

# THE AUSTRALIAN EDUCATION REPORTER

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TERM 1 2018



"Never stop experimenting with new things, and never ignore what your mind and body are telling you."

**MELISSA CRANE**  
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Image: Alan Duffy

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Term Calendar

2018						
Mon	Tue	Wed	Thu	Fri	Sat	Sun
05	06	07	08	09	Feb	
12	13	14	15	16		
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05	06	07	08	09		
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Have an interesting story to share or know an inspirational educator we should profile?

Email [emma@edureporter.com.au](mailto:emma@edureporter.com.au)

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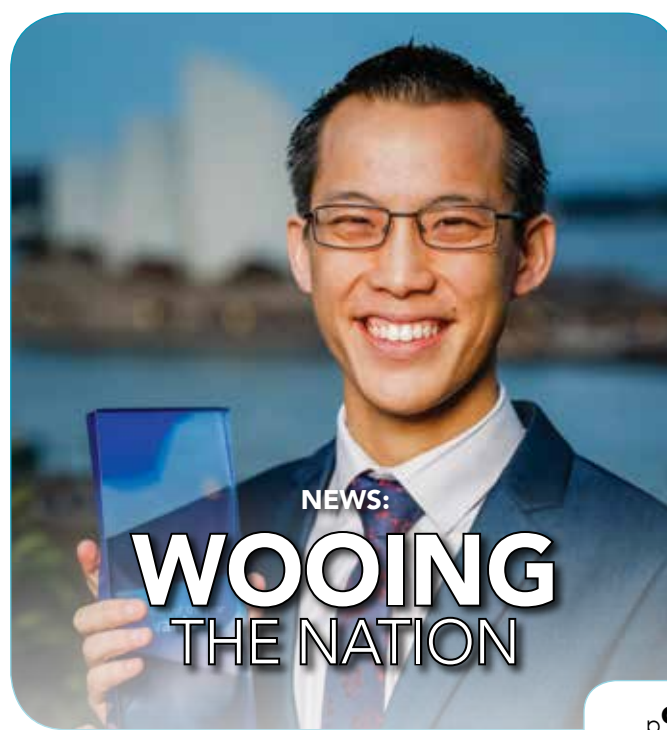
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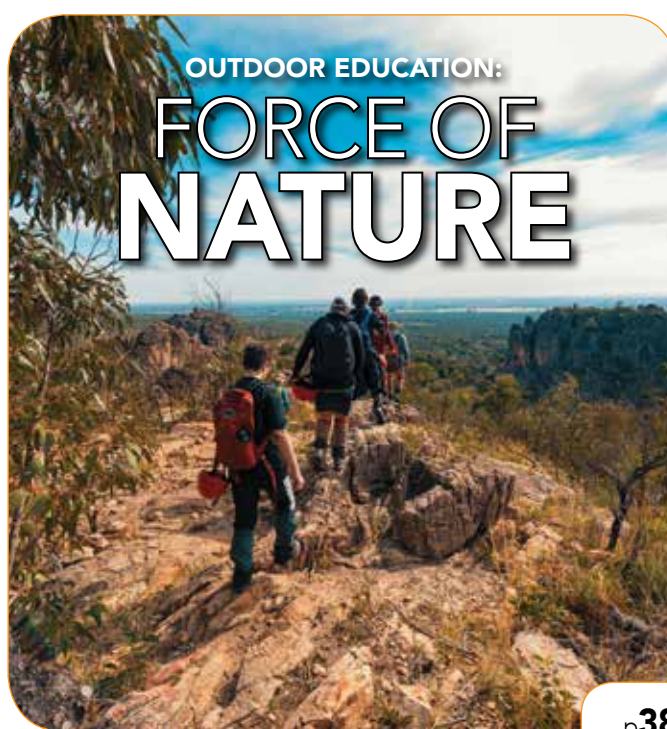
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# Teacher registration review launched

EMMA DAVIES  
NATIONAL

THE Federal Government has launched a national review of teacher registration practices to tackle inconsistencies in systems across the country with a focus on early childhood teacher registration, vocational education, and new teacher transition.

Education and Training minister Simon Birmingham said the review had been endorsed by State and Territory ministers.

"Too many teachers report how they struggled making the jump from university to working in a school, and so the registration process should ensure classroom proficiency is attained," Mr Birmingham said.

National Review of Teacher Registration chair Chris Wardlaw said the review would look at whether there was consistency in teacher registration processes across the country, including identifying examples of best practice, challenges, and barriers.

"We would especially urge teachers and principals to participate in the consultation process," he said.

To boost the delivery of vocational education, the review would also explore

**"Those different life experiences could shake up Australia's schools and add more depth to the talented teachers we have."**

making it easier for people with other real-world skills to become teachers.

Mr Birmingham said former tradies or nurses as teachers would be especially beneficial for the teaching of vocational and trade skills.

"Those different life experiences could shake up Australia's schools and add more depth to the talented teachers we have," he said.

Australian Education Union federal president Correna Haythorpe said the review disrespected the teaching profession and could lower teaching standards.

"It is important to attract people with different skills and life experience into the teaching profession, there should be no fast track to becoming a teacher," Ms Haythorpe said.

"Teaching is a complex and demanding role, and all teachers should be fully trained and qualified. Therefore if you want to be a teacher, then you need to do the training."



Education and Training minister Simon Birmingham.



## PROPOSED ITINERARY FOR TUTTI 2019

DAY	MORNING 0630 - 1230	AFTERNOON 1330 - 1630	EVENING 1800-2200
Day 1 Friday 5 July	Arrival in Beijing prior to midnight this day; met by China Stars events personnel Check into hotel		
Day 2 Saturday 6 July	Registration and local orientation Travelling staff and faculty meeting	Summer Palace 'flash mobs'	Welcome dinner Welcome performances
Day 3 Sunday 7 July	'toast 'n tunes' Master Classes or Guest Conductor sessions	Hutong Tour Chinese Tea Ceremony	Wangfujing Street
Day 4 Monday 8 July	'toast 'n tunes' Master Classes or Guest Conductor sessions	'midday melodies' Guest Conductor sessions or Concert 1 rehearsal/ sound check	'Ensemble Concert 1' School ensembles perform
Day 5 Tuesday 9 July	'toast 'n tunes' Master Classes or Guest Conductor sessions	Tian An Men Square Forbidden City	Acrobatic show
Day 6 Wednesday 10 July	'toast 'n tunes' Master Classes or Guest Conductor sessions	'midday melodies' Guest Conductor sessions or Concert 2 rehearsal/ sound check	'Ensemble Concert 2' School ensembles perform
Day 7 Thursday 11 July	'toast 'n tunes' 'tutti festiva' sound checks	'tutti festiva'	Free
Day 8 Friday 12 July	The Great Wall Combined choral performance on the Wall	Hongqiao Market	Farewell banquet 'bye-bye Beijing' performance
Day 9 Saturday 13 July	'toast 'n tunes' Temple of Heaven 'flash mobs'	Art District 798	Art District 798 Dinner with Beijing roast duck Olympic venues by night
Day 10 Sunday 14 July	Check out of hotel by 12pm; depart for Beijing International airport for home		

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# TUTTI WORLD YOUTH MUSIC FESTIVAL BEIJING JULY 5-14 2019

# tutti

world youth music · beijing

With a stellar international faculty selected and directed by Paul Dean, one of Australia's leading music educators, tutti is an exciting event for school age musicians and singers from around the World.



## Andrea Stimson — St Stephens School Director of Music Curriculum

"The tutti world youth music festival provided an outstanding and life-changing opportunity for our music students, and the Music Program at St Stephen's School continued to reap the benefits of this incredible experience.

One of the greatest features of this Festival is the flexibility it offers to all types of Music Programs. This Festival is great for all types of ensembles.

We toured with a Concert Band, Orchestra, Swing Band, SATB choir and male and female barbershop groups. Next time we will be taking our Senior Guitar Ensemble as well. Other ensembles that participated during our Tutti experience included a Marimba Band, a Percussion Ensemble and a Recorder Consort.

In addition to intensive rehearsals, master classes and performances, our students had the opportunity to hear the faculty perform during lunchtime and evening concerts - a wonderful learning experience in itself. Tutti can serve as a springboard to assist the development of a Music Program once the students return home. It can provide a larger, established Music Program with intensive technique and performance development at the highest of levels as the students are able to work in master classes and rehearsals with outstanding professional musicians.

As a school that tours regularly, it was really fantastic not to have to take our bulky and heavy percussion equipment - the Tutti organisers made sure we were able to use the outstanding selection of percussion instruments available at Dulwich College. I have to mention the incredible attention to detail shown by the Tutti organisers when it came to coordinating itineraries, meals, accommodation, performances and sightseeing.

The opportunity for parents and supporters to tour alongside Tutti, attending major performances but enjoying a varied itinerary and separate accommodation from the Tour groups was an unexpected and successful bonus for our parents.

Finally, singing together on the Great Wall of China - does it get any better?

I would thoroughly recommend this Festival, not only for the intensive musical work that it allows our students to engage in, but for the flow on impact this has on the rest of the Music Department for years to come. We are definitely planning to go to Tutti again in the near future!"

## Professional Development opportunities for Teachers

As a result of its stellar international faculty of outstanding musical performers and teachers, tutti 2019 Beijing will provide unique opportunities for music educators to improve their pedagogical and ensemble training skills through a targeted program of professional development. Topics to be addressed in this Professional Development for Teachers component will include:

- Music advocacy to promote and support the important work of music educators
- Choosing repertoire to achieve optimal student outcomes
- Score preparation and rehearsal pedagogies for developing better student musicianship
- Conducting gesture and non-verbal communication to make music more expressively
- Developing students' aural and improvisational skills
- Recruiting and retaining musicians in school programs
- Instrument-specific pedagogy tips from professional performing artists

This component will be coordinated by Professor Rob McWilliams who is widely recognised as one of Australia's leading pedagogues in the area of pre-service and in-service professional development.

**WE URGE YOU TO BRING YOUR INSTRUMENT AND JOIN IN THE MUSIC MAKING.**



# Education tops election agenda

REUBEN ADAMS  
SOUTH AUSTRALIA

## LABOR: LAPTOPS FOR STUDENTS

AHEAD of the March State election, the Labor Government's newly announced five year, \$70 million Laptops for Students program will see all year 10, 11 and 12 public school students own personal laptops by 2021.

A trial laptop roll-out would commence for a number of schools in the second term of 2018, with full roll out to all year 10 public school students in 2019.

The State Government has also announced upgraded broadband speeds for all public schools and preschools across the State.

Public school students with special needs would also benefit from a recently announced \$57 million funding boost over the next five years.

## LIBERAL: \$190M FOR VET

If elected, a Marshall Liberal Government is committed to "comprehensive program" to improve literacy and numeracy outcomes for all students, but especially students with dyslexia and other learning difficulties.

This program would include literacy coaches, phonics checks for all year one students, free dyslexia workshops for parents, professional development opportunities for teachers, and a review of how SACE exams are conducted for students with dyslexia and other learning difficulties.



SA minister for Education and Child Development Susan Close (left), Premier Jay Weatherill, and Labor candidate for Badcoe Jayne Stinson at Plympton International College.

The Liberals also spruiked a \$100 million investment in more than 20,000 new places in the Vocational Education and Training (VET) system.

## SA-BEST: TACKLING JOB SECURITY

Xenophon's popular SA-BEST party said it would address the lack of job security for teachers and

support staff, particularly the high levels of short term contracts and casual employment, and the increase in non-core administrative tasks.

The party also supports the transition of Year 7 students into secondary school, the reduction of centralised bureaucracy and administration, and the more effective allocation of resources to where they are needed most and will make the most difference.

"Teachers are hard-working, dedicated

professionals who have had far too little support for far too long when dealing with the complex problems children often bring with them to school," Morialta candidate, educator and SA-BEST education and learning spokesperson James Sadler said.

"Teachers are no longer just educators - they are adjudicators, psychologists, enforcers, philosophers, sports coaches, career counsellors, and even nutritionists."

# Leading the STEM revolution

## NATIONAL

OUR world is changing fast. Currently, 60 per cent of new jobs require skills held by just 20 per cent of the workforce. It is estimated that 75 per cent of the fastest growing occupations require STEM related skills and knowledge, while 40 per cent of Australian jobs face the risk of becoming fully automated in the next 10 to 15 years.

Educators understand that the world is constantly evolving, which means schools must implement relevant STEM learning with a basis in real world activities.

This has led Direct National to introduce STEM starter packs to schools. The starter packs are just that! An excellent means of getting your STEM precinct underway.

Manly State School principal Clayton Carnes is just starting the school on their STEM journey. A new STEM precinct is underway using the STEM starter packs as the basic foundation.

With more than 21 years' experience supplying products to the education sector, Direct National managing director Phil

MacPhail knows that every school delivers the curriculum to students in different ways.

"We take the time to understand requirements, school ethos and desired outcomes," Mr MacPhail said.

"For us it's not about product distribution, we have a firm belief at Direct National that every child, teacher and employee deserve the best resources.

"This is the driving force behind our business and why we have had substantial growth and are now Australia-wide suppliers."

Direct National also conducts conferences across Queensland to help teachers introduce STEM precincts into their schools. These conferences aim to leave teachers inspired with a plan to engage their students.

The thrill of discovery, working alongside schools that are discovering and adding tools to their STEM precinct, outlining the most suitable options and offering ongoing support and expertise advice with all supplied products, is at the heart of Direct National's approach.

Many schools have already begun the STEM journey. Goodna State School is a prime example and with the help of Direct National uses hands-on, practical tools and flexible spaces to inspire, encourage, and support students to play, discover, explore, problem solve and create real world applications for STEM.

Goodna State School has even received praise from Sir David Attenborough for their STEM projects and efforts engaging with academia and industry to provide students with a real world experience.

As a major partner with Queensland Association of State School Principals, and a key liaison with Education Queensland, Direct National understands STEM is high on the agenda, and is active in STEM developments, working alongside industry partners Microsoft, Dell and Cisco.

Partnerships with industry will not only provide opportunities for teachers to increase their skills, but will allow students to see the link between coding robotics and their future work and study.

The Queensland State Government has made a firm commitment to STEM;



The Department of Education and Training is strengthening STEM education in Queensland state schools.

by 2020, 100 per cent of State Schools students will be taught coding and robotics and 100 per cent of schools will have active partnerships with industry and universities; the overall aim to create students who think, explore and question without reservation.

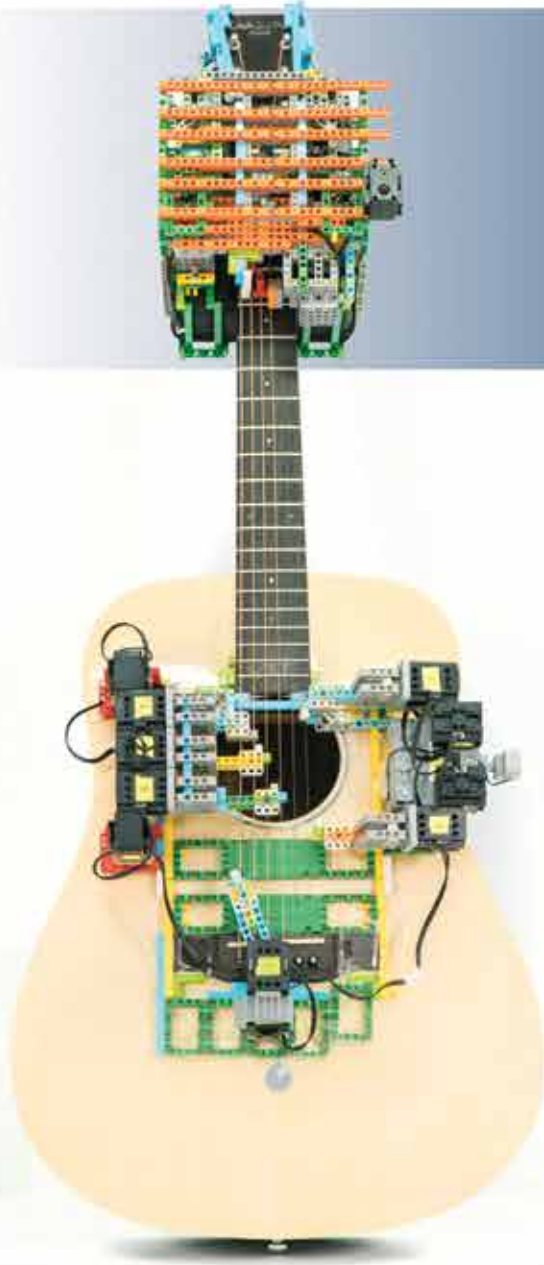
More information about revolutionising STEM at your school can be found at [www.directnational.com.au](http://www.directnational.com.au).

## FOR MORE INFORMATION ON:

- Opportunities for girls in STEM visit **STEM Girl Power Camp**
- Skills needed for future jobs visit **STEM skills in the workplace: What do employers want?**
- Where Australia sits in STEM worldwide visit **Bench-marking Australia science, technology, engineering and mathematics**
- The Chief Scientists STEM strategy visit **Science, Technology, Engineering and Mathematics in the National Interest: A Strategic Approach**

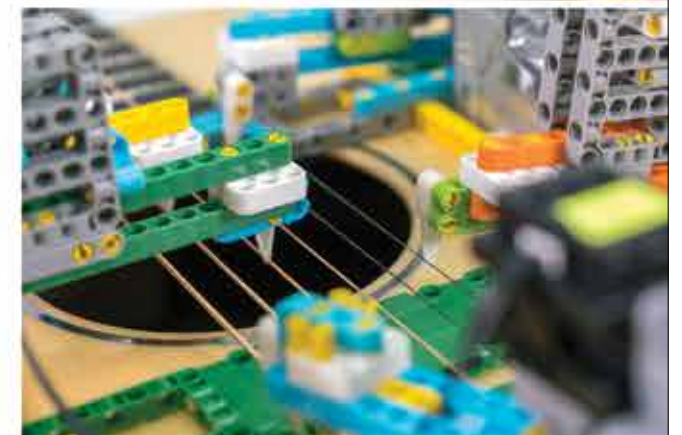
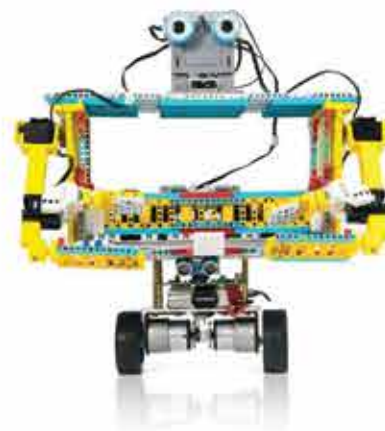
# uKit

The uKit is a programmable building block kit tailored to STEM education, helping students reach their potential by improving their abilities in critical thinking and creativity while simultaneously fuelling their interests in science and technology.



## FEATURES INCLUDE:

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- Visual programming block coding



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- Salt Water Fuel Cell Buggy Kit
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- Air Powered Bottle Car Kit
- Hydraulic Water Powered Robotic Arm Kit
- Solar Powered Wild Boar Kit
- Solar Powered Rover Kit
- Crystal Radio Kit



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# Property profile report

## NATIONAL

If you're buying, selling, investing or even renting, it's important to find out as much as possible about a property. Get a better view of a home's potential price with a free ANZ Property Profile Report.

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ANZ provides property price estimates from a number of sources.

Estimates are based on a number of variables including recent public sales data for similar properties in the area.

The price estimate is a guide and not a bank valuation.

### What did other comparable properties recently sell for?

You'll see a number of recently sold properties in the area, selected based on property features, recent sales and location.

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Have a look at the advertised price of similar properties that are currently on the market.

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Find out more about how the suburb's doing in the property market, including how house and unit prices have changed over the past 10 years.

### How much did it sell for before?

Get the sale history for the property you're interested in, including price, type of sale and the agent who sold it (where available).

At ANZ, the staff recognise and value the important relationship they have with the Australian education community.

As well as the ANZ Property Profile Report, ANZ provides access to a range of specialists, tools and information, which could help people make confident decisions about life's moments, big and small.

More information can be found at [www.anz.com](http://www.anz.com)

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# Education costs soar: report

REUBEN ADAMS  
NATIONAL

THE Independent Schools Council of Australia (ISCA) is disputing research which claims that the estimated cost of a private education has soared by 64 per cent in the past decade.

The *Planning for Education Index* from Australian education investment fund ASG asserted that the estimated cost of a private education across metropolitan Australia for a child born in 2017 was \$487,093; a jump of \$190,820 compared to a child born in 2007.

The estimated cost of a systemic education soared by 57 per cent over the same period to \$239,672, while the cost of a Government education climbed 25 per cent in the past 10 years to \$68,613.

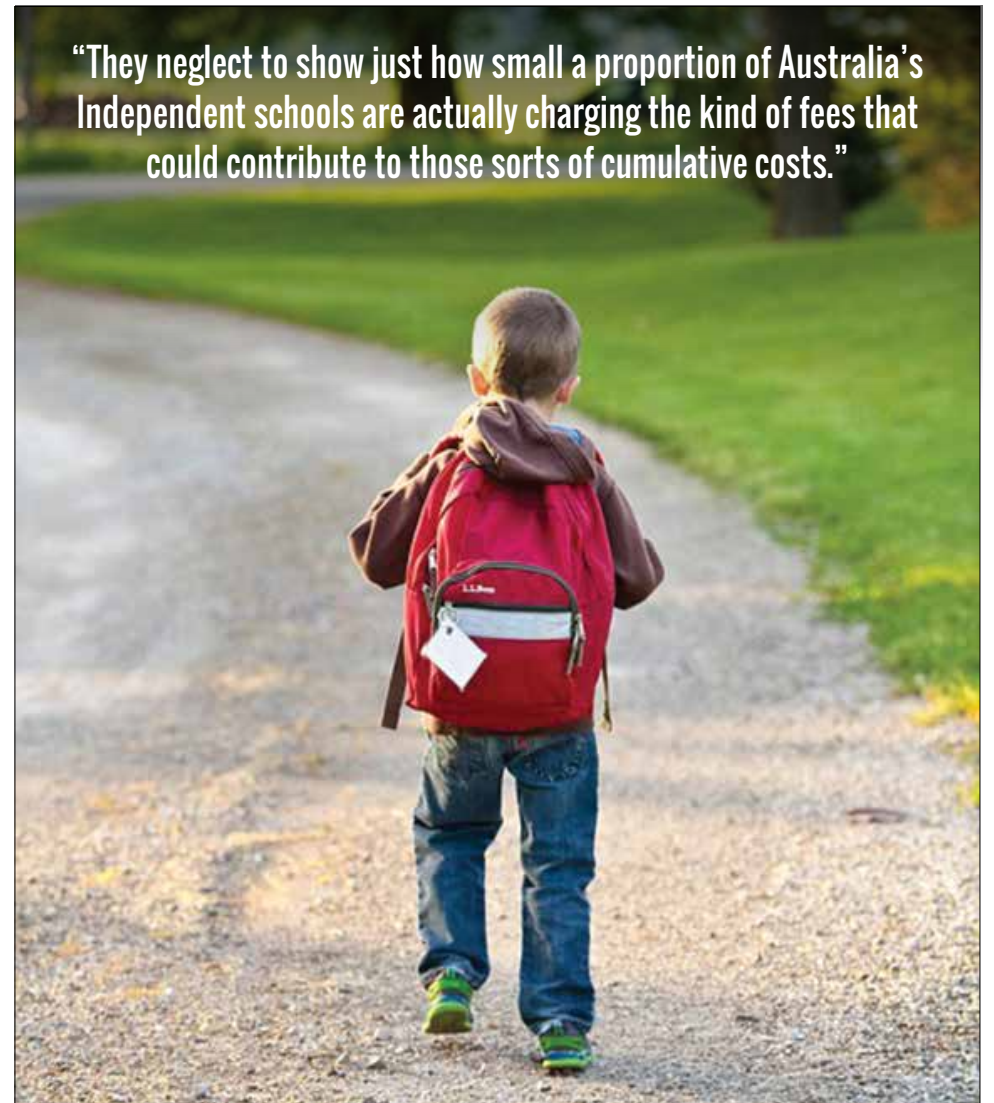
The survey named Sydney (\$575,140) as the most expensive city in Australia to educate a child in the private school system, at 18 per cent above the national metropolitan average (\$487,093) and significantly more expensive than Melbourne (\$536,515) and Canberra (\$447,307).

ASG said the research – based on more than 12,500 responses from parents – calculated a range of variables including school fees, transport, uniforms, computers, school excursions and sporting trips to determine the cost of education.

School fees, the cost of extracurricular activities including excursions and uniforms all rose in the past year, however computers and transport costs had fallen when compared to 2016.

The Independent Schools Council of Australia (ISCA) said that the research did not reflect the majority of Independent schools.

ISCA Executive Director Colette Colman said that while ASG stated that their school fee figures represented the upper ranges that parents can reasonably expect to pay, "they neglect to show just how small a proportion



of Australia's Independent schools are actually charging the kind of fees that could contribute to those sorts of cumulative costs".

"ASG's fee estimates state that the 2018 national metropolitan upper-range figure parents could expect to pay in secondary school fees is \$21,004 per annum," she said.

"However, the most recent official data shows a median Australian metropolitan Independent school fee of \$6,441 per annum.

"Nationally, 70 per cent of metropolitan Independent schools are charging below \$10,000 per annum."

# Parties commit to more teachers

EMMA DAVIES  
TAS

THE State Liberal Government is the only party not committed to boosting educator numbers ahead of the State election on 3 March, according to the Australian Education Union (AEU).

The Labor Party, the Greens and the Jacqui Lambie Network have all backed AEU's 'Quality Education for all' campaign to boost overall educator numbers.

"Three political parties have all committed to significantly boosting educator numbers while the Liberals have been silent," AEU Tasmanian president Helen Richardson said.

"All parties must commit to delivering additional resources and staff to our schools, colleges and TAFEs so every child gets the opportunity to have a great education."

"Properly resourcing education should be a priority for all politicians in the lead-up to this election," she said.

A majority Labor Government would deliver \$63 million in funding to provide Tasmanian schools with more than 300 new teachers and education support staff.

Labor intends to employ 201 teachers and 107 support staff over the four years of the \$63 school staffing package.

"We know that our teachers are stretched to breaking point and we cannot hope to get the best from them or for our students without providing additional capacity to allow them the time they need to teach,"



Tasmanian teachers supporting the AEU's Quality Education for all campaign.

Labor Leader Rebecca White said.

A re-elected Liberal Government promised to roll out Grade 12 to all state schools by 2022.

Education Minister Jeremy Rockliff cited the release of the Education Report on Government Services (ROGS) as confirmation that the Governments Year 11 and 12 High School extension program was

working.

"While we have made great progress with our Year 11 and 12 high school extensions, we will push for even more improvements with a target of increasing the retention rate of Year 10-12 students to at or above the national average by 2022, and to have 75 per cent of all students in Year 12 complete their TCE by 2022," he said.



# Wooing the nation



“Parents, politicians, managers and the media - we all must do our part in honouring our schools and those who work in them. Our children are depending on it.”

Mathematics teacher Eddie Woo delivering the 2018 Australia Day Address.

## EMMA DAVIES NATIONAL

HIGH school mathematics teacher and internet sensation Eddie Woo has added to his list of accolades by delivering the 2018 Australia Day Address.

Hosted by the Australia Day Council of NSW, the Australia Day Address is a celebration of thought, diversity of opinion and freedom of speech.

“Being a teacher gives me the opportunity to see and savour the very best of what Australia is. I get to see students dream of what they might one day become and achieve – citizens who will make a positive difference in

Australian society,” Mr Woo said.

Mr Woo also said that while Australian schools work hard to offer a world class learning environment to every child, the issues of teacher retention and burnout needed to be addressed.

“Valuing education isn’t about awards and accolades. It’s much more about trust and respect,” he said.

“Parents, politicians, managers and the media - we all must do our part in honouring our schools and those who work in them. Our children are depending on it.”

Head of mathematics at Cherrybrook Technology High School in Sydney, Mr Woo rose to fame when he started posting videos online for a student who was missing a lot of

school. His YouTube channel Wootube now boasts almost 200,000 subscribers worldwide.

Mr Woo was recently named as one of the Top 10 finalists in the Varkey Foundation Global Teacher Prize with \$US1 million in prize money up for grabs.

NSW Premier Gladys Berejiklian said Mr Woo’s innovative and dynamic methods have transformed the way students relate to mathematics.

“Through his unique ability to engage with young people, Eddie Woo has helped countless students to overcome a fear of maths and nurture a love of learning,” Ms Berejiklian said.

“Eddie’s passion and dedication to teaching and his personal story is truly inspiring.”

# Beyond the Broncos

## EMMA DAVIES QLD

BRISBANE Broncos star Anthony Milford has launched the 2018 Beyond the Broncos program at his old high school, St Peter Claver College in Riverview.

The Indigenous mentoring program aims to improve school attendance and Year 12 completion rates for Aboriginal and Torres Strait Islander students.

Mr Milford spoke to students in a Q&A session alongside Alexia Baker from the Queensland Firebirds, about the importance of working hard, and how his effort and commitment to education not only translated to his NRL career, but also the completion of his Certificate IV in Youth Work.

“If I had someone mentoring me while I was going through high school it would have helped me out heaps,” Mr Milford said.

“The amount of time and effort you put in is what you get out of it.”

The Beyond the Broncos program



Anthony Milford (right) and Broncos youth employment coordinator Hamish McLoughlin (left) present a commemorative plaque to St Peter Claver Principal Niall Coburn.

ambassadors are set to visit 35 schools across QLD and NSW, returning each term to conduct youth development workshops

aimed at educating and motivating young Aboriginal and Torres Strait Islander people in Years 10 to 12.

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# NSW students scoop 2018 STEM awards

EMMA DAVIES  
NATIONAL

THE winners of the 2018 BHP Billiton Foundation Science and Engineering Awards include an autonomous window cleaner, a water filter and fertilizer made from agricultural by-products, and bioplastic made from prawn shell and silkworm silk.

Three Sydney-based high school students were awarded Australia's most prestigious school science and engineering prize, a partnership between CSIRO, the BHP Billiton Foundation and the Australian Science Teachers Association (ASTA).

Barker College student Oliver Nicholls from NSW won the engineering category, combining his knowledge of mathematics, physics and design to create an autonomous robotic window cleaner designed to reduce injury and decrease the costs of window cleaning.

Winner of the Investigations category was Sydney Girls High School student Minh Nga Nguyen, an aspiring environmental engineer who used agricultural by-products such as corn husks, bamboo scraps and rice waste to create a biochar product with the dual capability of filtering water and then being used as a fertilizer.

**“The world is changing faster than many of us can keep up with, but science, technology, engineering and maths can guide that future through innovation.”**

Also from Sydney Girls High School, Innovator to Market category winner Angelina Arora developed a bioplastic made from prawn shell and sticky protein from the silk of silkworms which completely degrades.

The plastic has potential to replace current plastic shopping bags and other packaging to reduce the environmental impact in landfill and in the ocean.

CSIRO chief executive Dr Larry Marshall said the award winners' ideas and achievements would inspire other students to become innovators.

“The world is changing faster than many of us can keep up with, but science, technology, engineering and maths can guide that future through innovation,” Dr Marshall said.

Six of this year's finalists will have the opportunity to go to Intel International Science and Engineering Fair (ISEF) in the US, where over 1800 high school students from 75 countries, regions and territories are given the opportunity to showcase their research.



Winner of the Innovator to Market award, Angelina Arora.



Winner of the Investigations category, Minh Nga Nguyen.



Engineering category winner, Oliver Nicholls.

## Renewable powered classroom trial

REUBEN ADAMS  
NSW

RENEWABLE powered 'smart' classrooms with the ability to power both themselves and two more conventional classrooms will be trialled in NSW schools.

Hive Technology will build and install two prototype classrooms at St Christopher's Catholic Primary School in Holsworthy and Dapto High School in Dapto, with Australian Renewable Energy Agency (ARENA) providing \$350,000 for the trial.

“With the average Australian classroom consuming approximately 3800 KWh per year, these trial classrooms have the potential to reduce both energy consumption and costs in our schools,” Federal Environment and Energy minister Frydenberg said.

“They have the ability to not only power themselves, but also generate enough power for two additional convention classrooms, totalling approximately 11,400 KWh per year.”

The portable classrooms incorporate solar PV generation, real-time energy metering and air quality monitoring.

Data is collected in 15 minute intervals from a network of meters and sensors installed in each classroom, enabling the schools to actively manage energy demands and control indoor environment quality via a user-friendly dashboard.

“This is a great opportunity for our students to learn about energy production and consumption as well as various exciting technology developments – many of which Australia is at the forefront,” Mr Frydenberg said.

## New schools for “rapidly growing suburbs”

REUBEN ADAMS  
WA

THE WA State Government is investing more than \$55 million in three new primary schools to cater for growing populations in Perth's outer suburbs.

Construction of Baldivis North (South East) Primary School, Banksia Grove East Primary School and Caversham South Primary School will begin this year, ahead of opening for kindergarten to Year 6 students in 2020.

The \$16m, 430-student Baldivis North (South East) Primary School will incorporate first-class art and music facilities.

Construction on the \$22 million, 540-student Banksia Grove East primary school will begin this year with the school to fully open in 2020. The \$17.3 million primary school in Caversham South will have capacity for 430 students and will relieve pressure on nearby Caversham Primary School.

## Virtual classrooms for remote students

EMMA DAVIES  
NT

THE NBN Co's Sky Muster is moving beyond the delivery of broadband services, with the launch of a multicast technology trial to allow remote students in the Northern Territory to participate in virtual classrooms.

Federal Indigenous Affairs minister Nigel Scullion said the trial launch was a great step forward for students and teachers and would help close the gap in the education of rural students compared to students in urban areas.

“Learning in these remote locations will now be easier thanks to Sky Muster's multicast technology, giving students and teachers

access to online learning through clear audio, high resolution video and the ability to share large files,” Mr Scullion said.

The three month trial of the broadband service will span 15 locations across the Northern Territory, with the plan to roll out the technology to rural and remote locations across Australia by mid-2018 if successful.



# PROMOTING POSITIVE EDUCATION

After implementing Positive Psychology into her own life, educator Melissa Crane now offers positive education workshops for primary aged children and their teachers to improve learning outcomes and long term life satisfaction.

EMMA DAVIES

## Q. Why did you become a teacher?

I loved the idea of teaching when I was younger, but for some reason, that desire didn't carry over into high school or post-high school life.

Instead of studying education, my first degree was a Bachelor of Communications, which led me to a marketing job for two major car dealerships.

I very quickly realised that the corporate life wasn't for me. A few hard, miserable months at the dealerships gave me the push I needed to become the teacher I once dreamt of being.

I re-enrolled in University, and on my very first day I knew it was the right decision.

I don't know why I enrolled, specifically. It wasn't some earth-shattering realisation that I had to go save the children of tomorrow, one correctly spelled word at a time. I just desperately needed change in my life and decided to follow my gut.

All I knew is that I had a really good feeling about the direction I was headed.

## Q. How did Inspire Happy Humans come about?

After graduating I became a relief teacher. Teaching was new and exciting at that point, and I really enjoyed what I was doing. Everything about teaching felt so right to me and I knew I made the right choice.

Unfortunately, my life at home wasn't quite as good. I hit a long, dark period where I felt helpless and lost. I'd just come out of a long-term relationship and I didn't really know anything about myself or what I wanted out of life. I was just going through the motions, and it wasn't working for me.

A gorgeous friend saw my struggle and pointed me in the direction of my first ever self-development book. It made me realise that I had more control over my life than I realised. It allowed me to take the power back and change what wasn't working. I wasn't as helpless as I initially thought.

This realisation was a game-changer for me, and gave me an unwavering drive to find out as much as I could about how to create a better life. Every spare moment I had I read, researched,

journalled, brainstormed ideas, tried every gratitude intervention imaginable, and became a quote-junkie.

I wanted to tell the world what I was discovering, but I didn't want it to sound like airy-fairy self-help babble, so I made sure everything I was learning was scientifically-backed. This was my first exposure to Positive Psychology. My life was rapidly changing, and all I could think was, 'why didn't I know about this earlier?'

My personal growth coincided with noticing more and more children – young children – who lacked confidence, showed signs of anxiety and depression, isolated themselves from their peers, and generally looked like they held the weight of the world on their shoulders. Here I was thinking kids were meant to be the bright, bubbly, care-free, innocent, adventurous souls of our society, yet so many of them didn't show it.

As a relief teacher, I was in a different classroom every day, and in almost every one of those classrooms, one or more children exhibited those same traits. It broke my heart and lit a fire within me to make a change.

It took me to 24 years old to find Positive Psychology and make positive change within my life, but no way should these kids have to wait as long as I did.

I decided I would re-enrol at Uni (again!) to learn how to teach Positive Psychology (in the form of Positive Education) to as many children and families as possible.

I was on a mission to see less children struggling, and more children flourishing. And so Inspire Happy Humans was born.

## Q. Why is Positive Education so important for primary school students?

If I asked any parent the question; 'in one or two words, what's the one thing you want for your child?' the answer will usually be happiness. But what are we currently doing to achieve that outcome in our classes, schools, and homes?

The majority of us aren't doing much, because we simply don't know how to.

If we want more happiness for our children, then we need to improve their general wellbeing as early as possible.

The earlier we start, the more time they'll

have to improve their skills throughout their schooling, and the longer-lasting the effects will be.

Our top priority should be to prevent ill-being amongst our children. To reduce the horrendous statistics that show childhood depression is on the rise.

Beyondblue.com.au states that suicide is surpassing car accidents as the most common cause of death amongst our youth.

These statistics need to change, and we should be doing everything in our power to initiate that change.

The scientifically-backed interventions taught via Positive Education have also been shown to increase life satisfaction and improve learning outcomes in children.

Why wait? It's clear that Positive Education is highly beneficial for the individual and the community, and the sooner we get started, the better off we'll all be.

## Q. How can teachers improve the mental wellbeing of students?

Improve their own wellbeing first. I am a huge advocate of being the example, and I truly believe you can't pour from an empty cup.

Teachers – take care of yourself and work on you. Prove to yourself that Positive Education works, believe in it, reap the benefits, and show the children you teach that they can do it too.

Be the change you wish to see in your classroom, and you'll see your classroom change.

## Q. Should Positive Psychology be included in pre-service teacher training?

Absolutely! When we learn about Positive Psychology, we begin to implement the ideas and interventions into our own lives. Like I said before, the best thing a teacher can do to improve the mental wellbeing.

The first years of teaching can be an incredibly challenging time, so it would be great to see new graduates starting off on the right foot with the skills to move through inevitable challenges more gracefully.

It's also important to mention that just like there's an art to teaching literacy and numeracy,

there's also an art to teaching wellbeing to ensure maximum engagement.

Provide children with the foundations for effective learning, because their wellbeing is paramount.

## Q. Do you have any advice for prospective and current primary school teachers?

Four things – be curious, believe, take responsibility, and persevere.

Be curious about life! Can it get better than this? What do I want? How can I progress? How can I get to where I want to be? Who do I want to be? What works well for me? How can Positive Psychology help me?

Then, believe that it's possible. Read the studies that show the benefits of Positive Psychology. Know that if it's worked for others, it can work for you, too. Believe that anything is possible, and believe in your abilities enough to do it.

Next, take total responsibility over your life and commit to making positive change. It's entirely in your capable hands!

Finally, persevere, because Positive Psychology does not offer a cookie-cutter one-size-fits-all solution.

Every person is so unique, and what works for one may not work as well for another. Never stop experimenting with new things, and never ignore what your mind and body are telling you. They know best.

## Q. What achievement are you most proud of?

It might sound a bit cliché, but I'm proud that I believed in myself enough to make a change. I leapt from the familiar – classroom teaching – to the unfamiliar world of business, because I have to help solve a problem.

At times, it's been terrifying and difficult, and self-doubt has been trailing me since the get-go, but I am so proud of where I am and so proud of where I'm going.

My greatest achievement from here will be seeing the positive changes in the children I have the pleasure of teaching. Nothing could beat that.

# IT'S NOT ROCKET SCIENCE

**Students are turning away from STEM at alarming rates – so how do we arrest the slide?**

**To engage more young people, astrophysicist and STEM champion Alan Duffy says learning should be a toolkit for curious students to explore and explain the world around them.**

EMMA DAVIES

## Q. Why is science education so important?

It is critical that young people become as scientifically literate as possible. We live in an age of increasing technological sophistication where the solutions to some very serious challenges in the future will require more science, not less.

Young students today are the voters of tomorrow, and while only some of them are involved in designing, creating or implementing future technologies, all of them will be asked to judge the solutions to some very complex situations.

## Q. How can schools prepare students for the jobs of the future?

While it's impossible to accurately predict the exact nature of future jobs – significant numbers haven't even been created – it's fair to say that some things never change, and that's exactly what schools should focus on.

The basic laws of science, mathematics and engineering principles will only be more relevant for future roles than they are today, as industries become more technologically advanced.

Having familiarity of computer coding will be valuable. Although advances in AI may require less hands-on programming and more high-level guidance of self-developing code, the need to understand how it works will be critical.

Having that grounding in STEM and computer science basics will be invaluable, but so too is the ability to learn.

Students will be constantly finding solutions, learning new skills, and teaching themselves how to use as-yet unimagined tools.

So schools should teach the basics, but in a way that has the students learning how to learn; then they can be ready for whatever the future holds.

## Q. What makes STEM subjects attractive to students?

Making STEM subjects relevant to a student's life is an easy way for them to see the value of what can otherwise be highly abstract concepts.

For example, the fact that time ticks slower the closer you are to the Earth's surface is a bizarre outcome from Einstein's General Relativity, and that will appeal to certain students.

But perhaps you'll find more will be interested if you mention that this causes the atomic clocks in space to race ahead of the more slowly moving clocks on Earth.

This would result in the satnav on your

Professor Alan Duffy.



smartphone being inaccurate by 100m within hours if not corrected.

That's why we explore scientific discoveries in context and in an approachable way at Australia's Science Channel.

STEM is not a subject to be learnt for a test, it's a toolkit to explore and explain the world around you.

## Q. How do we encourage more female students into STEM?

There is a challenging and deeply seated falsehood in our society that STEM is for boys, and girls aren't interested – or worse yet, incapable – of pursuing it as a topic.

It's simply not fair that female students are missing out on the joy of studying science or maths, or the incredible careers to be had in engineering and technology.

If we hope to solve the challenges around us as a society we need our best and brightest to work in STEM, and you won't get that with only half the population.

I believe that numerous efforts across society are required. For example, the new Lego female scientists campaign, the raft of new girl coding clubs, and ensuring TV shows featuring awesome female scientists like Professor Emma Johnston. Collectively,

these will slowly change the view of scientists being old, white men.

Targeted gender equity programmes at university to retain more of our top female researchers from leaving are part of the other solution to ensuring younger students know they should be in science.

## Q. Do STEM competitions attract more students to the field?

STEM competitions are an incredible way to show how fun science is. These activities reward experimentation and ingenuity, rather than only working to the 'right' answer like a school test.

To do the best work in STEM demands teamwork and for some students these competitions are a great way to meet likeminded colleagues and feel welcomed into a community.

While not everyone might enjoy the pressure competitions can bring, I suspect hackathons or robotic competitions would appeal to many!

## Q. How does educating parents and communities about STEM guide student decisions?

Careers are guided by parents and the community. The choices a student makes is strongly influenced by their family, which means if we want students to feel confident about a career in STEM we also have to reach out to the parents.

I want to see parents and communities empowered by asking and answering questions. Rather than shy away from their child's question in fear of saying the 'wrong' thing or not knowing the answer, it would be great if they could search for an answer together.

That is the nature of STEM, and that would undoubtedly trickle down to the youngest.

## Q. What impact do STEM role models and mentors have?

I believe that mentors and role models play an incredibly important role when considering a career. If you don't know what the target is, how can you possibly aim for it?

At the Ultimate Careers guide we often feature industry leaders to explain how they succeeded and why; making clear that there is a fantastic career out there and how you can find it!

## Q. What kind of STEM training would be beneficial for practicing teachers?

Our teachers are asked to do so much already – far more than I think is sustainable – so I would like to see them supported more before we ask them to go beyond their specialisation.

That's why we created Australia's Science Channel Education site for teachers, which supports teachers with up-to-date breaking news stories and how they can use them in the classroom.

It's all mapped to the Australian Curriculum for Science, particularly around the Science as a Human Endeavour strand.

## Q. How should schools implement new STEM programs?

I would tell them to get in contact with their local Science Teachers Association and see what resources are available.

They are not the first school to try and implement STEM programs; others have been there before and can help you avoid their mistakes, as well as take advantage of the latest thoughts about ways to ramp up your program.

You don't need a scanning electron microscope in your school to explore the wonders of this universe, there are so many hands on experiments that can be as engaging.

Start off with small projects, and enthusiastic teachers, and grow it from there.

# 95 per cent of schools rebook

## NATIONAL

ROBOKIDS delivers workshops to more than 18,000 students and teachers in Australia for schools and children's services.

Robokids offers teacher professional development, robotics incursions, and after school programs. We provide our services in all States and Territories and have specific teams in NSW, South Australia and VIC which travel.

Our programs align with the Australian Digital Technologies syllabus, specific State curriculums and support teachers on their STEAM journey in robotics.

The STEAM robotic workshops will prepare students for the future workspace by developing critical thinking and analysis, as well as encouraging students to be curious, and problem solve both independently and in collaboration with others.

Robokids aims to capture girls as young as preschool and hold their STEAM curiosity through their formative years, so, together with your school we can address the gender imbalance in STEAM careers.



100% of our principals and teachers recommend our services.

Robokids is proud of a recent survey of current k-6 students, where 85 per cent stated they would select robotics as an elective if offered in their school curriculum.

"In Australia, when our students shift from being users of technology to designers of technology they will have the capacity to create a better world," Teacher and founder of Robokids Michele Miller said.

For more information visit [www.robokids.com.au](http://www.robokids.com.au).

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*"In Australia when our students shift from being users of technology to designers of technology, they will have a capacity to create a better world"*

**Michele Miller**

Teacher, CEO & Founder of Robokids

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## NATIONAL

FOUNDED in 2014, Pakronics is a unique online shop for educators, hobbyists and inventors, offering a range of services to schools, libraries and educators to upskill in digital technologies for the classroom.

The company aims to make teaching coding, electronics and robotics easy for educators through professional training and workshops in wearable electronics, robotics, coding and basic electronics.

The professional development workshops offer a quick 'how to' guide for fast tracking experience with the educational kits. It is a complete hands-on experience that can be tailored to suit a schools unique needs and skill levels.

As every teacher, school and STEM requirement is unique, the kits and workshops are completely customisable to meet term, timeline, budget and educational requirements.

Pakronics is expanding these services by introducing online courses with curriculum mapping and community for teachers to share their activities, get help and support in getting started with the latest technologies.

Pakronics has helped hundreds of teachers improve their confidence in digital technologies with product suggestions, activity ideas, and technical support and is the trusted education partner and STEAM kit supplier for Australian schools.

More information can be found at [www.pakronics.com.au/edu](http://www.pakronics.com.au/edu).



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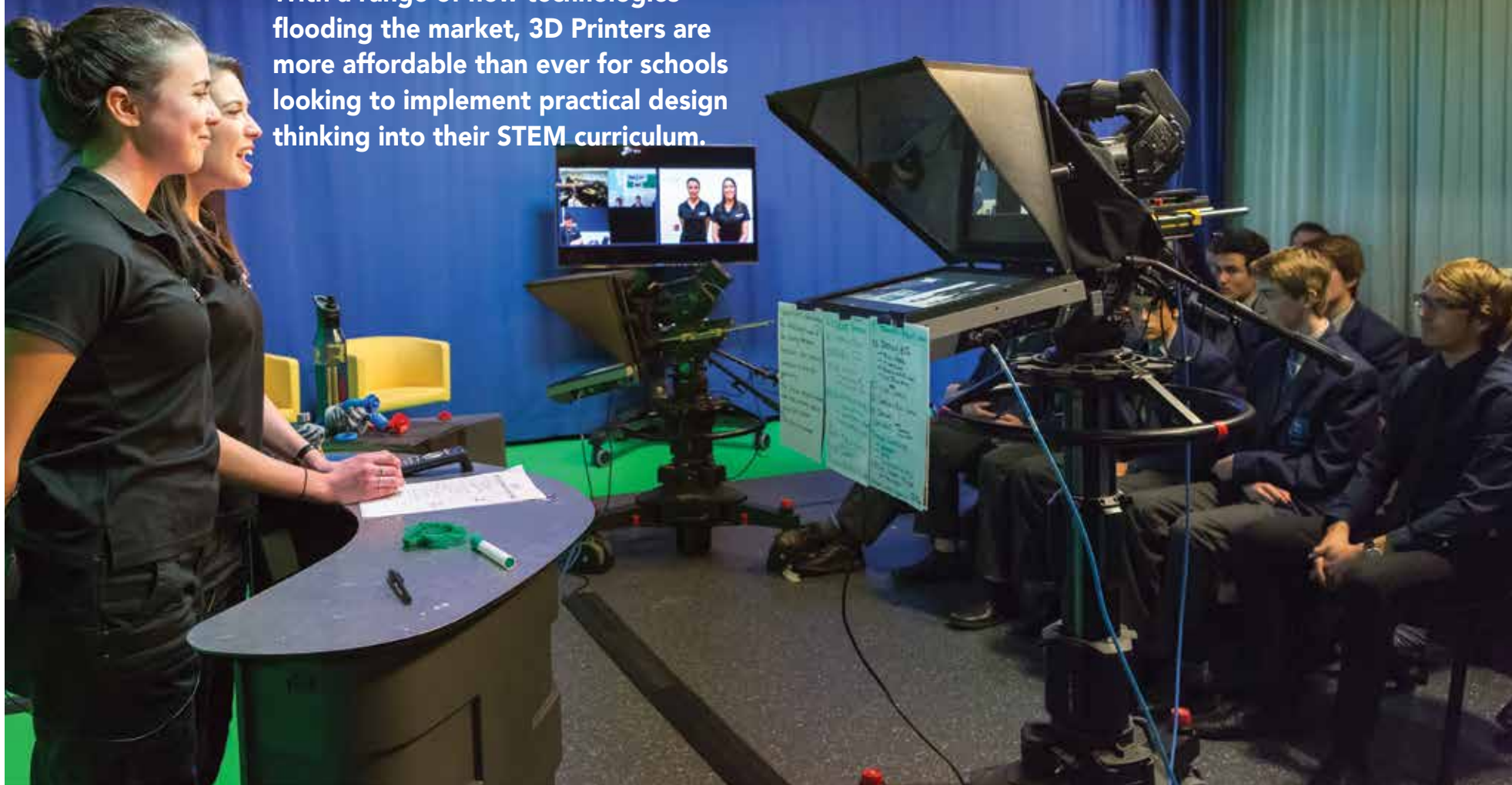
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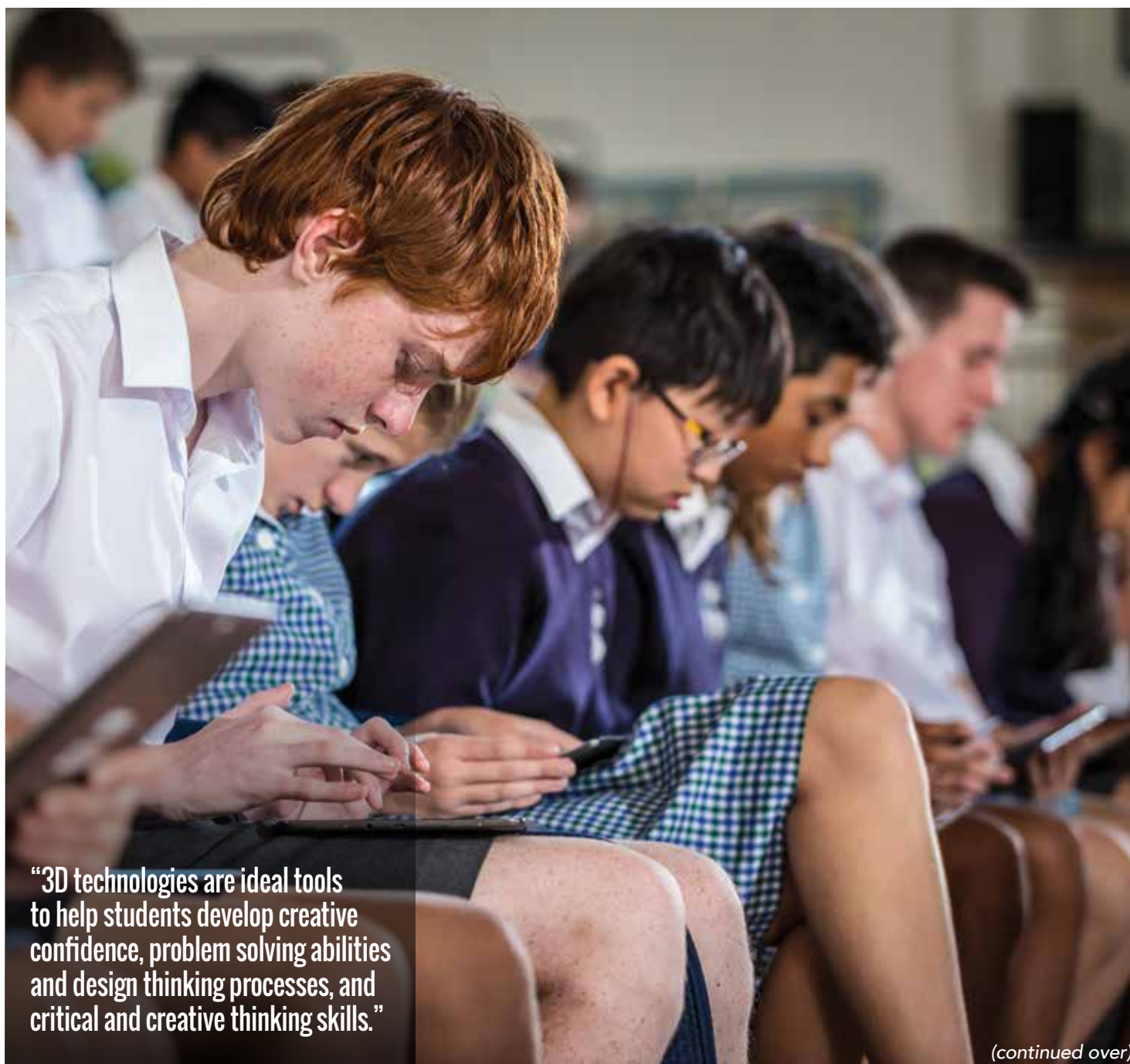
**Pam Wright**  
Assistant Principal at Thomastown West Primary

# LIMITLESS DESIGN

With a range of new technologies flooding the market, 3D Printers are more affordable than ever for schools looking to implement practical design thinking into their STEM curriculum.



Questacon Innovation Mentor Hannah Feldman taking students through a 3D workshop.



**“3D technologies are ideal tools to help students develop creative confidence, problem solving abilities and design thinking processes, and critical and creative thinking skills.”**

## EMMA DAVIES

TECHNOLOGY like 3D Printing, previously the domain of industry and manufacturing, is now commonplace in the classroom with companies providing 3D software, technology, specialised resources, and professional development to schools.

Questacon’s National Science and Technology Centre and its programs strive to promote greater understanding and awareness of science and technology within the community.

Questacon has a range of national programs that tour Australia, visiting different regional areas each year.

The Shell Questacon Science Circus is the most travelled and farthest-reaching program of its kind in the world, inspiring young people – primarily in regional areas of Australia – to value and engage in STEM through interactive in-school science shows and pop-up science centres in regional hubs.

Questacon innovation mentor Hannah Feldman said that 3D printers are a great way to make design and ideas a reality, and suggests that schools look at printers as a tool for their projects.

“There are so many enriching activities that you can explore before the printing stage actually happens,” Ms Feldman said.

“3D modelling, user centred design or design thinking, and iterative prototyping are great uses of the technology to investigate, without putting all of your 3D printed eggs in the one basket.

“This also means that if the printer doesn’t work on any given day, you still have a great project to go on with.”

While 3D Printing has potential across a range of different curricular activities, from IT, Design and Tech and other STEM subjects, Ms Feldman said teachers should be aware that troubleshooting when the printer doesn’t work can be time consuming.

(continued over)



## SMART SKILLS TEACHER WORKSHOPS

Hands-on design thinking activities suitable for Years 6 – 12 science, design & tech and maths teachers.

Workshops accompany the Smart Skills touring program, and are designed to complement the in-school student workshops.

More details:  
[www.questacon.edu.au](http://www.questacon.edu.au)

Smart Skills teacher workshop with Karabar high school.

When printing a large number of projects teachers should also be prepared for it to take longer than expected.

"Our best advice is to be flexible with your printing deadlines, and try to allow a bit of wiggle room in your timelines to set up new printers or old prints," she said.

Questacon offers a 3D Design workshop for high school students, a suite of Questacon Maker Project virtual excursions, and the opportunity to see a suite of 3D printers in the Maker Space at The Ian Potter Foundation Technology Learning Centre in Canberra.

The Questacon Invention Conventions are aimed at connected regional youth with local industry and mentors as a way to create engagement in STEM, but Ms Feldman said it's not only about students' motivation for the

subject.

"Some of the key skills that we are trying to instil in students at Questacon are 21st century skills such as creativity, communication, critical thinking and collaboration – these skills play a vital role in STEM and are just as important for teachers to develop these skills," she said.

Makers Empire director of learning Mandi Dimitriadis said that the world is changing so rapidly that while we can't be certain exactly what jobs of the future will look like, it's clear that students – and teachers, by extension – will need to be adaptable and flexible in order to thrive.

"They will need to be prepared to face situations and challenges that they have never seen before. They will need to be able to identify and develop innovative, creative

solutions to problems and challenges they encounter," she said.

"3D technologies are ideal tools to help students develop creative confidence, problem solving abilities and design thinking processes, and critical and creative thinking skills."

Students can create almost anything to make abstract concepts accessible and easy to understand; from chemistry molecules, to fossils, to architectural models and robot parts.

"3D printing empowers students to create their own products and innovations, and makes it easy to iterate and improve their designs through prototyping and testing," Ms Dimitriadis said.

"If a student can imagine something, they can create it!"

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# 3D printers for schools



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## NATIONAL

GILKING School Supplies has been the number one provider of design and technology supplies to Australian schools since 1996.

The company has delivered 3D printers and specialty filaments to schools for over five years, with more than 8000 items available for shipping Australia-wide.

Gilking supplies the Flashforge range of 3D printers, including the new Inventor 3D printer line, a desktop printer specifically geared towards educational use.

The company also exclusively supplies the 3D Industries (3DI) 3D printers which are designed and manufactured in Australia.

The 3DI printers have large bed sizes and come with the option for a bespoke printer to be designed and built to custom requirements.

Several locally developed features include a strong box frame using 25mm RHS steel, heavy duty gantries, an adjustable extruder, a hot end designed by 3D Industries, a high efficiency bed heater, printer control at the printer front panel, and an effective frame mounted anchor point/filament cleaner using sponge refills.

The printers have a two-year warranty and unique anti-clogging features to avoid blocked nozzles, with a free replacement hot end if the nozzle ever blocks.

Printing flexible and very soft filaments can be challenging and often impossible for many printers but Australian 3D Industries 3D printers produce top quality results and are available only at Gilking School Supplies.

## 3D printing consumables

Gilking School Supplies also carries a

full range of 3D printer consumables for every type of 3D printer with a full range of colours for both standard PLA and ABS filaments.

A comprehensive range of speciality 3D filaments includes metal such as stainless, bronze, copper, aluminium, magnetic iron filaments, carbon fibre, conductive or brick type filaments, as well as flexible rubber-like filaments in a range of colours, and light changing glow-in-the-dark filaments which are popular novelty items.

For more information visit: [www.gilking.com.au](http://www.gilking.com.au)

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# The ultimate educational tool

## NATIONAL

3D printing is not just a core educational technology across most disciplines; it is central to the educational sphere.

Here are some of the basic things to know about why and how 3D printing can be used to help students better understand and engage with course material across the curriculum.

### 3D Printers as Educational Tools.

In classrooms, 3D printers have two principal uses. The first is to print models that relate to the material a teacher is presenting.

In this capacity, a printer's function is to improve student engagement through more concrete interactions than a textbook or verbal lecture can provide.

The element of excitement that 3D printers have for students who haven't been widely exposed to them before can further facilitate this increased level of engagement.

The second use of a classroom 3D printer is to teach students the actual skills involved in 3D printing.

Recent statistics have shown that roughly 10 per cent of all businesses list buying a 3D printer by 2022 as a major priority.

A considerable majority of top manufacturing companies are already using additive manufacturing in their



Engaging students in STEM.

operations.

Since many jobs in the future will likely depend on familiarity with 3D printing, the use of a printer in the classroom to help students develop basic skills with

the technology is a valuable educational experience.

### Classes in Which 3D Printing Can Be Used.

In a STEM class, such as chemistry or biology, a 3D printer can help create physical models that students can see and touch to gain a greater understanding of scientific concepts. In math classes, 3D prints can be useful in helping students gain greater insights into complex geometries.

In history classes, replicas of objects and artefacts from different historical periods can be created right in the classroom, providing an engaging learning activity for students.

Geographic terrains and features are easy to replicate as 3D models, allowing students to better understand them.

Even art and design classes are able to use three-dimensional models to bring projects to life.

### Ultimately, a 3D printer isn't subject-specific.

3D printing is useful in practically any class and should be thought of as a ubiquitous teaching tool that can enhance the educational experience for students.

If your classes don't already include 3D printing technology, consider getting a classroom 3D printer that will help your pupils learn and explore in new and exciting ways.

For more information visit: [www.me3d.com.au](http://www.me3d.com.au).



## Me3D has designed a range of 3D products specifically for teaching additive fabrication and enabling a host of STEM learning objectives such as:

- Education plans including 3D printers, software, parts and accessories, support and materials
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- Accredited professional development courses for teachers on 3D printing for education and;
- A downloadable teachers toolkit including active sources of funding for schools

Jason Egan  
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Me3D  
3D PRINTERS  
FOR EDUCATION



# UP TO CODE

Much of the focus on STEM has centred on coding in schools, but the jury is out on whether this subject should be made compulsory.

Image: Code4Fun.

## EMMA DAVIES

LAST year the Queensland State Government made coding a compulsory school subject. Now NSW is set to follow suit with Education minister Rob Stokes announcing that coding will be compulsory in primary schools by Term 1, 2019.

"This new syllabus provides students with the ability to strengthen their problem solving skills, enhance their computational thinking skills, and create digital solutions," Mr Stokes said.

"Learning coding is not an end in itself – it is about developing critical thinking, analytical skills and improved numeracy."

The new syllabuses for Science and Technology K-6 have been approved along with Technology Mandatory Years 7 and 8 – also focusing on digital literacy – for implementation from 2019.

NSW students already have the opportunity to study digital technologies such as high technology advance manufacturing, robotics, programming and control technology. They will also be able to study a range of technology courses for the HSC in programming, coding and digital projects.

The New South Wales Education Standards Authority (NESA) has developed a teaching and learning resource for teachers that identifies opportunities for coding within the mandatory curriculum for Kindergarten to Year 8.

In March of last year Mr Stokes announced new measures to ensure student teachers learned appropriate skills in their university training to ensure they are properly prepared for an increasingly digital and online world.



Code Monkey chief executive Jonathan Schor.

A NSW Department of Education spokesperson said the compulsory coding is expected to encourage more students into ICT study at school and beyond.

"Coding can take on many forms from the development of software for use on computers and smart phones, to physical computing such as programming of micro-controllers," the spokesperson said.

The NSW Department of Education is currently providing support to public school secondary teachers of Technological and Applied Studies through a number of workshops and online resources.

"To date, 350 teachers from 185 schools across NSW have participated in the workshops. In addition, the Office of the NSW Chief Scientist and Engineer has funded 100 class coding kits through a joint initiative. More opportunities for teachers in NSW

public schools to participate in the coding workshops will be available in 2018," a NSW Department of Education spokesperson said.

The National Issues Paper, *Optimising STEM Industry-School Partnerships: Inspiring Australia's Next Generation*, released in December observed that students are increasingly opting out of STEM subjects.

The paper also suggests that simply making STEM subjects compulsory will not work.

"A better solution is to make these subjects so compelling, so stimulating and so exciting that the student cannot help but be inspired to take up these subjects," it stated.

"This will require teachers who are confident in their discipline and are supported by their school leaders and system.

"If it can happen in other countries, it can

happen here too.

"Bringing industry and educators together is another way to bolster student engagement, participation and achievement in STEM."

Industry-school partnerships are suggested as a way to inspire students towards STEM based careers.

Industry's role is not just as an employer. "It can play a greater role in developing a skilled workforce by connecting the concepts taught in our classrooms to real-world applications," the National Issues Paper stated.

"The flow on effects in the future labour market will be achieved by tertiary institutions and education authorities working together with industry to maximise and amplify these efforts."

## GAMIFICATION

Many educational coding companies have gamified the subject area to make them compelling.

Code Monkey chief executive Jonathan Schor has produced an online game that teaches children from as young as eight to write code in a real programming language.

At his presentation at the Yidan Prize Summit in Hong Kong last year, Mr Schor said that while 71 per cent of STEM jobs are in computer science, which presents a challenge for many economies, there is a great opportunity for STEM students to learn coding.

"The concept [of Code Monkey] is very simple; students program the monkey to collect bananas on the screen by writing real text based code in a programming language called JavaScript," Mr Schor said.

(continued over)

"That way they advance through a pre-defined linear path, only in this game the challenges are teaching the next concept in computer science."

The system automatically analyses a student's work and gives them instant feedback and personalised tips on how to improve.

"Code Monkey uses simple suggestions that students can act on and this goes a very long way in a classroom scenario where a teacher obviously can't assess the state of each student one by one while running a class," he said.

"We've created detailed classroom plans. Minute by minute breakdowns for the teachers means that any teacher can teach Code Monkey."

When asked if coding should be mandatory in schools, Mr Schor had reservations and believes that subject should just be offered as an elective.

"The benefits are clear but making it mandatory sometimes creates a reverse effect on students, like 95 per cent of grownups hate maths because it was mandatory during school," he said.

In terms of age, students are never too young to start learning the language of coding.

There are educational toys on the market exposing children to critical thinking at a very early age – although basic literacy and numeracy should be attained before introducing coding concepts.

"The common bottleneck is teacher training," said Mr Schor.

"Code Monkey and other solutions were designed so that any teacher could be successful with them but they still require the teacher to be engaged in the process.

"Giving teachers a PD credit in computer science or running a nationwide pilot are all ways to get teachers involved and engaged."

"A better solution is to make these subjects so compelling, so stimulating and so exciting that the student cannot help but be inspired to take up these subjects."

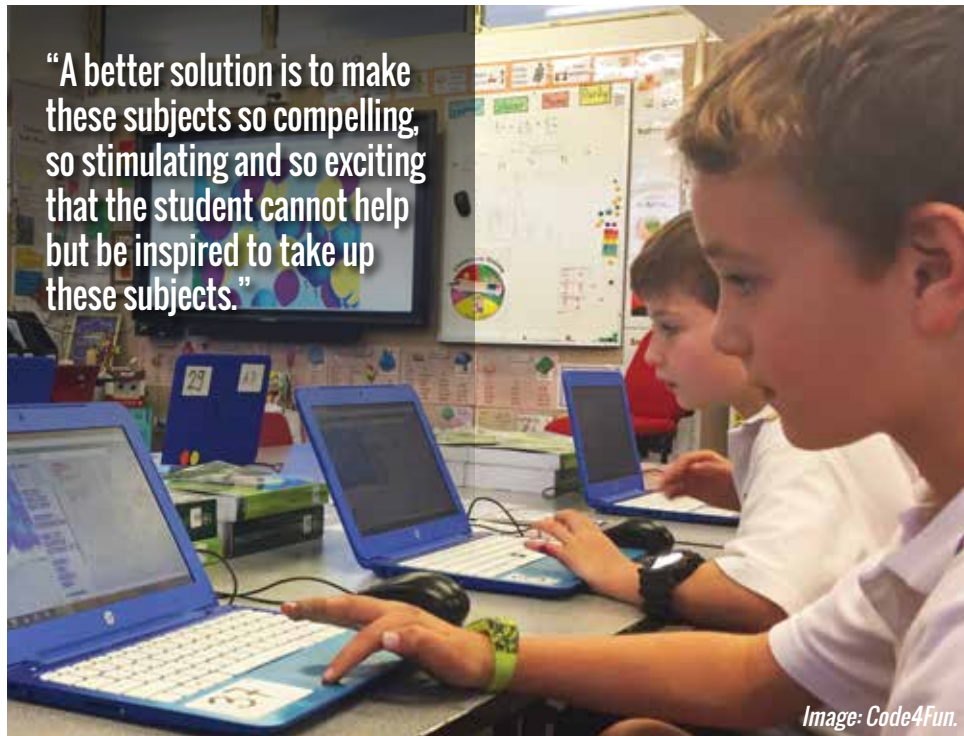


Image: Code4Fun.

### FUTURE FOCUS

There is so much room for coding to develop life-long skills, with robotics and coding competitions like Zero Robotics proving popular among Australian students.

Zero Robotics is an international robotics programming competition offering high school students the chance to control robots in space.

Led by the University of Sydney's Faculty of Engineering and Information Technologies, the competition challenges participants to test their coding skills on NASA robots aboard the International Space Station (ISS).

Last year students from five NSW high schools – Gosford High School, James Ruse Agricultural High School, Mosman High

School, Sydney Boys High School and Sydney Technical High School – won the privilege of seeing the computer code they had written used by the robots on the ISS.

The University of Sydney supported more than 300 students to compete last year and encouraged engineering, IT and recent graduates to mentor students throughout the process to inspire students to explore the exciting range of STEM study and career opportunities.

The space industry is worth an estimated \$400 billion globally and contributes commercially to defence, transport and communication sectors. With Australia set to start its own National Space Agency, the time is ripe for students to learn STEM skills like coding, which will be highly sought after in the job markets of the future.

# Bringing coding to class

## NATIONAL

**PROGRAMMING** School CODE4FUN teaches coding six days a week to over 1350 students in 28 schools and education centres across the Sydney metropolitan area and rural NSW.

Originally launched by two techie parents Elena Sveshnikova and Grigory Punanov with a primary goal to educate their own kids and their friends, the CODE4FUN team now consists of 12 coding professionals.

The program runs workshops before and after school, during school hours as a part of the school curriculum, during school holidays, and even teaches children in remote schools via video conferencing.

"For students who may not necessarily be known for their high academic achievements at school, coding has become an area where they can succeed and achieve high results – which can be applied to future job prospects as well," CODE4FUN cofounder Elena Sveshnikova said.

"It's great to see that more and more Public, Catholic and Independent schools have already stepped ahead and introduced coding to their students as a part of curriculum."

CODE4FUN has developed its own coding syllabuses for students of different ages and levels, starting from Beginners courses for Y2-Y6 and progressing all the way to the Pro level courses for Y8-Y11, and has recently offered its coding syllabus to



CODE4FUN cofounder Grigory Punanov teaching a coding class.

other schools.

"We just signed an agreement with one of the coding schools in UK," CODE4FUN cofounder Grigory Punanov said.

"Now we are offering our Beginners Coding course materials to any educational institution interested in starting a coding program for primary school children. This syllabus is very detailed and coherent. We made sure that we increase a level of difficulty gradually step by step, introducing some new concepts as we go and also reinforcing what has been taught so far," he said.

"It is written by our teachers and based on hundreds of hours of the coding classes we've been running during last three years."

Throughout the course students create over 20 different projects like animations, computer games, and even real world software prototypes like a Google Self

Driving car prototype. There are also multiple coding challenges embedded in the syllabus, so students can code with their teacher, or create their own projects.

All projects taught by CODE4FUN involve a great deal of Maths, Trigonometry and Physics, but in a fun and playful way.

"In order to create a platformer type of a game where a character jumps from one platform to another, students need to come up with a realistic gravity algorithm," said Mr Punanov.

"This involves a lot of calculation, reinforces the X & Y coordinates system, and explains how acceleration works in gravity.

"Students learn and apply this knowledge straight away: if the algorithm is correct, the game works!"

For more information visit [www.code4fun.com.au](http://www.code4fun.com.au).



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**EduTECH 2018 is the largest education conference in the Southern Hemisphere, covering research, leadership, technology and learning environments, pedagogy and curriculum integration.**



## EMMA DAVIES

EDUTECH has shaped the future of Australian education for the past decade with targeted professional learning and development from pre-school to post-school.

EduTECH and FutureSchools conference director Samantha Young said the range of experienced speakers was a major drawcard for attendees.

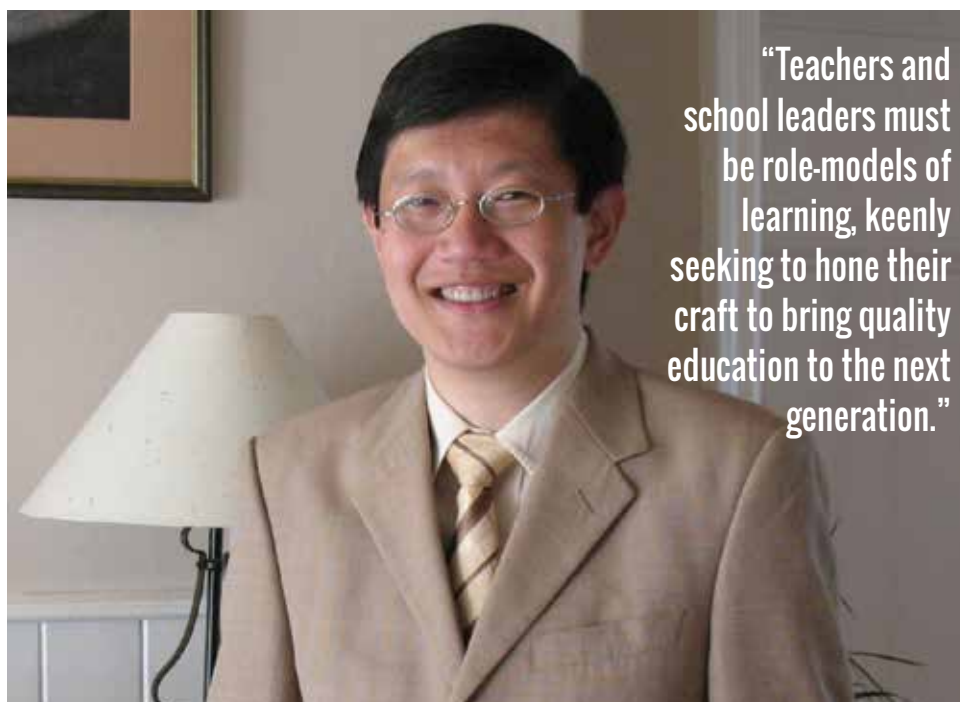
"Every year we bring avid educationalists the brightest and most innovative minds to share their unique ideas – ranging from Sir Ken Robinson to Prof. Carol Dweck, Prof. Sugata Mitra to Jan Owen AM," she said.

This year's speakers include Mark Scott AO, Secretary, NSW Department of Education; Dr. Yong Zhao, World renowned educationalist; Jennie Vine, assistant principal of one of Australia's most innovative primary schools, Wooranna Park; and Prof. Toby Walsh, one of the world's top authorities and Australia's leading scientist on Artificial Intelligence, to name a few.

National Institute of Education (Singapore) Associate Dean of Leadership Learning and Head of the Policy and Leadership Studies Academic Group Dr Pak Tee Ng is looking forward to delivering a keynote address at the conference and exploring the difference in education practices between our two countries.

"I am involved in the preparation and continuous professional development of school leaders and teachers for my country," Dr Pak Tee Ng said.

"While the context are very different, other education systems may wish to study and understand Singapore's commitment to investing consistently in education, investing in the professional development of educators, making every school a good school, and



**Dr Pak Tee Ng - Associate Dean of Leadership Learning, Head of the Policy and Leadership Studies Academic Group, National Institute of Education (Singapore).**

diversifying the educational pathways for different children to find success in their own way," he said.

Dr Ng believes that, while we should be open minded about changing technology as a tool that increases human connectedness across time and space, and can empower individuals in the learning process and enable learning at any place and time, schools should not use technology blindly just for the sake of using it.

"Schools should focus on the pedagogy that technology can enable, not on how fanciful or powerful a tool is," he said.

For teachers and school leaders to keep up with rapidly changing technology, Dr Ng recommends courses and conferences like

**"Teachers and school leaders must be role-models of learning, keenly seeking to hone their craft to bring quality education to the next generation."**

EduTECH to gain new knowledge, network with peers and gain exposure to new and exciting educational possibilities.

"Teachers and school leaders must be role-models of learning, keenly seeking to hone their craft to bring quality education to the next generation," Dr Ng said.

Educators attending the conference can receive points towards professional learning activities which can be lodged with their state teacher registration board, and they also have the opportunity to learn from the successes and failures of others and implement best practice in their own schools.

"Depending on the number of sessions attended, delegates can get up to 13 hours for the two conference days, whilst attendees

who choose to attend one of our pre-event masterclasses can get an additional 6.5 hours for attending the masterclass," Ms Young said.

The masterclasses are a chance for educators to learn from leading education thinkers in a practical, interactive and intimate group.

"It's the perfect complement to the EduTECH Congress professional learning experience!" Ms Young said.

EduTECH 2018 aims to educate the educators; equipping them with the newest tools, ideas and strategies to teach the next generation of students to learn deeper, faster, wider and smarter.

"Looking at the bigger picture – learning is thinking with other people's ideas. When you bring together over 4000 schools from over 20 countries and provide a flexible learning space – naturally we all swap ideas and learn from each other," Ms Young said.

"We must learn from others success, and more importantly their failures. This is why case study driven content delivered interactively and live at EduTECH and National FutureSchools will never go out of fashion."

Ms Young said that there is something for every educator at this year's conference.

"It's for the principals who feel they aren't ready, not confident and need support. It's for the teachers who can say that they aren't able to provide the exact combination of resources and knowledge for every student and is willing to look at collaboration beyond the classroom so that their students can realise their full potential," she said.

"At EduTECH, you can guarantee leaders, educators, and students alike will get unlimited access across two days to an incredible and expansive network of peers, potential commerce and business partners, universities, design and construction thought-leaders."

**EDUTECH AUSTRALIA 2018 WILL BE HELD AT THE INTERNATIONAL CONVENTION CENTRE, SYDNEY, FROM THE 6-8 JUNE.**



Michael speaking at EdTechSA 2017 Conference

**Michael Ho and the team at Edu Web Solutions continue to support school websites that meet Australian standards and best practice, while educating school leaders on the importance of online presence.**



Peter, Michael & Kirio - The EWS Team

Michael Ho and the team at Edu Web Solutions (EWS) continue to support school websites to meet Australian standards and best practise, while educating school leaders on the importance of online presence.

Edu Web Solutions are the forefront of school websites, leading the way with accessible and modern websites that meet all the necessary standards and guidelines. The team have supported schools for over 8 years in website development, hosting, maintenance plans, graphic design, training and IT support.

**Q.** What has led EWS to early success?

Prior to EWS, our team supported over 900 Public Schools at the Department for Education and Child Development (DECD) for over 6 years. During our employment with DECD we developed websites which followed Vision Australia and Government standards, as well as World-Wide Guidelines. This sense of security has helped hundreds of schools choose EWS to support their websites.

The EWS team are not just passionate about website development for Schools, we also work alongside other companies to ensure the health and safety of children and we are currently working with Gameday Mouth Guards to support safety during school sports.

**Q.** What makes EWS different from other website development companies?

EWS manage over 150 school websites ranging from Children's Centres to High Schools. The team consists of creative graphic designers, photographers and IT professionals, all of which contribute to photography for sites, marketing, branding, social media graphics and videos. EWS also work with private clients and other Government entities; our latest website was created for the Commissioner for Children and Young People of South Australia.

EWS has performed several training sessions on website information for site leaders. Michael was also invited to public speak at the EdTech SA conference during July 2017 in South Australia.

**Q.** What is the future for EWS?

We plan to work with school leaders and IT staff to create apps to support everyday tasks and online solutions. We have successfully gained clients throughout Australia and the next goal will be to reach international success.

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# Practical professional development

**The EduTECH Congresses are valuable to educators, equipping them with new tools, ideas, and strategies to teach each new generation of students and allowing up close and personal discussion with experts.**

- **K-12 Ed Leaders Congress** – a strategic look at the future of education, global trends, Australia's curriculum and practical advice on technology as an educational tool.
- **K12 Schools ICT Management Congress** – ideas, advice and lessons-learned from fellow school ICT Managers and Network Administrators.
- **School Business Management Congress** – for school business managers, finance managers, marketing managers, bursars and administrators looking to improve the finance, operations, administration, marketing and strategic direction of schools.
- **Future Library Congress** – exploring how the job of the Librarian is becoming more of an 'information facilitator' and creator.
- **Higher Ed Leaders Congress** – brings together leading figures to discuss the significant changes underway in higher education globally, the key role of technology to remain competitive, how to enhance student learning and engagement and ways to grow partnerships and collaboration.
- **Tertiary Education IT Leaders Congress** – address the skills and capabilities required to be an effective CIO. It will explore the technical challenges facing CIOs and ICT leaders from the entire tertiary and higher education sector.
- **National VET Leaders Congress** – exploring the themes of: VET reforming & transforming; Disruption & Agility; Employability & Entrepreneurship; Student Engagement & Choice; Enhancing Quality & VET Reputation; and identifying opportunities within changing VET.
- **2018 AITD Annual Conference** – the annual EduTECH Learning@Work Congress will be combined with the Australian Institute of Training & Development National Conference. This is now Australia's largest event for training, learning and development professionals.
- **EduBUILD** – Australia's largest education buildings and infrastructure conference and tradeshow for education leaders and decision-makers involved in design, construction, renovation, maintenance, operation and management of buildings for schools, colleges and universities.
- **EduFM** – (Facilities Management for Schools and Universities) Australia's only conference dedicated to facilities and asset management within the entire education sector, including both schools and tertiary education.
- **EduPROCURE** – Australia's only conference focused on improving and streamlining the procurement process within the entire education sector, including both school and tertiary education.



World famous author, neuroscientist, entrepreneur and inventor Prof. Adam Gazzaley.



NSW Department of Education Futures Learning Unit director Kathleen Donohoe.



Australian Council for Computers in Education president Martin Levins.

**EduTECH 2018 offers a choice of optional and practical Masterclasses, led by world renowned keynote speakers which gives attendees an interactive, practical and in-depth learning experience.**

- **Masterclass A** – Learning Spaces with world renowned educational architect and Fielding Nair International (USA) Founding president and chief executive Prakash Nair, and Fielding Nair International senior design consultant Roni Zimmer Doctory (USA).
- **Masterclass B** – The Learning Power Approach with King's College of London visiting professor of Education Prof. Guy Claxton (UK).
- **Masterclass C** – Going Full STEAM Ahead with University of Technology Sydney researcher Dr. Jane Hunter.
- **Masterclass D** – Teaching Kids to Code with Computer Science Education Group research fellow Dr Rebecca Vivian, and University of Adelaide Computer Science school head Prof. Katrina Falkner.
- **Masterclass E** – School Marketing & Branding Masterclass with technology teacher, author and school marketing specialist Dr. Arnaud Prevot (USA).
- **Masterclass F** – Integrating Collaborative Inquiry with author Warren Berger (USA).
- **Masterclass G** – Preparing For The AI Revolution In The Classroom with University College London Knowledge Lab Prof. of Learner Centered Design Rose Luckin (UK).
- **Masterclass H** – BYOD with Douglas & Brown Consultancy president Martin Levins.



# Spaces to grow

With student numbers increasing there is more demand to incorporate outdoor learning areas than ever

Outdoor learning offers teachers flexibility in lesson structure and produces creative, collaborative spaces that connect the school community. Outdoor learning spaces are also a great alternative or addition to a school's infrastructure resources.

These spaces have the ability to create all weather areas with emphasis on airflow, heating, Wi-Fi, sound and flexible furniture design. These outdoor spaces can also accommodate PE lessons, science and art.

Creating these outdoor spaces in your school also bring the added health benefits of sun protection. Keeping kids safe from the sun and heat particularly in secondary schools where students may not wear hats and sunscreen.

With the fact that the highest incidence of melanoma occurs between the ages of 15 and 39 we need to consider higher protection initiatives to prevent devastating future melanoma in students and staff.

Our southern sun has a serious bite, but creating shade is only half the battle when you live in a country that has one of the highest rates of skin cancer in the world.

To keep Australians healthy and safe, we support Melanoma Institute Australia (MIA), as a sapphire partner.

MIA are a world leading treatment and research centre that has made some huge leaps forward in 2017 in the treatment of melanoma.

At Greenline we think we're pretty lucky - our loyal clients have helped us build a business providing shade solutions for two generations. That's why it's our duty to make sure future generations can enjoy the great Aussie sun, without the bite.

In 2017 while talking to MIA we discovered they have an education program to go into schools to reduce the instance of melanoma before it ever occurs. We immediately thought 'how can we help?'

With your support we have set a goal of shading and educating 100,000 students in 3 years. With every shade that is constructed in the next three years, we will organise a speaker to go into the school (or send a purpose made video) for a free sun safety talk.

The kids will also receive a sunscreen, sundicator sticker and some information to take home to spark a discussion with their families around skin checks and sun protection.

#### Q. Where do I start?

You know the potential of your space better than anyone else. Look outside and imagine people mingling, kids playing and your school community strengthening around a space that's purpose-built for them. All you have to do is describe it, and we can make it happen. Show us an empty space, wave your hands about or draw sketches in the sand. Our team of world-class designers and builders will translate your inspiration into a space that truly meets your learning, teaching and play needs.

#### Q. Does Greenline have standard structure designs?

When it comes to designing shade, there's no one-size-fits-all formula. And while it might sound nerdy, we're happy to admit that problem solving gives us a buzz. We'll consider your space, the humans who use it, and how the sun and the rain fit into the picture, before designing your structure to the best effect. Maximum shade, strongest materials, longest life.

#### Q. Why should you chose Greenline?

When we are building your shade, it has to be the perfect marriage of form and function. So, we set out to raise the industry benchmark for safety, quality and environmental standards through independent assessment. Yep, we actually choose to be audited. We renew our vows every year, to make sure our structures last the test of time. We are the only shade structure company to hold three ISO certifications for our work from manufacture through to construction.



# Trading Textbooks for Tablets



When cross platform devices enter the classroom, the ability to engage every student requires flexible solutions.

**wePresent** allows the teacher to share digital content from each student's tablet, laptop or smart-phone. To help highlight important information or show examples of concepts, use the built in On Screen Annotation and Whiteboard tools.

WebSlides can be saved to their device so each student has a copy. Students can also select which pieces of the concepts presented they save on their own device, ensuring they have the information necessary to revisit the ideas once class is over.



**WiPG-1000-P**  
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**WiPG-1600W**  
*supports both wired and wireless connections allowing greater networking flexibility*



**WiCS-2100**  
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*wePresent wireless presentation solutions & weConnect collaboration systems work to provide instructors and students an environment for interactive and collaborative learning experiences*

## weConnect: Re-inventing Interactive Learning

Consisting of just a couple of simple building blocks, Barco's **weConnect** is a cloud-based interactive collaboration system, unencumbered by complex infrastructure. All users gain access to the classroom system through a web-based cloud app (via their laptops, tablets or smart phones.)

The app gives teachers full moderation control of content shared within the classroom, as well as the ability to issue a poll or a quiz and solicit feedback. Students can pose silent questions, rate other questions, and get a close-up view of what is being shown on the classroom displays.



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# FutureSchools: defining progress

## NATIONAL

THE National FutureSchools conference brings together schools and educational experts from across Australia to collaborate and redefine progress.

"Times are changing and we need our children to be confidently prepared for the global, competitive and the vastly different digital world of tomorrow."

"We take strategic looks at our teaching and learning practices; then re-imagine, re-design and re-build our schools," National FutureSchools conference director Samantha Young said.

"We are humbled to have a stunning variety of education change-champions shed light into the why and how they are driving revolutionary pedagogy."

Speakers including Sir Ken Robinson - one of the most influential leaders in educational reform - offer attendees a fantastic opportunity to discover the best in educational leadership, innovation, pedagogy, curriculum, and technology.

Attendance at National FutureSchools counts towards PD/professional learning activities which delegates can record with the relevant state teacher registration board.

Depending on the number of sessions attended, delegates can get up to 13 hours for the two conference days, while those who choose to attend one of the pre-event masterclasses can get an additional 6.5 hours.

National FutureSchools offers a range of congresses targeted to educational trends of the future, emerging technology, teaching coding and digital technologies,

and inclusive education practices to upskill, improve or expand teacher capabilities.

Association of Independent Schools South Australia educational consultant Monica Williams has extensive experience in digital technologies and will be speaking at FutureSchools.

Ms Williams said the event draws on the expertise of international and national speakers to answer the big question - what's schooling going to be like in an increasingly digital age?

"FutureSchools lets us imagine how schools will provide the best learning in the future and give schools practical ways to begin or continue their journey in transforming teaching and learning," she said.

Ms Williams advocates for teachers to spend time with emerging technology to learn how it functions, as well as joining the students in exploring new capabilities.

"Everybody is on a level playing field and when teachers feel comfortable learning alongside their students, the classroom becomes a learning community," she said.

"We live in a digital world and if we don't understand how that world operates then it's hard to imagine how we're going to be able to successfully navigate it and thrive - so I think it's critically important for students and teachers to embrace what is actually a really exciting new area of learning."

National FutureSchools Expo will be held at Melbourne Convention & Exhibition Centre on 21 and 22 March 2018.

## SPEAKER HIGHLIGHTS

This year the conference features a wide variety of talented thought-leaders, including:



### Gary Stager

Maker, author, and serial innovator



### Dr Catherine Ball

Scientist and new technology innovator



### Dr Pete Goss

Grattan Institute School Education Program director



### Professor Katrina Falkner

University of Adelaide School of Computer Science head & Computer Science Education Research Group lead



### Dr Chip Kimball

Singapore American School superintendent



### Lisa Rodgers

Australian Institute for Teaching and School Leadership (AITSL) chief executive



### Dan Haesler

Leadership, engagement, mindset, and wellbeing expert



### Monica Williams

Association of Independent Schools of South Australia, educational consultant



### Sir Ken Robinson

New York Times best-selling author & authority on creativity and innovation in education

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# CHANGE MAKERS

## YIDAN PRIZE SUMMIT 2017

The inaugural Yidan Prize Summit in 2017 brought together more than 350 global education leaders, both to celebrate the largest educational prize in the world and discuss future challenges.



### EMMA DAVIES

DR Charles Chen Yidan, co-founder of Chinese internet giant Tencent, established the Yidan Prize Foundation in 2016 with the mission of creating a better world through education.

"One night in 2013 I wrote in my diary that I would set up a prize for education that transcends race, religion and nationality," Dr Chen said.

Since then, Dr Chen has worked to create a global platform to learn the best practices and concepts in education that could be scaled and replicated around the world.

The Yidan Prize recognises and supports change makers for their forward looking innovation to create sustainable impacts on education systems.

The two categories are the *Yidan Prize for Education Research* and the *Yidan Prize for Education Development*, each carrying an award of \$US3.97 million – four times that of the Nobel Prize.

The inaugural laureates, Professor Carol S. Dweck of Stanford University and Vicky Colbert, founder and director of Fundación Escuela Nueva in Colombia each received \$US1.9 million in cash and \$US1.9 million in the form of funding for their work.

Dr Chen said that the goal of the Prize and Summit was for the global community to engage in conversation around education and to play a role in education philanthropy.

"Education is so important because it's a huge driver for socio-development," Dr Chen said.

"This kind of international prize actually promotes the best theories and best practices for education."

"Education has so many stakeholders from policy makers, people working on the front line of education, and investors. We need to get everyone on a single platform where they can share ideas and talk about their opinions about the future of education," he said.

It's no surprise that Science, Technology, Engineering and Mathematics (STEM) was high on the agenda, with educators debating how coding and technology could be implemented in the classroom and the importance of adequate teacher training.

Dr Chen emphasised that technology could



Prize winner Vicky Colbert (left).

impact education positively but that there was room for improvement in curriculums and school management systems to prepare for future education technologies.

Over the next three years the Yidan Prize Foundation will follow up on the laureates' projects, to discover best practices and methods that could be replicated in other educational systems worldwide.

Nominations for the 2018 Yidan Prize close on the 31st of March.

### INAUGURAL LAUREATE VICKY COLBERT

Vicky Colbert was the former Vice Minister of Education in Colombia and founded the Fundación Escuela Nueva, training teachers in more than 20,000 rural schools at a time when drug war violence was at its highest.

"Latin America is a country with a lot of inequality, so I wanted to push for social change through education," Ms Colbert said.

Escuela Nueva promotes a classroom environment where students actively learn, participate, and collaborate, as well as strengthening the relationship between the school and the community.

The model has been shown to improve retention and academic achievement and lower the rate of grade repetition and dropout.

Internet connectivity and lack of resources were an issue but Escuela Nueva adapted by created learning materials that combined the

textbook, the workbook, and guide for the teacher.

The ambition was to reach as many children as possible, but some rural schools were avoided due to the presence of the Revolutionary Armed Forces of Colombia (Farc).

"I feel that the outlaws saw the importance of education," Ms Colbert said.

"They knew that poor rural children could receive benefits and so we never received aggressions, but we knew we had to be careful when we sent teachers to train other teachers."

With multi-grade classes and a single teacher, rural schools struggling with traditional teacher centric classrooms benefitted from a more flexible curriculum.

"I think this is one of the strengths of Escuela Nueva because you can respect different learning rhythms in the classroom," Ms Colbert said.

"Some kids are learning faster, some are a little bit slower and need more support from their peers – so it's a lot of peer tutoring and collaboration."

Ms Colbert sees applications for her program around the world; in urban areas, for displaced peoples, for teacher training and in any school that could benefit from students developing values and democratic, peaceful behaviour.

To date Escuela Nueva has been adopted in Brazil, Colombia, Chile, El Salvador, the

Philippines, Guatemala, Guyana, Honduras, Mexico, Nicaragua, Panama, Paraguay, Peru, Dominican Republic, Uganda, India, Vietnam and Timor.

### INAUGURAL LAUREATE DR CAROL DWECK

Lewis and Virginia Eaton Professor of Psychology at Stanford University Dr Carol Dweck is a leading researcher in the field of motivation, focusing on the importance of growth mindsets for students' resilience and achievement.

"Mindsets are influenced by a belief about yourself, about your abilities, the nature of your abilities, the workings of your abilities," Dr Dweck said.

"People are always comparing themselves to others, measuring themselves, feeling they're deficient, feeling they'll never be admired or accepted but we are all works in progress."

When students have a growth mindset they believe they can get smarter, they understand that effort makes them stronger, and they put in extra time and effort which leads to higher achievement.

For schools to implement growth mindset development for their students, Dr Dweck said it was important to realise we are not purely a fixed mindset person or a growth mindset person, but that everyone is a mixture.

"They're both natural to us. The fixed mindset actually grew up to watch over us and protect us because we want to be validated, we want to be respected, we don't want to do things that will make people think we're deficient.

"We need to work with it rather than deny it."

Dr Dweck's research has shown that teacher practice has an impact on student mindset. Praising students or telling children they are smart encourages a fixed mindset, whereas praising hard work and effort cultivates a growth mindset.

Putting the concept into the context of neuroscience is another way to encourage students to develop a growth mindsets.

"Neuroscience shows the ability of the brain to change, grow and even reorganise with learning and experience. So what does that tell us about our students and their capabilities?" Dr Dweck said.

# BREAKING THE GLASS CEILING IN EDUCATION

**Over 75 per cent of Australia's 276,000 full-time teachers are women, according to ABS figures, yet relatively few will break into senior management positions.**

## LIONEL CRANENBURGH

IN WA, where government teachers are considered public sector employees, the department of Education has a gender imbalance in senior ranks with 25 percent of women filling corporate executive and regional directors' levels – only four of 16 positions are filled by women.

The danger of quick-fix solutions to rectify gender inequity was revealed by the ABC when an attempt at "blind recruitment" in the public sector had to be stopped when the trial backfired against women and ethnic minorities.

The trial, done by several public sector organisations, aimed to remove sexism from selection processes, including female bosses, when gender was removed from applications.

The Commonwealth Government trial was abandoned when it was found that de-identifying candidates reduced the likelihood of women being selected for the shortlist, as adding a woman's name to a CV made the candidate 2.9 times more likely to be selected.

Professor Michael Hiscox, who oversaw the trial, found that the public sector had a long way to go on gender equality and he recommended the need for more flexible working conditions and training.

The CEO's Gender Equity Initiative, launched by 18 WA CEOs to break the glass ceiling, focuses on changing culture in schools from an early age.

Chris Sutherland, Chair of the initiative's Education Group, asked teachers and parents to reverse the trend that saw women in WA earning 26 per cent less than men.

Nationally, the CEO Group said that WA had the lowest female representation on boards and the highest pay gap. It has launched a TV advertising campaign, with school visits, to spread its message.

Sutherland's recommendations, made at the Gender Equity launch in Government House, asked schools to empower girls to select careers leading towards high-paying occupations and for parents and teachers to stop creating the impression that some jobs were only for boys.

Dr Amanda Bell, principal of the Women's College in Sydney University and former principal of Brisbane Girls Grammar School, wrote in *ABC News* that the practice of some independent girls' school boards to appoint men as principals in all girls' schools was misguided.

She said women were disadvantaged because there were fewer females than males on independent school boards.

Appointing authorities preferred a male principal as a "safer option" to a female deputy principal and there were more male principals and fewer female principals who could apply for jobs.

Her advice is to have more females appointed to independent school boards and mentor middle management females for CEO positions.

Women needed coaching in the changed role of CEO that involved project management, financial management, administrative functions and risk management that require different skills and mindset.

Karen Pedrick, deputy principal of South Thornlie Primary School and former principal of several remote and city schools in WA said that working in remote schools could be challenging but she was supported by the regional office staff.

"You are out there so you learn to budget, develop plans, manage projects and sharpen your leadership skills," she said.

Ms Pedrick won praise from the WA Director-General of Education for raising the attendance of Aboriginal students to record levels.

She said that her aim was to mentor Aboriginal women to become leaders and principals, which would need the support of universities, department of education and cultural organisations.

Research in 2017 done by the McKell Institute, an Australian organisation providing practical research solutions to policy challenges, recommends that agencies should set targets and timeframes for achieving equity with penalties for not meeting targets.

Winchester and Browning, writing in the *Journal of Higher Education Policy and Management*, suggest that actions need to be based on research, have the support of senior officers and networks for women.

Dr Karen Edge's research, from the Institute of Education in London, published in the *Guardian*, said that women aspiring to be head teachers in schools needed workshops to build their confidence.

Otherwise, schools were going to lose incredibly talented people.

*Lionel Cranenburgh is the 2015 Positive Behaviours Winner (WA) and Director of Lionel Cranenburgh and Associates, Career Company.*



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# GOING GREEN

Kitchen gardens at schools around Australia are teaching children the joys of eating healthy, seasonal food.

## STEPHANIE ALEXANDER KITCHEN GARDEN FOUNDATION & MEGAN SAUZIER EXECUTIVE OFFICER AT WASCA

THE WA School Canteen Association Inc. (WASCA) and the Stephanie Alexander Kitchen Garden Foundation are working with schools to encourage a whole-school approach to nutritious eating.

The aim – to help students develop positive food habits for life.

Part of that whole-school approach means teaching children the joys of growing, harvesting, preparing and sharing fresh, seasonal delicious food through a kitchen garden program.

The Stephanie Alexander Kitchen Garden Foundation is now working with more than 1600 schools and centres across Australia running a kitchen garden program.

In a kitchen garden program, children actively grow and harvest their own vegetables, herbs and fruit and, alongside their peers and adult helpers, prepare seasonal dishes with care and a focus on deliciousness.

Everyone then sits down together to enjoy and share tastes of the dishes they've made.

When they participate in a kitchen garden program, children are fully engaged in growing and cooking food.

They understand where their food comes from, and learn the skills they need to feed themselves well.

In the process, they make links to learning areas in the curriculum and understand more about the environment, sustainability, and other cultures.

An evaluation of the Stephanie Alexander Kitchen Garden Program, by Deakin University and the University of Melbourne, demonstrated that the program encouraged positive health behaviour change in participating children.



Margaret River Primary School students harvesting spring onions.

## The Stephanie Alexander Kitchen Garden Foundation is now working with more than 1600 schools and centres across Australia running a kitchen garden program.

The evaluation also showcased the transfer of benefits to the home and the broader community.

School canteens also have an important role to play in promoting healthy eating to the school community.

WASCA supports schools to implement the Department of Education's Healthy Food and Drink policy (HFD policy), first launched in 2007.

compliance in schools a decade after the introduction of the policy has revealed positive results. For example:

- 80% find the traffic light system easy to understand.
- 80% of canteen managers are confident to colour code menus.
- 90% feel the policy is a good opportunity to teach children about healthy eating.
- 95% know red means 'off the menu'.

While both the HFD Policy and kitchen garden programs work well in schools, the most encouraging evidence comes from schools where there is a strong collaborative approach between the kitchen garden, classroom and canteen.

Top tips for linking a kitchen garden and canteen:

- Use fresh produce from the garden in the canteen, and return food scraps to the garden for composting.
- Share recipes used in a kitchen garden program with canteen staff.
- Invite canteen staff to kitchen garden workshops.
- Run a competition where students develop a recipe using garden produce, and the winning recipe is added to the canteen menu.
- Hold a community event where parents can take a garden tour, visit the canteen and sample dishes prepared by students, as well as canteen fare. This is also great way to attract more volunteers for kitchen garden programs.

## CASE STUDIES

### Margaret River Primary School, WA

The journey towards a healthier canteen and school environment at Margaret River Primary began in 2014.

A whole-school approach in this sense relates to the link between the canteen and what is taught in the classroom.

The HFD policy is based on the Australian Dietary Guidelines and a traffic light system of categorising foods. Common canteen items include:

**Green:** Fill the menu – minimum 60% of foods such as sandwiches, wraps, sushi, frittata, rice paper rolls, vegetable curry, fruit salad, water and reduced fat dairy.

**Amber:** Select carefully – maximum 40% of foods such as fruit muffins, full fat dairy, 99% fruit juice.

**Red:** Off the menu in WA schools, e.g. soft drink, chocolate, deep fried food.

According to Megan Sauzier, Executive Officer at WASCA, a recent evaluation to assess current levels of awareness and

(continued over)





Margaret River primary school students sharing a meal.

A passionate group of parents voiced their concerns regarding some discrepancies in what was being taught in the classrooms about nutritious eating, particularly in the school's kitchen garden program, and what was being offered at the school canteen (mainly amber items).

Strategies

- Educating and training all canteen staff, e.g. online training on the traffic light system of categorising foods.
- Canteen manager reporting to and attending all P&C committee meetings.
- Raising the profile of the canteen and the changes being made through the newsletter and school blog.
- Advertising and trialling new menu items each term for incorporation into

future seasonal menus.

- Engaging the kitchen specialist, from the school's kitchen garden program, to cook three hours per week for the canteen so the canteen staff can heat and serve nutritious meals utilising the school garden produce.

Vasse Primary School, WA

Vasse Primary School has connected its kitchen garden and canteen to provide fresh, seasonal produce for use in snacks and school meals.

The school's canteen has a set menu which uses produce from the garden, as well as specials which are based on surplus produce.



The health harvest from the Vasse primary school garden.

Menu items include salads, broccoli quiche, spaghetti bolognese featuring veggies and herbs, and veggie and fruit sticks for snacks.

The school became a Kitchen Garden Classroom member, through the Stephanie Alexander Kitchen Garden Foundation, and used the Foundation's resources to help link the garden and canteen.

Strategies:

- Encouraging the canteen manager to visit the garden regularly to check on the progress of the plants and develop a good understanding of garden practices.
- Ensuring canteen staff understand the need for flexibility when planning menu items as there will be times when produce quantities and qualities will be

affected by weather, pests, etc.

- Planning menus carefully to make full use of the garden's produce and to minimise waste and the need to spend money buying ingredients.
- Using the Stephanie Alexander Kitchen Garden Foundation's Planting Chart and Kitchen Garden Program Seasonal Planner to coordinate seasonal plantings, to ensure there is enough harvest to meet demand.
- Involving students in the process of planning and coordinating what needs to be planted in the garden to supply the canteen.

For more information, go to [www.waschoolcanteens.org.au](http://www.waschoolcanteens.org.au) and [www.kitchengardenfoundation.org.au](http://www.kitchengardenfoundation.org.au).

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## NATIONAL

HEALTH and Nutrition is now a dominant theme which influences political and social trends, including buyer behaviour within the grocery and snack food market.

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Celebrity Chef  
Tobie Puttock.



**EMMA DAVIES**

WITH more than 20 years in restaurants around the world – including the first Fifteen Restaurant in Australia which taught underprivileged youth to be chefs – numerous TV appearances, and four bestselling cookbooks, celebrity chef Tobie Puttock is passionate about teaching young people the benefits of getting in the kitchen.

**Q. How important is good food and nutrition for young kids?**

Society surrounds us with glossy packets and attractive advertising campaigns drawing us in to eat unhealthy products. Now more than ever is the time to get your kids in the kitchen and get them cooking.

I always find that when my daughter is involved with the cooking she takes an interest and at the same time I'm giving her a skill every person should have.

**Q. Do you think food and nutrition should be a stronger focus in children's education?**

Hell yes! Learning about nutrition and learning to cook basic food should be compulsory!

We have become a society of convenience, but obesity and diabetes definitely isn't convenient.

These illnesses can be prevented. It was compulsory to learn Latin at the school I went to, yet I wasn't taught to steam vegetables or boil an egg.

Education is everything, and with some early education kids are given the knowledge to understand the outcomes of what they are being fed at home.

There are a so many programs out there educating kids about food, but for me it needs to be compulsory in schools.

**Q. Do you think schools need stronger Vocational Training programs around food and nutrition?**

100 per cent. School should be as much about teaching kids life skills as gearing them to make money.

In my mind the system is all back to front. The system seems to concentrate on creating money makers and doesn't nurture our most basic needs.

**Q. Do you think we need to educate parents on healthier food choices?**

We can do all the educating we want but if the parents aren't on board the example is not being set.

The majority of the time when I see overweight parents the kids are also overweight; although genetics will play a part, diet can also drastically help reduce obesity.

**Q. What advice would you give to determine the best foods to sell at the canteen?**

I think it is wise the school consult a nutritionist; there will often be a parent who is a nutritionist who would be more than willing to donate their time to help shape a schools offering to better the eating habits of the students.

**Q. Do you think school gardens could engage more students to learn about sustainability and where their food comes from?**

We've all seen Jamie Oliver's shows where some kids aren't sure what a carrot looks like.

I think giving the kids ownership of what they are eating is everything.

Being a parent I totally get that feeding kids their daily veg portions is not easy, but there are ways of getting kids involved with cooking and making recipes that are fun to make and healthy.



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All images: The Outdoor  
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# FORCE OF NATURE

Collaborative research between the Outdoor Youth Programs Research Alliance (OYPRA), research institutes, universities, peak outdoor education bodies and the Victorian State Government is set to transform outdoor education policy for schools.

## EMMA DAVIES

THE world-first research is aimed at improving outdoor education practice and policy for schools, as well as leading to more strategic investment in outdoor programs for learning, health promotion, and positive youth development.

The aim of the study, published in the *International Journal of Educational Research*, was to examine how outdoor programs impact adolescent development and wellbeing, with students participating in a range of activities, challenge tasks, group discussions, remote living, and outdoor activities like bushwalking, mountain bike riding, canoeing, ropes courses and overnight camping.

The study involved cooperation between researchers and OYPRA members including; the Royal Children's Hospital Melbourne, Murdoch Children's Research Institute, University of Melbourne, Deakin University, University of Oregon, the Australian Camps Association, the State Government of Victoria, the Outdoor Education Group, the Outdoor Council of Australia, YMCA Victoria, Outdoors Victoria, Operation Newstart, United Church Camping and Outward Bound Australia.

OYPRA's comprehensive insight into Australia's diverse outdoor youth programs puts it in an ideal position to determine the most beneficial camp experiences for adolescent students.

Dr Ian Williams, Postdoctoral Research Fellow at the Murdoch Children's Research Institute, said OYPRA's research was integral for improving outdoor learning programs across Australia and internationally.

"Most people agree that outdoor learning programs support personal development and learning new skills. Now, through world-first research undertaken by OYPRA, we hope to understand how nature-based education programs are beneficial to young people," Dr Williams said.

"The extensive research undertaken by OYPRA will help inform policy and practice, and lead to more strategic investment in Australia's outdoor programs for learning, health promotion and positive youth development."

Dr Williams said the anecdotal evidence that outdoor education programs benefitted students was very strong, but the researchers wanted to collect thorough quantitative data.

"Traditionally in the outdoor space a lot of the research is done by outdoor practitioners who don't necessarily have a lot of training in conducting high quality research. There are



recognised limitations of some of the research that's been published and so we've set out to try to address those limitations," Dr Williams said.

"One of the things that is somewhat unique to our group is the combination of outdoor providers and academia and researchers means that we bring a lot of the practices that are common in medical research where the threshold for acceptability and rigour is very high – we bring those principals to the outdoor space."

The study aims to determine what the benefits are, whether or not they last when students go back to school or back home, and how long those benefits might last after the outdoor activity has concluded.

Teachers and group leaders were surveyed about their observations and impressions of students' strengths and difficulties, general achievement and content of the programs delivered.

"In our study we've focused on questionnaires that have been well tested in other domains, and the content, or focus of the questions, is asking around the kind of things that people commonly report students benefitting from," he said.

Student surveys covered health behaviours, psychological strengths, emotional difficulties, interpersonal connectedness, nature relatedness and the camp experience.

As well as assisting with supervision, teachers participated in activities alongside students, with researchers stating the involvement of school staff was critical in helping transfer students learning from the program back to school and everyday life.

"From our view the inclusion of teachers is a key part of that argument of the transfer of

benefits back to regular life," Dr Williams said.

"We also surveyed teacher and group leaders to try to get some insights from them about the experiences of students on camps by doing what we call triangulation; looking at the extent to which the outcomes that students who participate report matches the opinions of teachers and the opinions of group leaders who're on the same program and whether those three sources of information align or whether they're different."

Dr Williams said part of the aim of OYPRA is to demonstrate the psychosocial benefits of outdoor education can be utilised through existing facilities and infrastructure in order to enhance and build on the breadth of student learning which currently takes place in schools.

"Our research is not only about investigating student benefits but also about trying to peer inside the black box of outdoor programs. What is it that goes into outdoor programs that actually makes a difference? Is it being away from home? Is it having a wilderness experience? Is it having a break from technology? Is it having challenging experiences? We're trying to take a research lens to those questions about effective components about program design," he said.

The results will be finalised mid-2018, but previous research has shown that personal development in students has been linked to improvements in academic performance.

"If we find evidence that particular components of outdoor education lead to effective outcomes then our hope would be that some of those program design elements would translate into recommendations for subsequent school based programs and policy," Dr Williams said.

## THE STUDY

**The impact of outdoor youth programs on positive adolescent development: Study protocol for a controlled crossover trial.**

This study takes place over a period of **36 months** and examines a purpose-designed, seven-day outdoor program intended to promote positive adjustment in young people.

**Up to 400 participants** (ages 14–16 years) will be recruited from across two Victorian secondary schools.

Outcome measures include self-reported **social and emotional health**, and teacher-reported **ratings of academic performance and school conduct.**

Results will be of **interest to educators internationally** and those involved in improving social and emotional health in adolescents.



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Located just 30 mins north of Mackay, the Outdoor Education Centre has been returned to its former glory by Don Griffin and his team with more than \$250,000 invested so far.

Visitors to the centre will find accommodation for up to 100 guests, full commercial kitchen, indoor recreation hall, and a wide range of activities on offer from team building to boat trips, and bush walking trails to low ropes courses.

Additionally, in late 2017, the centre kicked off its abseiling program which is available to all age groups.

With a beginner's wall available on site, and an advanced wall located via a short bush walk, abseiling has become the number one activity request for camps in 2018.

Centre manager Katie Geiger encourages anyone who wants more information or an obligation free quote to get in touch.

But act quickly - the centre is already more than 50 per cent booked out for 2018 and 2019 camps!

Visit [www.seaforthpines.com.au](http://www.seaforthpines.com.au) or call 0408 550 415 for more information.



**Hanging around:** Abseiling is one of the most popular activities at Seaforth Pines Outdoor Education Centre.



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# Supportive school camps

## NSW

AS Jess approaches the giant swing at YMCA's Camp Yarramundi, it's clear she is apprehensive.

She locks herself into the harness and it's now time for her peers to hoist her using the ropes attached.

"Do I have to go all the way to the top?" she asks timidly.

Tristan, the camp supervisor, responds.

"Only as far you think you can go. Then try to go a baby step further."

As Jess is lifted higher, her fellow campers chant her name. The fear is giving way to determination. The team count her down and then after a final pause, Jess flies through the air.

She greets everyone with a triumphant smile as she swings back the other way. In a split second she's grown in leaps and bounds.

These are the sort of experiences that YMCA NSW has been offering young people since the 1930s.

Camp Yarramundi in Sydney's Hawkesbury Valley offers both hard-top and traditional camping options in a unique natural setting by the Hawkesbury River.

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# Engage. Explore. Inspire.

## Village Roadshow Theme Parks

### NATIONAL

#### Sea World

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Sea World is the home of discovery and fun, where the adventure never ends with exciting rides, spectacular presentations and amazing marine animals.

#### Paradise Country

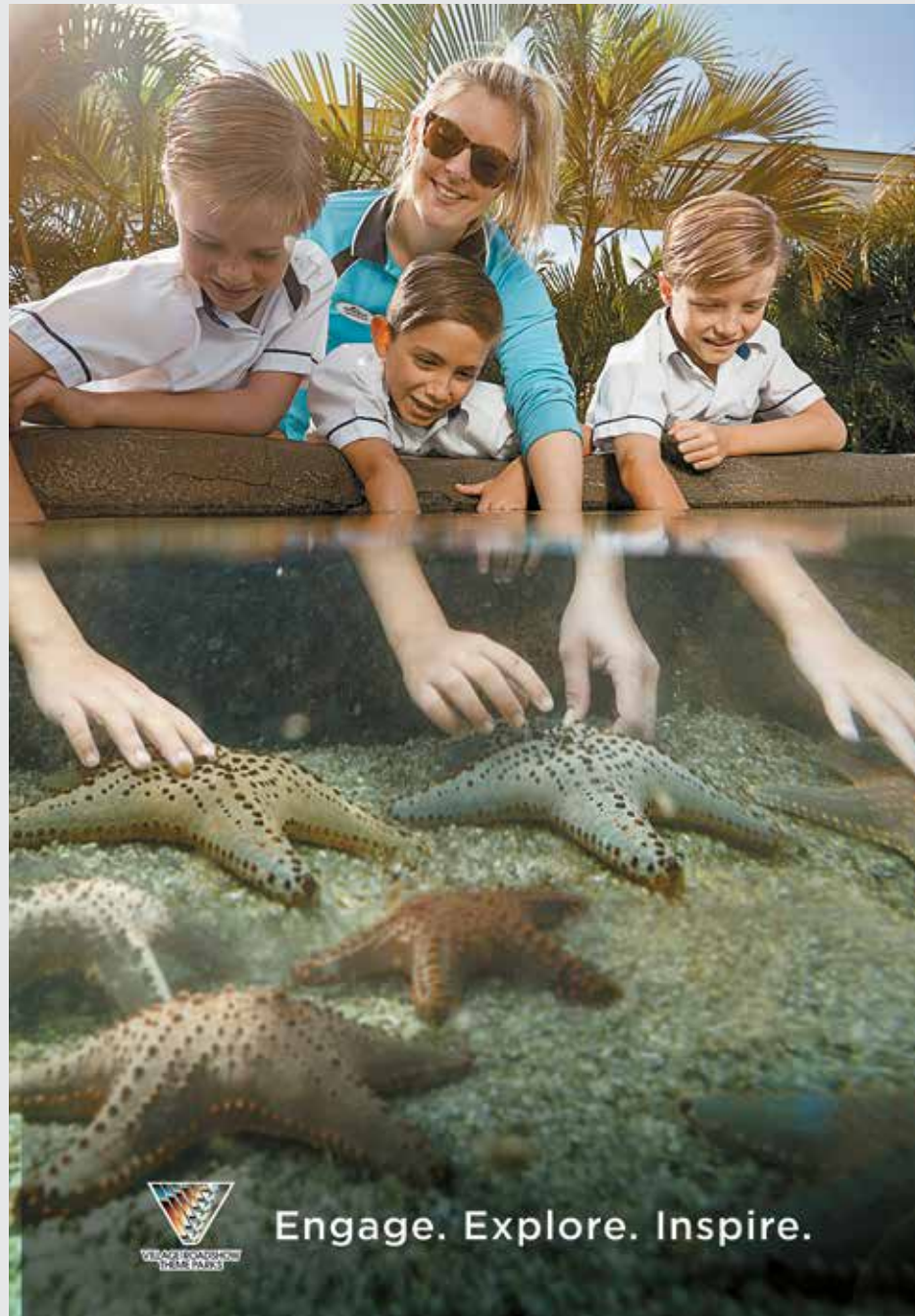
Paradise Country's Australian Curriculum based programs will see students immersed in an authentic experience that reflects traditional farm life and explores the history of Australian Aboriginal and Torres Strait Islander culture and its wildlife. These programs focus on Biological Science and Humanities and Social Sciences with relevant information about Aboriginal and Torres Strait Islander history for the traditional land owners of the Gold Coast - the Ngarang-Wal/Kombumerri people.

A wide range of activities available include sheep shearing, damper tasting and gold and opal mining! Students have the unique opportunity to interact with our native Australian animals including dingoes, koalas, kangaroos and snakes.

#### Warner Bros. Movie World

Students can glimpse into the world of entertainment at Warner Bros. Movie World and uncover what this iconic Gold Coast Theme Park is all about. Our diverse programs are available for Prep to Year 12, and shine a light on the performing arts and entertainment industries with interactive Drama programs with our professional entertainers. Students will have the opportunity to gain extensive knowledge from industry professionals, as well as learn key performance skills from our professional actors to enhance their dramatic performance.

For secondary students, we are proud to present our exciting programs for Physics, Media Arts, Drama and Tourism! See students apply their knowledge and understanding of physics to real world experiences with our exceptional Physics programs. Students will have the opportunity to learn all about the science behind our world class rides and attractions at this iconic Gold Coast Theme Park. Our Media Arts program uses up-and-coming



modern technology, including virtual reality, to allow the students to engage in an authentic experience, with exclusive behind the scenes interactions with industry professionals. Catch a sneak peek into the real world of the entertainment industry with our unforgettable Drama programs at Warner Bros. Movie World.

With exclusive access to industry professionals and performers, students will have the opportunity to learn and apply different skills to enhance their dramatic performance. The Tourism program at Warner Bros. Movie World allows students to hear from Managers who have a wealth of experience to impart, providing valuable information regarding the plethora of opportunities the ever growing, exciting and diverse tourism industry provides!

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## Testimonial

John Del Borrello and his two children Jade (13) and Luke (9) recently visited Village Roadshow theme parks Sea World, Movie World and Wet'n'Wild.

"My favourite part about Sea World was snorkelling with the stingrays and sharks and the sea lion and Dolphin shows," Jade said.

"The educational tour taught me that sea creatures are not dangerous by nature."

"I learned that it's our responsibility to help take care of the ocean and the environment," she said.

With themed rides and attractions, Movie World was also a highlight for the children.


"I liked learning how movies are made and constructed," Luke said.

Mr Del Borrello said not only were all the parks facilities excellent but they also provided underlying educational messages to children in an entertaining way.

"Even the water at Wet'n'Wild is continually recycled through all the water attractions so as not to waste large amounts of water," Mr Del Borrello said.

"It was a fantastic opportunity for my children to learn something new and have fun at the same time."

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*Marcus, biology teacher.*

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# BUILDING RESILIENCE

Aggressive behaviour and cyberbullying on social media is on the rise, making it crucial that students, schools, community groups and Government work together to reduce bullying in the classroom and beyond.



Image: Office of the eSafety Commissioner

Professor Donna Cross has studied more than 300,000 students across the country to develop effective anti-bullying programs.

## EMMA DAVIES

WITH the deaths of young bully victims like Amy "Dolly" Everett in the spotlight, statistics show suicide as the leading cause of death for Australian children aged between 5 and 17 years.

Professor Donna Cross is an expert in child and adolescent mental health, bullying and cyber bullying prevention, with more than 22 years of research under her belt.

In her work with the Telethon Kids Institute and the Friendly Schools Plus program, Professor Cross has studied the causes, effects and ways to prevent and reduce bullying with involvement of more than 300,000 Australian students.

Professor Cross advocates for a whole school and whole community approach to create supportive environments to reduce bullying.

"Everybody needs to be taking action that discourages bullying," she said.

"There's evidence that shows that if a teacher is on duty at recess or lunchtime and they observe two children being aggressive with each other, that aggression will increase more if that teacher, adult or parent does nothing, than it would if there were no adults there at all."

According to Professor Cross, young people read inaction on the part of adults as condoning the behaviour. When an adult or teacher does react, kids know that's the

threshold point.

"The most effective way to reduce bullying is if the bystanders take action – by supporting the target, seeking adults' help,

showing distaste towards the behaviour, or even messaging the person being bullied to check to see if they are okay; any action that will minimise the harm to the target and

## LATE Model for teachers

- **Listen** - Thank the student for sharing the information with you, ask open ended questions, use non-invasive communication options such as walk and talk;
- **Acknowledge** the young person's concerns - using reassuring statements such as 'It sounds like you are having a tough time';
- **Talk** about options - so that students feel in control of their own problems. Ask the student what they have tried already and if it has worked for them and what they would like you to do to help them;
- **End** with encouragement - to give the student a feeling of hope and that they could come back and talk some more if needed. It may also be beneficial to follow-up with students at a later date, to ensure the problem has been resolved or to offer further assistance.

demonstrates that they do not agree with the actions being taken by the perpetrator," she said.

"If a young person doesn't feel they have enough social status to step in and help somebody who's being bullied, they can try to distract the person bullying by saying 'oh come on, let's go do something else', to try to reduce the conflict indirectly."

Taking action is always more effective if the school has a strong anti-bullying culture. This means students standing up to bullying know there is acceptance or encouragement within the school for that positive behaviour or action from bystanders; an active discouragement of bullying behaviour.

"The most powerful ways to discourage bullying are through peers, and setting a school culture and tone that encourages positive social behaviour," Professor Cross said.

Research has shown that it's rare for children to come to an adult for help – around a quarter of girls and 10 per cent of boys.

Professor Cross suggests if a student does approach a teacher for help, teachers need to structure their response around four actions that form the basis of the LATE Model.

LATE can be used by adults and peers to show young people experiencing difficulties that they are being listened to and that they are in control of the situation and what happens next.

(continued on page 46)



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(continued from page 44)

**“If parents consider that the technology or online environment is like a swimming pool - you can put a fence around it, filter it or block a child’s use but will the child ever learn to swim properly?”**



“This approach is restorative and empowering, we’re trying to build on the strengths of the young person rather than taking over and encouraging learned helplessness,” she said.

“It’s a delicate conversation and teachers need to respect how hard it was for that young person to speak to an adult and to work through a process that empowers that young person and gives them control and agency in the situation.”

“The error we’ve often made in the past is believing that the best action is for parents or teachers to take over and quickly fix the situation. When we talk about children not having enough resilience, or not being able to help themselves, it’s largely because we haven’t trained and supported them to do that.”

Professor Cross advises parents not to just block or ban children from the internet as they also risk blocking children’s learning.

“We often draw analogy with cyber bullying, online environments and digital technology with the way parents think about swimming pools,” she said.

“If parents consider that the technology or online environment is like a swimming pool – you can put a fence around it, filter it or block a child’s use but will the child ever learn to swim properly?”

“They need education and support and adults to be more knowledgeable and helpful in understanding digital environments. We all need to make an effort to understand our children’s needs and skills to keep them safe and enhance the positive benefit of online environments.

“Technology is not going to go away, swimming pools are not going to go away – children are going to be swimming at some point in their life.”

While cyberbullying often happens beyond the school yard, Professor Cross said

that schools have a responsibility to provide student support if the behaviour is affecting the students’ learning. Schools can approach the e-Safety Commissioner’s office if they feel it’s beyond their capabilities.

“If a child is being bullied about an image online and they don’t know how to get it down the E-Safety Commissioner’s office can help,” Professor Cross said.

State Governments are rising to the challenge, introducing a range of initiatives for a whole school community approach to reduce bullying.

South Australian State Liberals have revealed an anti-bullying package which would replace the controversial Safe Schools program with a targeted focus on cyberbullying.

The Andrews Labor Government in Victoria has introduced a \$7 million Anti-Bullying and Mental Health Initiative which includes resources and training for schools to help reduce the risk of suicide and manage students’ recovery from bullying.

Queensland Premier Annastacia Palaszczuk has also focused on cyberbullying for the new Youth Advisory Council and the Queensland Families and Child Commission (QFCC), and a statewide survey of children will be included in an issues paper the Premier intends to sponsor at the February COAG meeting.

The Queensland Department of Education also coordinates the National Day of Action against Bullying and Violence which this year will be held on 16 March.

The NSW government is also launching a comprehensive initiative to reduce bullying in schools during 2018.

For more information about how your school can get involved visit: [www.bullyingnoway.gov.au](http://www.bullyingnoway.gov.au).

For more information on the e-Safety Commissioner visit: [www.esafety.gov.au](http://www.esafety.gov.au).

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Director of Turning Point Consulting, a Centre of Excellence in Leadership, Change & Wellbeing. Board member of Wellbeing Australia, expert in Education & Wellbeing for ACPI & member of the Global Career Council with ICCI



# A Focus on Wellbeing: Building Skills to Prevent Bullying Behaviours

All schools face challenges with student behaviours and interactions that are negative, harmful, thoughtless, unkind or targeted.

While a focus on bullies and their victims is common, it is important that all children develop skills to support them in responding to people and situations they feel are not positive or constructive.

With these skills, children and their families are able to engage in conversations to recognise and label behaviours for what they are and seek out positive solutions to create change.

Children are exposed to different lives and experiences, and so see different standards of interaction as acceptable. With a positive culture, a school is in a position to create standards that focus on inclusion, optimism and consistency.

## 1. Encourage Ownership

In developing ownership skills, children are better placed to recognise their choices and the impact of those choices on themselves and those around them.

Discussing situations as they stand and seeking responsibility from all parties, there is the potential for children to accept ownership of their choices and the consequences of these decisions.

## 2. Strengths Awareness

In building an awareness of strengths in children we can create a positive platform for discussion of difference, valuing the unique gifts and talents each child brings to the school or family and so the different ways children think, talk and develop relationships.

Respect for individuality can reduce the feeling of exclusion and informs the school community as a whole.

## 3. Value Self-Confidence

Offer children the chance to develop confidence in their choices, actions and decisions by including reflection in their week.

Support families in having discussions to increase confidence based on evidence of great friendship, independent decision making, acknowledging mistakes, valuing others and themselves. Journaling can be a wonderful opportunity for children to improve these skills.

## 4. Recognise the Power of Language

Lead by example in recognising the power of language. Offer questions that allow children to share their experiences, identify areas of growth, compliment others or

understand the impact of their words on others.

Have a visual list of words or images to support considered and thoughtful conversation and wordplay in your school.

## 5. Establish a Positive Culture

Create behaviour standards for those working with children in your school, and explain the importance of positivity in diminishing negative actions, such as bullying. Allow all staff the opportunity to be true to themselves and to share stories of growing skills, taking ownership, failing, and learning how to deal with people with varied opinions and ideas to their own.

## 6. Community Involvement

Include your community in your plans, language and expectations of behaviour. Share strategies parents can use at home to reinforce messages of acceptable behaviours, attitudes and words with suggestions of how to practice this outside of school. Share situations your school is challenged by for families to discuss at home, noting the school's expectation and response.

## 7. Be Solution Focused

Encourage families and their children to solve problems they face with people,



school work and around the playground. Develop critical thinking so that students consider broadly the choices that may be available and the impact of those choices on themselves, others and the school community.

Praise independent problem solving and creating think tanks for students to work together to resolve issues within the classroom in a positive and proactive manner.

For more information visit [www.turningpointconsulting.com.au](http://www.turningpointconsulting.com.au).



All images: Speech Pathology Australia.

**MARY GORNIK**  
SPEECH PATHOLOGY AUSTRALIA  
NATIONAL ADVISOR - EDUCATION,  
EARLY CHILDHOOD & PROJECTS

### Q. What student difficulties can a speech pathologist assist with?

#### Language and literacy;

Students may have trouble understanding what they hear and may not follow directions or answer questions well.

Language problems can also make reading and writing more difficult.

#### Social communication;

Students may have trouble talking with other students and may not make friends easily.

They may not notice or understand the signals which tell us what others think or how they feel.

#### Speech difficulties ;

Students may have trouble saying sounds, or putting sounds together to produce words, making their speech unclear and hard to understand.

#### Fluency (Stuttering);

Students may have trouble speaking smoothly.

They may repeat sounds or words or have long pauses when they talk.

Stuttering can make it hard to answer



Speech Pathologists can assist with a variety of communication issues in the classroom.

questions, read aloud or give speeches in class.

#### Voice;

Students may sound hoarse or lose their voice.

They may sound like they talk through their nose, called nasality.

#### Oral eating and drinking;

Students may have chewing and swallowing difficulties due to a variety of causes.

One of the signs of a potential swallowing problem is coughing, gagging or choking when eating and drinking.

Speech pathologists provide advice on a

range of strategies that can facilitate children's ability to enjoy mealtimes, eat and drink safely, and get adequate food and fluid intake while at school.

Speech Pathology Australia has a Swallowing Awareness Day on Wednesday March 14.

### Q. What signs indicate speech, language or communication needs?

Students may have difficulties:

- understanding and remembering spoken information
- understanding and using specific concepts (e.g.) above, between, after, before
- explaining what they want or need
- with reading (e.g.) sounding out words and reading for meaning
- with writing (e.g.) generating story ideas, linking thoughts
- thinking of the right words to use to explain, describe, or define
- understanding and answering questions requiring higher levels of reasoning, problem solving, predicting and inferencing (e.g.) how do you know? What do you think they will do next?

Speech, language and communication are closely linked to behaviour, educational attainment, how students interact socially, and to self-esteem.

Some associated difficulties arising from a student having a speech, language or





communication need are:

- loneliness and isolation and difficulty making friends, such as starting and maintaining conversations, understanding humour and sarcasm etc.
- difficulties adjusting to changes in routine
- difficulties with organisational skills.
- behaviour problems (including withdrawal, switching off, acting out, frustration, bullying).

### Q. How can teachers support students with speech, language and communication needs?

A teacher's role is crucial in identifying that a student has a speech, language or communication need and providing appropriate supports to promote inclusion, access and participation.

Speech, language and communication skills underpin the skills of literacy and numeracy and are necessary for students to understand and achieve success in all subject areas.

*For students who have difficulty understanding language:*

- Making classroom language easier to understand by pre-teaching new vocabulary and concepts prior to a new unit of work;
- Giving an overview of the lesson first and then going into more detail;
- Explicitly teaching the language of learning, which are high frequency words used over

a variety of content domains, for example: compare, contrast, hypothesise, relative etc.

- Emphasising key words and using short chunks of language;
- Explaining difficult words or idioms for example say 'make' instead of 'produce';
- Supporting what you say with visual cues, gestures, diagrams, pictures etc;
- Using visual timetables to help understanding of the sequence of events;
- Using mind maps to capture ideas;
- Linking new information to what the students already know.
- Reducing background noise and distractions in your classroom;
- Checking your student's understanding, and support students to recognise when they don't understand;
- Making sure you're facing the student and using their name if they are not focused;
- Giving pointers for what students should listen to such as, 'It's important you remember X',
- Allowing extra time to listen and process language.

*For students who have difficulty expressing themselves:*

- Listen and show your interest by maintaining eye contact and using the student's name;
- Be patient and allow plenty of thinking time;
- Give positive feedback for effort;
  - o build on what the student has said. Rather than correcting them, provide

the correct model of spoken language;

- o follow the student's lead;
- o increase opportunities for real dialogue and conversation by shortening your talking time when it's your turn;
- o sometimes you may have to let the student know that you cannot understand them and suggest other ways to get the message across such as rewording, writing or demonstrating;
- o offer help and support when the student requests this;
- o make sure they're not rushed or feeling rushed;
- o respond to what the student is trying to say rather than how they say it;
- o prompt with cues such as 'first', 'then', 'last'.

### Q. How do speech pathologists work in schools?

How speech pathologists work in schools is different in every state and territory in Australia.

In some states, Education Departments employ speech pathologists directly.

In most states school principals have the autonomy and funding to employ speech pathologists as contractors or staff members.

*Speech pathologists can work in various ways in schools:*

- Providing professional development to teachers about oral language, social

language and literacy development. Expressive and receptive language skills are critical in the development of literacy in the first three years of school.

- Assisting teachers to interpret data and to interpret professional reports about students with speech, language and communication needs.
- Advising teachers on appropriate resources to support intervention.
- Providing support in the development of personalised education/learning plans.
- School based targeted intervention for students or groups of students identified as at risk for learning.
- Advising teachers on implementation and interpretation of appropriate screening tools to identify students with mild, moderate or severe communication impairment.
- Assisting teachers to identify the needs for those students identified as having mild, moderate or severe communication impairment.
- Assisting teachers in the design and evaluation of targeted oral language and literacy programs.
- Providing support and training to therapy 'agents' (teacher aides, speech therapy assistants, parents etc.).
- Advising teachers and therapy agents on appropriate resources to support intervention.
- Providing advice and support to make the school a communication accessible environment.

## Q&amp;A

**CHELSEA EVANS  
(PRESTON)**

**Communication Speech Pathology director Chelsea Evans (Preston) has more than 17 years' experience in consultation services to schools regarding Paediatric speech, language, socialisation and literacy matters.**

**Q. How can speech pathology benefit older students whose impediments were overlooked in early childhood?**

Speech Pathology at any stage or age can serve to identify delays, disorders and disabilities across speech (articulation, voice and fluency/stuttering), all aspects of oral/spoken language (expressive and receptive), social interaction, literacy and feeding.

However, as a profession we strongly advocate for early intervention.

**Q. Can children with speech difficulties and impediments slip through the cracks at school?**

In my personal experience, no. Schools and educators, Allied Health, GP's and nurses are well informed and versed in children speech (and language) development.

As a result, children are being identified and referred to Speech Pathologists in the early school years.

This is a result of much advocacy from national governing bodies, local associations and the everyday working SP's.

**Q. What can be done to encourage more schools to employ speech pathologists?**

In my experience, schools are very welcoming of Speech Pathologists working onsite and/or liaising with off-site clinicians in the best interests the child.

If I had my way, every school would employ a Speech Pathologist. However, this mostly lies with the bean crunchers.

It goes without saying, Speech Pathologists are key stakeholders in child development pre-and-during the school years, in offering information, consultation, assessment and therapy.



**Our Mission at All Communication Matters Speech Pathology is to provide a flexible and innovative Speech Pathology Service which enables people of all ages, and across all types of settings, to develop and enhance their communication and swallowing skills.**

**Our Speech Pathologists have received extensive extra in house training in the assessment and intervention techniques that All Communication Matters Speech Pathology offer our clients.**



**All Communication Matters Speech Pathology provide:**

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The team at Stirling Speech Pathology and Allied Services.

# School speech services

WA

STIRLING Speech Pathology and Allied Services have provided speech services to schools across the Perth Metropolitan area for more than 8 years.

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# CHILD'S PLAY

Playgrounds and outdoor areas provide a structured space for socialisation, imaginative play and physical activity. So how can schools design the best educational landscape for their students?



Skywalker Playground, Kellyville Public School NSW.  
All Images: KidsSafe SA.

**EMMA DAVIES**

PLAY can teach children many skills including problem solving, creativity, initiative and social skills but schools need to move beyond the modular, fixed idea of playgrounds and create diverse, flexible and interactive learning environments.

The Australian Institute of Landscape Architecture (AILA) is the peak professional body, with many members involved in the design of playspaces and school landscape development.

AILA national president and University of NSW Associate Professor Linda Corkery said that landscape architects are not just involved in school grounds planning and designing play and learning areas.

**“In Australia, we should be making much more use of outdoor areas for play and learning, and investing more resources into creating wonderful school grounds for all children.”**

“Like any landscape project, they must also consider how the site needs to function, in relation to movement and circulation; accommodating the daily school activities, like morning assemblies; providing adequate shade and cover from wet weather; balancing the sorts of ground surface materials that are used throughout the site to ensure optimum use,” Professor Corkery said.

**KIDSAFE SA RECOMMENDS THE FOLLOWING DESIGN CONSIDERATIONS FOR PLAYSPACES:**

- **Accessibility** – able to be used by all students
- **Areas for Free Play** – running and games
- **Agility and challenge items** – equipment doesn't have to be high. Keeping items low to the ground will negate the requirements for impact areas and certified surfacing.
- **Nature Play** – natural play settings positively influence children's behaviour and their development in regards to mental health, social and emotional relationships and provide stimulating, sensory experiences.

Paving materials that absorb and hold heat – such as asphalt, concrete, pavers and rubber softball – are a potential problem, particularly in areas with sun exposure, few trees, and sparse little shade.

“In Australia, we should be making much more use of outdoor areas for play and learning, and investing more resources into

creating wonderful school grounds for all children,” Professor Corkery said.

“These outdoor spaces are critical for young children's development – physical, mental, social – and can continue to support good health, education, physical activity and places to socialise through to late teens.”



Skywalker Playground, Kellyville Public School NSW.

Professor Corkery said that the focus is not just about play. Well designed and managed school grounds can also enhance learning opportunities, and should be given as much attention as classroom interiors in the overall development of the school.

*(continued over)*



“In Australia, we should be making much more use of outdoor areas for play and learning, and investing more resources into creating wonderful school grounds for all children.”

Our Lady of the Rosary, Kensington, NSW.

“Schools are public buildings that must accommodate students, staff and visitors who have a disability or are movement impaired.

Site design should integrate appropriate ramp access to building entries and access around and throughout the grounds,” she said.

With inner city schools needing to

accommodate ever growing student populations, extra facilities like classrooms and halls are added at the expense of the school landscape.

“Many of these playgrounds end up being hard surfaced because they have to hold up under the concentrated daily traffic of hundreds of students,” Professor Corkery said.

“It is rare that many trees, grass or garden areas can survive in these conditions.”

When landscape designers are developing playspaces to engage student’s curiosity and imagination, involving natural elements is important.

“Fundamentally, there is wide acceptance and understanding among educators and

parents that the outdoor environments of schools are equally meaningful places for children’s learning as the indoor spaces,” Professor Corkery said.

“Interactions with nature and creating learning environments in school grounds can include school gardens,” she said.

“Rethinking the way the site functions



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Mater Dei, Camden NSW.

allows for the possibility of increasing biodiversity, introducing food-producing trees and plants, developing 'green infrastructure', such as rain gardens and in some situations, wetlands that can become outdoor science labs."

Kidsafe South Australia executive officer Holly Fitzgerald said that schools should do their research when planning to install or upgrade an existing play area and that children should be involved in the design process.

"This enables schools to make informed decisions about the playground with the ultimate outcome being a safe, engaging and challenging playground created for the intended users," she said.

"Well-designed playgrounds will be all inclusive. There are many designers who specialise in designing for all abilities. Consulting with designers, parents, children and health care professionals is essential."

**"By inviting a child to use their initiative and explore possibilities, we provide them with the best opportunities to learn."**

Ms Fitzgerald recommends that schools visit other playspaces and take note of the type of equipment and surfaces used

and then engage a landscape architects or designer who has knowledge of Australian Standards for playgrounds and experience in designing for education.

"Many designers will offer a consultation service which will include students, parents, teachers, and other community members in the design process," she said.

Ms Fitzgerald suggests that involving students in the process and letting them create a wish list of desired play activities will assist schools in selecting a supplier who best fits their needs.

"By inviting a child to use their initiative and explore possibilities, we provide them with the best opportunities to learn."

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# SHOULD YOU SALARY SACRIFICE?

EMMA DAVIES

A salary sacrifice is an arrangement between an employer and an employee, where the employee agrees to forgo part of their future entitlements (such as salary or wages) in return for an employer providing benefits of a similar cost.

According to the Australian Tax Office (ATO), to get the benefits of salary sacrificing for both employee and employer, there needs to be an 'effective' salary sacrifice arrangement under which:

- An employee must forgo part of their future entitlements before the employee performs the work;
- An employee pays income tax on the reduced salary or wages;
- An employer may be liable to pay fringe benefits tax (FBT) on the fringe benefits provided to an employee;
- If the arrangement involves receiving super contributions in lieu of salaries or wages, these contributions are classified as employer super contributions (rather than employee contributions) and are taxed in the super fund.

## TAX BENEFITS

Salary sacrifice can reduce an employee's taxable income as the employer pays for certain goods and services straight from the employee's pre-tax salary.

"Under a novated lease arrangement, the employer take over all or part of the lessee's rights and obligations under the lease," an ATO spokesperson said.

"This transfer of rights and obligations is agreed to in a deed of novation between the employer, the finance company and the lessee.

"The lessee is usually the employee, or an associate of the employee. The deed of novation usually contains a clause that transfers the lease obligations back to the lessee on termination of the lease or when the employee ceases employment with the employer.

"In the latter case, this enables the employee to enter into a new novated lease arrangement with another employer."

Some employers in the education sector may be Public Benevolent Institutions (PBIs). PBIs are eligible to provide Fringe Benefit Tax exempt benefits to their employees.

For the years ending 31 March 2016 and 2017 these benefits are capped at \$31,177 per employee.

## BENEFITS FOR EMPLOYERS

Will the ATO could not provide specific financial advice about the benefits, a spokesperson did point out that a fully novated lease agreement can be treated as a tax invoice, provided it satisfies the information requirements for tax invoices.

"Where the arrangement does not involve the legal assumption of an employee's obligations under the lease and is merely a reimbursement or payment by the employer on behalf of an employee, the employer may be entitled to claim GST credits," the spokesperson said.

"The reimbursement is treated as payment for a purchase that the employer has made on behalf of an employee and the employer may claim GST credits even where they hold a tax invoice issued to an employee."

## EFFECTIVE SALARY ARRANGEMENT

To get the benefits of salary sacrificing for both employee and employer, teachers need to have an 'effective salary sacrificing arrangement'.

"It is advisable that both employee and employer clearly state and agree on all the

terms of any salary sacrifice arrangement," the ATO spokesperson said.

"The contract is usually in writing, but may be a verbal one. If they enter into an undocumented salary sacrifice arrangement, there may have difficult establishing the facts of their agreement."

## SUPER CONTRIBUTIONS

"Salary sacrificed super contributions are considered employer contributions as long as it is under an effective salary sacrifice arrangement," the spokesperson said.

"It is important to note that these are not fringe benefits when paid for an employee to a complying super fund.

"However, super contributions made for the benefit of an associate, such as a spouse, are a fringe benefit.

"Similarly, contributions paid to a non-complying super fund will be a fringe benefit."

Teachers need to be aware of how entering into a salary sacrifice arrangement with their employers will affect them.

Refer to the ATO website for more information.

The Maxxia logo is positioned in the upper right quadrant of the page. It features the word "Maxxia" in a bold, orange, sans-serif font. The letter 'x' is stylized with a grey dot above it, and the 'i' has a grey dot above it as well. The background of the entire page is a photograph of a person's legs wearing white sneakers, sitting in the driver's seat of a car. The car's interior and the person's legs are visible on the right side of the frame. The background shows a bright blue sky and a view of the ocean and some greenery in the distance.

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\*Savings example is indicative only and is based on the following assumptions: living in NSW 2560, salary: \$70,000 gross p.a., travelling 15,000 kms p.a., lease term: 60 months. The purchase price discount represents a typical saving and is compared to the manufacturer's on-road price of the new vehicle. All tax savings calculations include budgets for fuel, servicing, tyres, maintenance and re-registration over the period of the lease. These calculations also include comprehensive motor insurance and platinum aftermarket pack, which includes window tint as part of the offer. The total amount saved is a comparison to financing the purchase price of the vehicle over 5 years and paying for all running and maintenance costs out of your post-tax earnings. Your actual savings will depend on your income tax bracket, the GST processing method nominated by your employer, administration fees payable under your employer's salary packaging plan, the negotiated Selectus discount on your chosen vehicle and your personal circumstances. <sup>^</sup>The vehicle price stated for Hyundai Tucson Elite 2.0i Auto is correct at the time of print and may be subject to change. Vehicle price stated includes all NSW on-road costs and government charges, and excludes platinum aftermarket pack.



# Lighten the load



Image: Pexels.



Record management regulations vary from state to state.

## For the record

### NATIONAL

ACCURATE record keeping means that school managers can quickly access relevant information to maintain and improve the quality of their decision making, reporting, and long term planning.

Schools should have a policy in place for records management which includes a records review schedule, a process for identifying short or long term storage, a procedure for duplicate records and drafts, efficient document storage, and identification of disposable records and a disposal process.

With the rise of digital apps, more schools are moving to electronic records management for rapid sorting, searching, and retrieval of records.

Schools should consider the dangers of inadequate and insecure digital storage – while it can save space, be cost efficient and easy to use, some electronic records can be hacked.

This is an issue for schools who have a responsibility to teachers, parents, and students to maintain private and confidential information.

For example, in May last year personal student and student family information was illegally downloaded from a Melbourne High school system and used to send hoax emails to parents.

**Schools should consider the dangers of inadequate and insecure digital storage - while it can save space, be cost efficient and easy to use, some electronic records can be hacked.**

Australia does not have a national records management policy for all schools.

According to the WA Department of Education Retention and Disposal Schedule for School College and Campus Records, schools must review active files on a regular basis to determine whether they can be destroyed, stored for destruction at a later date, stored for transfer to the State Records Office of WA at a later date, or remain as part of the active file system.

Lists must also be kept by schools, colleges and campuses of all records that are destroyed or archived.

According to the Independent Schools Victoria website, Independent schools are required to keep some records, the retention of which is optional but highly recommended.

For more information on your schools responsibilities for records management and disposal, contact your State or Territory department of education office or independent schools association.

## SCHOOL MANAGEMENT SOFTWARE: THE BENEFITS

- Reduce teacher workload with single point of data entry
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- Reporting and analytical tools
- Teacher alert functions in emergencies
- Allergies and medical information on hand

### EMMA DAVIES

MOVING administrative tasks online can greatly streamline processes such as enrolments, financial management, and equipment bookings, making life easier for staff.

If implemented correctly, integrated cloud management solutions allow all school staff, teachers, parents and students can be connected.

Now, schools can offer live student profiles which includes attendance, achievement, and behavioural data.

Software management systems can help teachers and other school staff, but there are also risks if the solution is not fit-for-purpose.

There was the Victorian Education Department's Ultraneet project; this online

platform promised to connect teachers, parents and students but technical issues meant it was rarely used after its 2010 rollout before being dumped in 2013.

NSW TAFE experienced a range of costly issues with its most recent LMBR system before cutting its losses and moving to a different provider, stating that "a modern, cloud-based system will enable students to easily manage their training records and allow us to adapt more quickly to new policy settings."

WA public schools will be hoping for a better result, with a \$32 million upgrade to the Department's School Information System coming online.

According to the supplier, the new solution will compile all student records into a single enterprise database, which will be delivered via the State Government's secure private

cloud.

The new education management platform was expected to relieve schools of many current reporting requirements, such as census reporting that can now be drawn directly from the system.

WA schools were due to be moved to the new system from 2018.

Market researcher Technavio is forecasting massive growth in the global classroom management systems market between 2017 and 2022, driven by increasing emphasis on collaborative learning tools, rising adoption of cloud-based management tools, and growing government initiatives in digital learning techniques.

With teachers working more and more hours, any program that can reduce the administrative and planning workload should be a high priority for schools.

# Sector embraces archiving help

## NATIONAL

A SMART space-saving solution to storing documents is helping clean up the education sector's archiving problems.

The patented storage system made in Australia by Archive Management has received an overwhelming response since the company focused on becoming an education specialist over the past five years.

"Our system can store double the paperwork using the same space when compared with traditional boxes on shelves, so it's a compelling solution," Archive Management director Duncan Macmillan said.

Mr Macmillan said their growth in the sector has meant the company has been able to continually tailor its services to the needs of education providers, now making up approximately half of the company's total activity.

"There's been a natural demand for our services in education over the past 30 years, but we've been thrilled by the response as we started engaging directly with our school customers," he said.

Mr Macmillan believes that Archive Management's core offering, an efficient system of super-strong stackable front-opening boxes, is a natural fit for the industry.

"The sector faces paper storage problems like anyone else - there's a requirement to keep important records at hand and access them easily when they're needed, but space is at a premium," he said.



Easily accessible records.

Another strong drawcard has been the installation and document migration services provided.

"So many schools don't have the time or labour to tidy up and properly catalogue their mounting archives - it's a headache

we can take away," he said.

More information can be found at [www.archivemanagement.com.au](http://www.archivemanagement.com.au).

## Paperwork a problem?

Clean up your records the easy way with our space-saving document storage solution.

We can make light work of the job with our onsite installation and file migration service.

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# Made by schools, for schools

## NATIONAL

SIMON is a holistic learning management system that makes life simpler for the school community - admin, teaching staff, students, parents, and even external providers.

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With ongoing development a priority, SIMON has released the first phase of a brand new Medical and Excursion Module, with phase two of the module due for release in January, 2018.

As a not-for-profit project, SIMON is overseen by a management committee consisting of school representatives, with every development a direct result of requests from schools.

Joining the SIMON Community also means much more than just software access.

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# The complete software package

## NATIONAL

PCSCHOOL'S Administration Software is a proven, tried-and-true platform used in schools across Australia and New Zealand.

The School Administration Software has the flexibility to integrate seamlessly with other programs or function as a fully self-contained standalone system.

In 2016, Padua College in Kedron, Queensland embarked on an overall ICT strategy to support the following underlying requirements; keep it simple / ease of use, fit-for-purpose, and flexibility to grow or change.

With more than 1200 students and a very high focus on student engagement, the college considered three potential approaches;

(a) Building a completely new, all-in-one information system;

(b) Developing an intermediate system layer in which all data from the source systems is mirrored and later processed (data warehouse);

(c) Defining interfaces between all the different existing information systems to allow data exchange (interoperability framework).

"After careful consideration and evaluation we went ahead with an interoperability framework in order to provide to perform our large wish list while remaining robust, scalable, flexible and using open platform to support integration easily," Padua College ICT Systems manager Peter Yeates said.

"PCSchool is our trusted data source for the school since 1988," he said.

"PCSchool constitutes the Administrative School Information system which includes the master data of the school, students, teachers, guardians and alumni, as well as the complete financial management of the college."

Mr Yeates said the company provided a robust central SQL database delivered over a

modern web interface.

"PCSchool's very high level of support and their willingness to work closely with the college and other providers is crucial to the interoperability framework."

"It is refreshing to have a homegrown Queensland company willing to work with other Australian companies to enhance the level of integration," he said.

PC Schools coordinates with Schoolbox by Alares (provider for Learning Management requirements) and Timetabler by Timetable Solutions (for creation and daily management of timetables that refreshes PCSchool as the master database on a daily basis).

It also coordinates with international companies such as; FACTS Management to provide payment planning options for the school community, Microsoft for identity management, Azure Active Directory integration, and the facility of Single Sign between software packages.

"This engagement allows Padua College to extend the interoperability across our entire school business processes as a mesh architecture using PCSchool School Information System as the 'true source of data' to deliver educational outcomes appropriate to the different stakeholders truly differing requirements," Mr Yeates said.

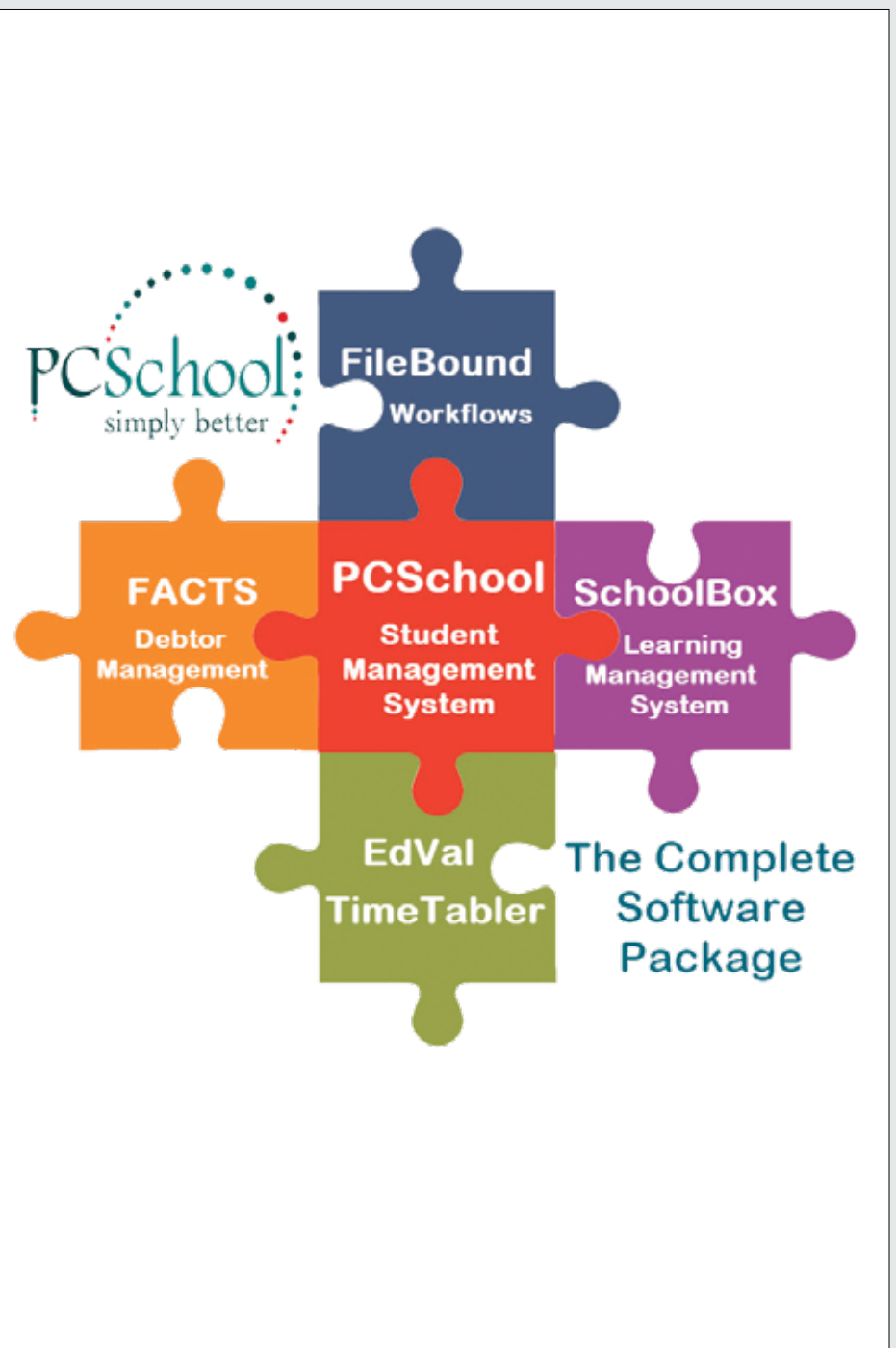
PCSchool not only offers powerful student and family management and curriculum capabilities, but also full financials, point of sale, library and foundation.

These are all seamlessly connected through one common SQL database, providing efficient timely access to a rock solid platform, without limitation.

For more information visit the PCSchool website: [www.pcschool.net](http://www.pcschool.net) or contact us for a demonstration of our software today.

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PC School brings all facets of school management together.

# Simplify your search

## NATIONAL

ANY relief coordinator or teacher looking to fill their absence knows how stressful it can be to find a suitable and available teacher for the job.

Time constraints and late absences mean last minute frantic calls only to find out your usual relief teachers are unavailable.

Teacher Search's calendar booking system only finds available relief teachers with the skills you require, allowing schools to send an immediate job offer to many relief teachers within seconds.

We even have auto mode that allows your absentee teacher to log a leave request and we instantly notify your

priority teachers of the available job offer.

Teacher Search allows teachers to block out days they are unavailable, meaning you only contact the teachers you know can work that day.

Plus, you can look outside your network and find teachers interested in working at your school.

Teacher Search is available via [my.teachersearch.com.au](http://my.teachersearch.com.au) or from the App Store for Apple devices and Google Play for Android.

Sign up for our yearly plan from \$290 per school and receive our 30 new teacher guarantee.

Sign up at [TeacherSearch.com.au](http://TeacherSearch.com.au) or Contact [sales@teachersearch.com.au](mailto:sales@teachersearch.com.au), to start saving time and money with Teacher Search.

Term Calendar		Settings	
2018			
	Mon	Tue	Wed Thu Fri
W7	12	13	14 15 16 Feb
W8	19	20	21 22 23
W9	26	27	28 01 02 Mar
W10	05	06	07 08 09
	Term Calendar	People	My Profile

The calendar booking system allows teachers to mark availability.



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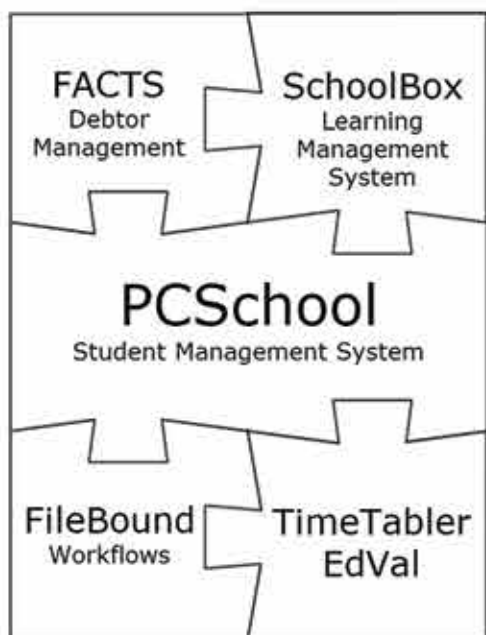
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Independent survey results



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# Picture perfect

## VICTORIA

MELBOURNE Schools Event Photography is the one-stop solution for all professional photography needs with an impressive 15 years' experience in special school events, debutante balls, school graduations, valedictory events, and school formals.

Specialising in creating memorable portraits and group photos, its mobile studio service allows prompt and speedy

photo printing, without compromising on quality and professionalism.

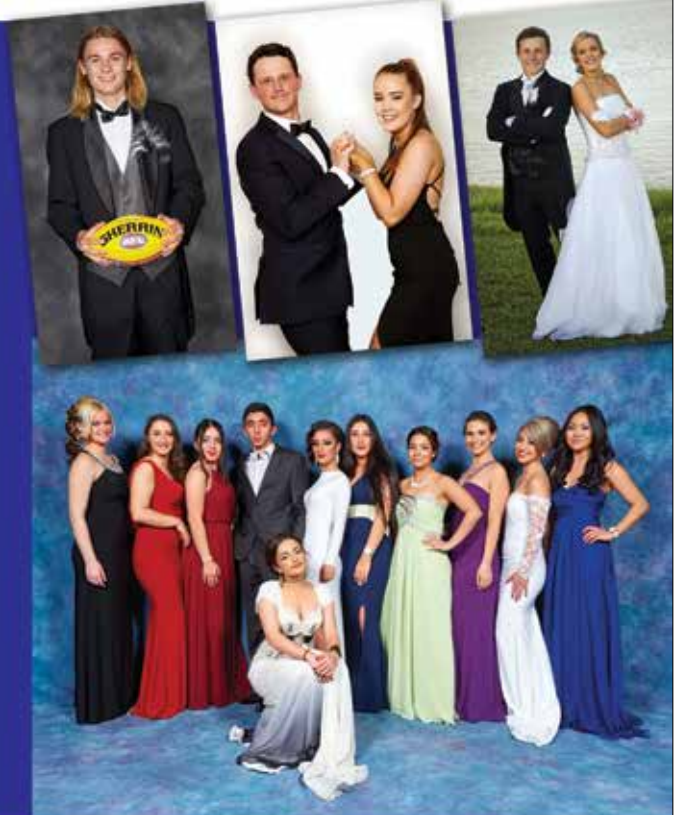
As the only school photography service in Melbourne to offer schools a chance to exhibit a six-meter customizable backdrop for wide aperture group shots, as well as an extensive range of background options, colours, themes and sizes, Melbourne Schools Event Photography is the perfect choice for formal school events.

More information can be found at [www.melbourneschoolphotography.com.au](http://www.melbourneschoolphotography.com.au).

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## THE AUSTRALIAN EDUCATION REPORTER

### FEATURES FOR MAY 2018 Term 2

AATE/ALEA National Conference 2018

EduTECH 2018

Design & Technology

Disability Access for Schools

Drama, Theatre Arts: Music & Dance

Professional Development for Teachers

School Music Programs

Sports in Schools

Sustainable Schools

South Melbourne Vertical Primary School

Sydney Science Park School

Teacher Wellbeing



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- Spare parts for all models.
- Bus and Coach Finance

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# Prioritising safe school buses

## NATIONAL

WITH more than 100 years of combined experience, Bus and Coach Sales Australasia (BCSA) is one of the largest suppliers of school buses in Australia.

A 100 per cent Australian owned and operated company, BCSA is focused on the design, engineering and supply of quality buses and coaches with safety features second to none.

The company's fully trained and dedicated 24/7 after sales support team is always available to give you peace of mind and ensure smooth vehicle operation.

"We don't just sell the bus, and our relationship with you does not end at point of sale," BCSA Director Rodd Hood said.

"We are committed to all of our customers in after sales service, providing 24/7 technical support and ensuring we carry a complete comprehensive stock of spare parts for all models."

BCSA even provides easy, overnight freight delivery to keep your bus or coach on the road to avoid costly downtime.

With options from 26 to 88 seaters, it's no wonder BCSA has sold more than 700 school buses across the country.

The company's future vision is to be a long term, innovative and leading supplier of safe, quality and affordable



The BCSA team.

school buses and coaches in Australia.

"We are always researching new technologies to keep one step ahead of our competitors," Mr Hood said.

"For your next bus or coach purchase think BCSA, and allow us to design, engineer and deliver a quality bus or coach to meet your schools individual

needs, expectations and budget at the best possible price."

For more information visit: [www.bcsa.net.au](http://www.bcsa.net.au).

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# Travel Safe Bus Hire

## NATIONAL

TRAVEL Safe Bus Hire Pty Ltd provides a wide range of ground based transportation services throughout Australia, and has earned a reputation for offering friendly and professional services at highly competitive rates.

Renowned for its ability in providing superior quality group transportation services and transport management, a focus on safety and reliability, and an unwavering attention to detail, Travel Safe Bus Hire has worked closely with schools, colleges and universities forging strong relationships within the education sector.

Many schools, colleges and universities across Australia rely on Travel Safe Bus Hire to provide reliable group transportation services for their students including the University of Melbourne, Scotch College, Monash University, and The University of New South Wales.

These great seats of learning have full confidence that students will travel safely with Travel Safe Bus Hire's experienced local drivers in modern and clean vehicles.

Travel Safe Bus Hire utilises the very latest technology to ensure that children are as safe as possible.

Swipe on/off technology allows for parents to be updated in real-time that their charges are safe.

This technology is powered by eCoach Manager and School Travel Manager



Reliable group transport anywhere in Australia.

software to bring cutting edge safety to school travel.

As well as education establishments, Travel Safe Bus Hire offers group transportation services to large events, corporate businesses, and any manner of

group tours.

Its modern nationwide fleet accommodates small parties in modern minibuses right up to large luxury coaches.

Travel Safe Bus Hire is not just a coach

charter company, it is a strategic group transportation services supplier that you can depend on to get the job done.

For more information visit [www.travelsafecoachhire.com.au/education-transport](http://www.travelsafecoachhire.com.au/education-transport).

# School Travel Manager: Protecting Your Most Valuable Assets

## NATIONAL

SCHOOL Travel Manager is a cloud based solution that focuses on the safety of your children while they are in transit.

Delivering information that is far beyond a simple tracking system, School Travel Manager is the most comprehensive vehicle monitoring system available.

Making use of an advanced swipe card system, parents and schools know the exact location of their children and the vehicles in real time.

Schools and parents have complete peace of mind as their children are monitored from the moment they leave the house until they return home.

The key benefits for schools are:

- Reduced administration
- Full knowledge of all vehicle locations in real-time
- Full knowledge of all children locations in real-time.

Administration is greatly reduced for schools as parents are able to access the application, which negates the need for them to query with schools as to the location of their bus.

School Travel Manager's system is flexible and also modular; reports, real time



Real-time tracking for student safety.

messaging, alerts can all be set up to suit both school and parents.

Not only does the system protect the children, it provides security for the education establishment by supplying and reporting on all regulatory information.

The system's functionality includes:

- Vehicle compliance
- Driver accreditation
- Supplier portal

• Real time messaging - from school to driver and parent

• Reports management

• Cloud based

• Swipe Card management - biometric or other

• Multilingual - the system can be used with multiple languages

• Real time and historical tracking

• Vehicle defect management

The School Travel Manager system takes the transportation management tracking and monitoring market to a complete new level.

Children have never been safer in transport, and never before do parents and schools alike have had so much real time information and reporting.

For more information visit [www.schooltravelmanager.com](http://www.schooltravelmanager.com).



**School Travel Manager is the most comprehensive real-time tracking and monitoring system available for school transportation.**

- 100% web based – access your system from anywhere
- Provides locations of vehicles and children
- Easy swipe on and off system for children to use
- Security and safety focus
- Admin System Management Feature
- Monitor App and Parent App for ease of use
- Third Party Compliance



Admin System Management



Parent App



3rd Party Compliance

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# Bring your school branding in-house

## NATIONAL

A school's brand has inherent value. From reputation within the local community, to a communication of culture, excellence, and in some cases, exclusivity.

A beautiful brand experience serves to attract potential students, instils pride and energises staff.

Unfortunately, for many schools, their branding doesn't extend beyond uniforms, signage and stationary.

Most believe it necessary to order large quantities of branded promotional products offshore to meet expectations of budget approvers.

This is no longer the case and savvy schools are embracing new digital printing technologies and bringing branding and the creation of promotional materials in-house.

GJS is Australia's premier provider of solutions and services for textile and promotional products for schools, and provides an extensive range of print solutions including dye sublimation.

This method can be used to apply an image to specially coated ceramics, metals and polyester fabric, creating many exciting opportunities for educational institutions, including; the production of student awards, team/club t-shirts, plaques for sporting events, name badges for teachers, mugs for visitors and more.

The process is quick and simple enough for one-off jobs and there is equipment available for long production runs.



A small selection of products that can be produced with a desktop dye sublimation solution from GJS.

Imagine your next sports carnival, instead of ribbons, the winners and place-getters receive a custom plaque with a high-resolution picture of themselves on the dias - printed on a beautiful piece of high-gloss metal.

Or when that visiting VIP arrives for

assembly you can present them with a customised mug with their name and your school branding on it.

Literally hundreds of branding and promotional items can now be created on-site and in-house with a single desktop

printing solution.

To see the plethora of possibilities that are available, contact Greg Stone, GJS.

Website: [gjs.co](http://gjs.co)

Email: [greg@gjs.co](mailto:greg@gjs.co)

Telephone: 1800 457 888

Print customised products  
in your school and on-demand!



Literally hundreds of branding and promotional items can be created on-site and in-house with a single desktop printing solution from GJS



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# LIONEL CRANENBURGH

Lionel Cranenburgh is an experienced and passionate educator, who currently directs a WA based career development and training company specialising in teacher and principal progression.

EMMA DAVIES

## Q. What led you to become a teacher?

I'd love to say it was my passion to make a difference, but in reality, it was the only job I could get in Bangalore, India so I became a secondary teacher in an independent boys school.

## Q. What is your career path as an educator?

I've been associate professor of English Literature at a university in India, senior lecturer at TAFE in Communications, head of English in the West Australian education system, as well as stints as an education officer and principal.

## Q. How did you become a teacher in WA after emigrating from India in 1970?

I only had three pounds sterling, a wife and child to support and twins on the way. I applied to the Armadale senior high school to be a gardener.

The principal was surprised to learn that I was one of the few teachers with a Master of Arts degree in WA. I was happy when he offered me a job as an English teacher.

## Q. What are you most proud of in your career as an educator?

There are several things. In the 70s schools in WA did not cater for gifted and talented children.

I formed an organization called the gifted and talented children's association of WA; it's still going.

As schools didn't want to do anything, to get things moving I started small enrichment projects run by volunteer parents.

I organized sessions where famous authors like Elizabeth Jolley and university lecturers did workshops for gifted kids on Sunday. We had programs from pre-school to year 12.

## Q. What was the outcome?

The Australian newspaper placed banners on Perth's streets saying 'WA Super Kids In New Test Program', and schools across Australia asked me to tell them how they could start programs like ours.

I was asked by the Education Department of WA to plan a program that would launch gifted and talented programs in WA and I did.

## Q. What led you to become a journalist?

The Regent Institute of London trained me in short story writing and journalism. I worked as a freelance journalist for *Education World*, the *West Australian* and *Australian Broadcasting Corporation* for many years and have over 50 years' experience as a journalist and lecturer in journalism.

I started a group of cadet journalists called The Classroom Press.

I taught them how to interview politicians, research stories, create reader interest, and report on local government and personalities like former Prime Minister Paul Keating and the first female Labor senator Susan Ryan.

One of the cadets became a journalist for the *Sydney Morning Herald* and others won awards in writing competitions.

## Q. What advice do you have for graduates in teaching or those wanting to teach?

Each teacher is unique. You need to build your own identity as a teacher.

Share your special talents with students as kids know when they are getting a 'real deal'.

The best training is to observe master-class teachers and get them to mentor you. Let them observe you and give you feedback.

## Q. What kind of professional development would you recommend for teachers?

Professional learning should be future-focused and relevant.

I see little value in doing professional learning to show that you have attended lots of courses.

I believe teachers should conduct trials of key concepts and refine their practice to achieve long-term gains.

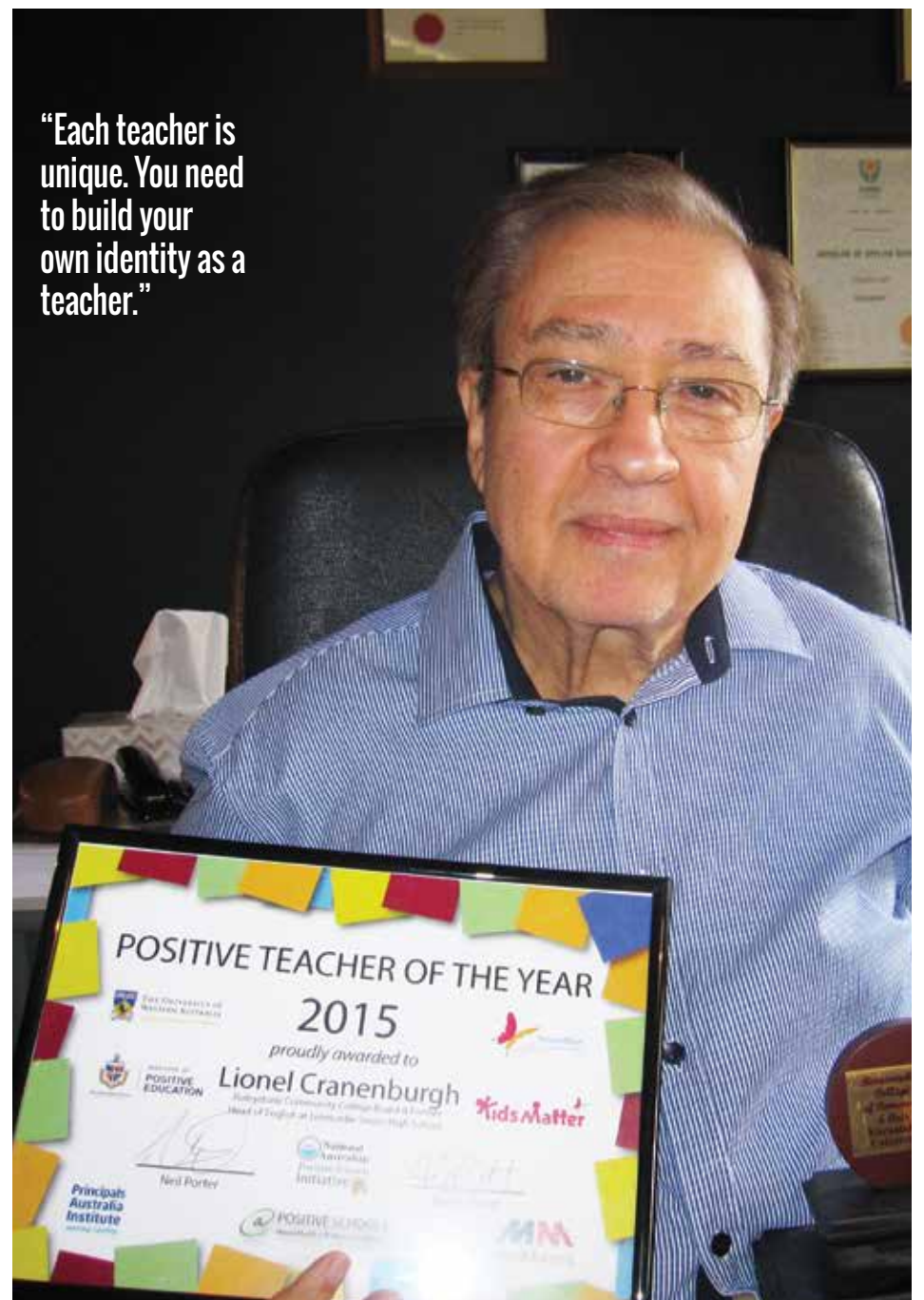
## Q. Is it more challenging being a teacher today than when you began your career?

Yes. There is more competition for jobs, an over-crowded syllabus, the system requires you to assess students continually and bureaucrats put pressure on teachers to comply with government agendas.

Teachers deal with the pressure in much the same way that surgeons or athletes do when facing challenges.

Deal with challenges, learn from them and light a spark by bringing your own brand of innovation to teaching.

"Each teacher is unique. You need to build your own identity as a teacher."



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# SIDEeffect

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## FEEDBACK

**Confronting, Challenging, Informative and Emotional** were the strongest feedback words used by Churchlands SHS students after the Sideeffect presentation.

The consensus from student feedback was that this was the best anti-drug message they had ever heard, seen or read. In the days following the presentation, the school received numerous parent contacts in support of the program. The consistent message was that, for the first time, their children came home and talked about drugs and the dangers they represent. **I highly commend the program to schools and parents.**

Neil Hunt, Principal, Churchlands SHS

## SIDEFFECT VISION

To be proactive in the community in order to help educate and make people aware of the potentially fatal dangers of illicit and synthetic drug use to ultimately decrease demand. This includes Research Chemical, ICE, Synthetic Cannabis and Ecstasy (MDMA).

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- PC Module optional for all EduTouch Panels
- Toughened Glass (Mohs Scale Level 7)
- Anti-Glare Glass
- 5 Year Warranty
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- Bluetooth and Dual-Band WiFi



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ScreenShare Pro now included on all UHD models, allowing for wireless display and touch control with Mac and Windows and wireless display from Android and IOS devices.

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- Only consumes 75 watts of power
- The #1 3D Printer for Homes and Schools



### da Vinci 1.0 Pro 3in1 3D Printer

The da Vinci Pro 3-in-1 is the perfect machine for becoming your own manufacturer. - with a built-in scanner, optional laser engraving add-on capability, and an open source filament system that allows you to print in third-party ABS and PLA 1.75mm filaments.

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