illumination to perform basic tasks, such as locating keys and unlocking cars".

In the Urban Studies article mentioned previously, researchers made a case for continuous light distribution:

"A person who moves from the dark into a circle of light created by a lamp-post experiences anxiety, as what happens beyond that circle is rendered extra dark and invisible."

"Trees can also cast shadows on the path, which may result in a discomfiting effect for someone walking alone to the carpark at night," Mr Kebbi added.



#### Lighting large areas, cheaply

How much outdoor lighting you require will depend on what your school community gets up to after dark, but safety for night cleaners and teachers working late should be a minimum consideration. Mr Kebbi says LED developments have delivered considerable savings. "Traditionally high wattage metal halide products were used with wattages up to 400 Watts; LEDs now provide the same level of light output with around half the power."

"For exterior security lighting, there are now LED luminaires that have integrated sensors so that the lighting is dimmed down to a certain level, and instantly increases to 100 percent when presence is detected." Mr Kebbi explained, adding that installation is simple with savings "that far outweigh the cost of the sensor".

Mr Kebbi says complete lighting control solutions that measure energy consumption of all luminaires connected are available: "They allow for real-time, web-based and offline reporting. All this data can be used as an input to a school's energy management plan to assist in identifying opportunities where energy reduction may be required resulting in energy cost savings."

By Suzy Barry, Editor

#### **LED lighting for cost-effective school lighting**

Schools can be plagued by lighting issues that undermine the learning outcomes of dedicated educators in a wide range of spaces. Stuart Templeman of Shine On Lighting says issues can range from low light levels, caused by internal wall configuration or lack of proper planning and installation, to difficulties accessing fixtures to change bulbs, and flickering tubes or globes.

"New globes covered by our warranty means no replacement costs for five years, and, for those flickering globes, we



use flicker-free drivers in our products and rewire ballasts out when changing tubes so this issue will cease."

School budgets have to stretch to

lighting multiple spaces, and tight funding means options such as schoolfriendly leasing arrangements are welcomed by thrifty schools.

Unnecessary light usage requires management and Ms Johnson said, "installing modern ultrasonic motion detectors will result in lights being on when occupied and off when not: increasing savings and extending product life."

He says it's understandable that school leaders can't be masters of everything: "engaging a lighting expert ensures schools get the right light for their space."

Mr Templeman says schools generally opt for tubes due to cost considerations:

"In NSW for example, you won't get the Energy Savings Scheme subsidy unless you upgrade tubes to panels. Panels are more expensive, but are a better-quality uniform light."

"We have upgraded over 90 schools to LED, saving a total of \$16 million over 10 years and over 100,000 tonnes of carbon in the same period," he said.

He says the very low-cost options are a false economy, costing more in the long run and for education, it's crucial to make sure the lux levels are conducive to learning. "They give off a lower quality (CRI) light which results in more eye strain and you can only get the subsidy once, so make sure you get the right light first time."

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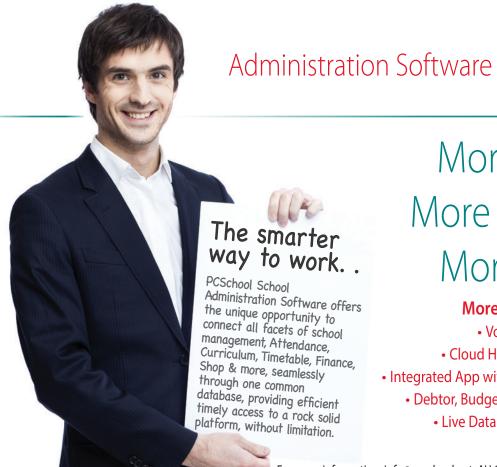
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