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Editor's Note

I wondered if the wisdom, innovation and insight within our inaugural issue could be matched, but the fascinating minds of education industry stakeholders seem replete with fresh ideas and stories to share.

A Perth school dubbed the 'greenest school in Australia' addresses cross curriculum priorities through sustainable social practice - stretching the fingers of their 'social handprint' to provide safe solar lighting for women in developing countries.

In this term's 'Principal Speaks', Marilyn Smith of Preshil School community depleted by a leader lost, to reveal a school with vision, collective spirit and the courage to innovate for the present.

on teacher training, and visionary of 'learning space'.

for young people, so do systems effect on body image.

part of growing up, or a touch of insanity?

Key - For easy perusal

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schoolnews

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and profit from the collective

knowledge within these pages,

and until next time - noli cedere

cognoscere (don't stop learning).

flooring and more.

Enjoy the passions and

administration concerns with

school library (see page 22 for

author, Lucy Clark, about pressure, parent-teacher relations

angst, a teacher can be a

With some excitement, we

composition, celebrating an

success".

details).

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

renovates an assessment of a

We tune into the tertiary sector approaches that push the boundaries of the very definition

As mental health concerns grow of support and programs that protect vulnerable young people from the media's undermining

Teenage suicide, extra counselling for families going through exams, anxiety, depression; just a necessary

Education news from around Australia

AEU calls for workload decrease for teachers

The AEU's 2016 State of Our Schools survey found that 77 per cent of teachers say their workload has increased in the last year alone, and 69 per cent say workloads are making it more difficult to retain staff.

Key findings of the 2016 survey include:

- 77 percent of teachers say their workload has increased; two percent say it has decreased.
- 26 percent of teachers say they are working more than 55 hours per week; 45 percent say more than 45 hours.
- Teachers who believe it is getting more difficult to retain teachers: up to 69 percent from 58 percent in 2015.
- 17 percent of teachers are considering leaving the profession, up from 14 percent in 2015.
- For these teachers, workload is by far the biggest issue; 74 percent say it would be the most important factor in any decision to leave, up from 66 percent in 2015.

AEU federal president Correna Haythorpe, said "the Gonski resources which are starting to be delivered are making a real difference but we need the full six years of funding to properly address the gaps in resources which have left disadvantaged students behind.

"If governments truly want to value teachers and improve the status of the profession, they will ensure teachers are supported in the classroom so that students can get the help they need.

PISA chair appointed

Dr Michele Bruniges AM, secretary of the Department of Education and Training will chair the Programme for International Student Assessment (PISA) Governing Board.

PISA is a triennial assessment of education systems worldwide. Dr Bruniges — the first Australian to be appointed as chair — will bring valuable international insights from this new role to the department's policy deliberations.

Grants for 'future-ready' graduates

Digital literacy school grants of between \$10,000 and \$50,000 are available for schools and other organisations to encourage and facilitate implementation of the new Australian Curriculum: Digital Technologies.





Grants will be awarded for project proposals that demonstrate innovative methods for driving enhanced digital literacy in schools. Teachers will also receive assistance with access to online support for preparing digital technology-based curriculum activities.

Principals affect test scores

In a Melbourne Institute of Applied Economic and Social Research project titled 'How Principals Affect Schools', researchers, Mike Helal and Michael Coelli examined the specific channels through which principals affect schools.

The research revealed that principals have a significant impact on a range of factors related to teaching and professional collaboration. School morale also improved, but there is the possibility that this increase is a result of improving student achievement rather than the cause.

Australian Capital Territory

Marist heals from past abuse

A November healing ceremony and the installation of a permanent plaque will recognise the past sexual abuse of children in the late 1970s, 1980s and early 1990s.

The royal commission found the

Marist Brothers Catholic order failed to intervene and remove offending brothers John Chute, known as Brother Kostka, and Gregory Joseph Sutton. Headmaster Richard Sidorko agreed to the healing ceremony and the plaque that will include a public statement of apology and commitment to abuse prevention.

Survivors have welcomed the measures as a positive early step by the school and an important symbol of a changed approach. Former Marist student and abuse victim Damian De Marco told *The Canberra Times* said it was "fantastic" that words were being locked in stone, to serve as a reminder that such abuse must not be allowed to occur again.

Mr De Marco said it was crucial that the church address the root causes of the abuse scandal, including changing policies on celibacy and women.



ACT schools remind girls that Any Body's Cool

ACT initiative Any Body's Cool is a positive body image health promotion program suitable for year seven and eight girls.

Through the real life experiences of five local young women, the program explores body image; how this is influenced, how this affects our behaviour and how we can strive to improve our body image and self-esteem.

The program also covers media literacy, healthy attitudes towards diet and exercise, the impact of body-based bullying and harassment and gender expectations.

Through a pre-requisite Teacher Education Session, the program seeks to support schools to become environments which support young people to develop and maintain positive body image and self-worth.

Any Body's Cool is free for all ACT secondary schools.

For more information on how the program works please see our FAQs or view our ABC Info Sheet. More info at:www.mieact.org.au.

New South Wales

Funding boost for NSW

Some schools across NSW, including Westfield Sports High, Greenacre and Campbelltown Performing Arts will gain hundreds of thousands of dollars in extra funding next year after the state government announced a record \$219 million funding investment according to the Gonksi needsbased funding formula.

The extra money for more than 2000 schools, allows schools to secure resources such as extra teachers or speech pathology services for students in need.



Kings and Trinity under fire

A former student of The King's School in Sydney has told the abuse royal commission he was driven out of the school by relentless bullying that started after a boy ejaculated on his sleeping bag.

The now 19-year-old is the first from the prestigious private boys' school to testify at the inquiry, which is examining institutional responses to harmful sexual behaviours by students. *ABC News* reported on allegations that headmaster Dr Timothy Hawkes helped a student accused of indecent assault transfer to another private school, by downgrading his expulsion to withdrawal. Another elite Sydney school came under scrutiny at the commission, with Trinity Grammar principal Milton Cujes earlier admitting his school failed to properly investigate rape allegations. **Source:** *AAP*

Surprise in the English HSC exam

English is the only compulsory exam of the HSC, and the paper had a surprise change this year that shocked everybody, even the teachers.

The unexpected omission of visual stimulus reflects a wider shift within the HSC. Last year students were asked to interpret Jacobus Houbraken's 1730 painting of Albertus Seba, and the year before, the cover of *Alone Together* by Sherry Turkle. The government's deviation from formula is said to be aimed at preventing rote learning of past responses.

Northern Territory

NT Star Foundation



Federal government will provide the Stars Foundation with almost \$2 million to deliver intensive school-

based mentoring programs to Indigenous girls and young women across the Northern Territory.

NT minister for Indigenous affairs, Nigel Scullion, said the investment would help 450 Indigenous girls and young women to reach their potential at school and beyond. "A positive experience at school and a smooth transition to work or further study helps young women to reach their potential later in life," minister Scullion said. Stars Foundation executive director. Andrea Goddard thanked the minister for his commitment and belief in the work Stars carried out to support young Aboriginal and Torres Strait Islander women. These projects funded through the IAS aim to support girls and young women stay engaged in their education, develop leadership skills, complete year 12 and other qualifications, and assist the transition into further study or employment.

Angurugu school principal Stephanie Blitner says being locked up has become a "rite of passage".

Residents in the Arnhem Land community of Groote Eylandt have told the inquiry that boys

as young as ten aspire to go to Don Dale Youth Detention Centre.

Blitner has been teaching at the school since the late 1980s and says attendance rates now stand at 40 percent. Indigenous kids living on the mineral-rich island face a lack of adequate housing, food and education despite communities receiving millions in royalties from South32's GEMCO manganese mine. Questions are being raised about how the appeal of jail will lessen without first breaking the cycle of poverty.

Queensland

Remote Kindy kids join Prep



"We are committed to providing universal access to kindergarten for Queensland families no matter where they live" said education minister Kate Jones.

Children in the program are placed in composite classes with Prep and other students delivered by their existing classroom teacher, with additional teacher aide support.

"The delivery of kindergarten programs in a state school setting enables children to enjoy early learning opportunities, make new friends and build their connection with the school," said the education minister.

Competition a winner for schools

Winning students of the Queensland Office of Fair Trading's 2016 Buy Smart Competition, along with their schools, shared in over \$11,000 in cash prizes. The competition, open to students from years four to 12, encouraged young consumers to research a financial or consumer issue and present their findings in an innovative way.

Approximately 2,500 students from schools across Queensland participated in this year's competition and the Office of Fair Trading received nearly 700 entries on topics including budgeting, online shopping, how to spot a scam and using credit cards wisely. A full list of this year's winners can be found at www.qld.gov.au/ buysmartcomp

Teachers are encouraged to check the website for resources and activities mapped to the curriculum.

OP system stays another year

The Palaszczuk Government's major reforms to senior assessment and tertiary entrance will now begin with year 11 students in 2019.

Education minister Kate Jones made a Wednesday October 19 announcement that current year eight students would be the first to experience the new system. Ms Jones said she had received advice from the Queensland Curriculum and Assessment Authority (QCAA) that they would require an extra 12 months to deliver the most significant changes to senior schooling in more than 40 years.

South Australia

New STEM facilities for schools

Students in 139 schools across SA will benefit from the new and refurbished facilities delivered as part of STEM Works.

Up to \$1 million per school will be invested in 77 primary schools, \$2.5 million per school in 44 secondary schools and \$3.5 million per school in 18 R-12



\$100 million CBD high school

A new school will open in 2019 in Adelaide's CBD, providing 1250 students from inner-city suburbs with greater access to high quality secondary schooling.

The school's core focus will

area schools. This investment will provide contemporary learning facilities for around 75,000 students. Construction on some projects is expected to begin in late 2016, with all projects to be finished by December 2018. For a full list of schools, visit www.decd. sa.gov.au/sites-and-facilities/stemworks/stem-works-schools

STEM training a priority

South Australia has announced its commitment to the development of "highly-skilled citizens, particularly in the fields of science, technology, engineering and maths (STEM). Professional development for teachers in these areas remains an area of considerable government activity and focus.

In November, the Science of Light workshop helps primary school teachers conduct a practical class on the Nobel Prize-winning work of William Henry and William Lawrence Bragg.

The teachers explore the analysis of crystal structures using x-rays, which won them the Nobel Prize in 1915. The discovery was an important step in the development of x-ray crystallography. Sent home with a locally-produced picture book '*Willie Wonders Why*', it is hoped that all teachers will be well-equipped to transfer their learning to their students, be on science, technology, engineering and mathematics (STEM). Students will use the latest scientific equipment, and have the chance to work with experts from the tertiary field to complete their SACE and plan future study and career pathways. The school's central location and connectivity to a large walking, cycling and public

according to the South Australian government. The Science of Light initiative is a partnership between state government, the University of Adelaide and the SA Science Teachers' Association.

Principal Exchange a success

In term three of 2016 principal Tracey Davies from South Australia's Richmond Primary School swapped places with Steve Berezowski, principal of Te Wharau School in sunny Gisborne on New Zealand's North Island.

Both principals report success and great professional growth and we will hear from them in the *School News* next term.

Tasmania

Tasmanian education reform postponed

Amid continuing negative feedback from some sectors, the Tasmanian Government tabled the Review of the *Tasmanian Education Act* in parliament on September, 21 2016.

The *Education Act* is currently being debated in the independent-dominated Upper House.

transport network will promote green, active travel for students and teachers. Located adjacent to the Adelaide parklands, Botanic Gardens and the Adelaide Zoo, the school will be close to the university and state libraries, performing arts facilities, and green space, forming part of a broader educational and cultural precinct.

Controversy around the reforms will not go away, and despite continued protests from the early childhood sector, the Government is sticking by its planned reforms.

A new Tasmanian government position (principal project officer - early years) has been created with a core purpose of working collaboratively with educators to develop an implementation plan that will guide the way government and educators reframe and strengthen the delivery of early learning in Tasmania. The Tasmanian Government will spend another year consulting on its proposal to allow children as young as three-and-a-half to start formal education, after the Upper House raised concerns about the change.

Part-time school now and option

There will be provision for homeeducated children to be partially enrolled in a school.

Currently a home educated child cannot also be formally enrolled at a school. Previously, there has been no legislative provision for a home educated child to attend a school part-time for specialised subjects. This will be particularly important to children and families in the senior secondary years, and those wishing to make the transition to school.



Victoria

Victoria to feel the sting of funding cuts

Every Victorian public school student will be \$848 worse off every year under the Turnbull government's plans for school funding, according to state education department figures.

As the school funding wars heat up, Victorian education minister James Merlino has warned of a widening gulf between wealthy private schools and poor state schools.

Department analysis released by Mr Merlino shows that Victorian public school students could bear the brunt of the federal government's decision to abandon the final two years of the Gonski agreement, while each private school student could be shortchanged by \$66 a year from 2019.

School's comments about girls' skirts "inappropriate": researcher

Kambrya College was in the news again this term, but for different reasons.

According to an August article in *The Age*, they demanded that female students wear skirts that finished below their knees to "protect their integrity". Dr Bianca Fileborn, a research fellow at La Trobe University's Australian Research Centre in Sex, Health and Society, said the school's response was "inappropriate" and had effectively put the blame back on female students.

Year nine student, Faith Sobotker delivered a powerful speech and posted it on Facebook. "My self-respect is doing what makes me happy. You can't tell me what ladylike is because we don't live in the '50s anymore. I am looking for equality", were among her comments.



Western Australia

Kalgoorlie Boulder Community High School reopens

Students at Kalgoorlie Boulder Community High School have returned to school.

Regional executive director Goldfields Region, Ken Perris, said the community is proud of these new facilities and they are a positive step forward for Kalgoorlie Boulder Community High School. "We'd now like to give teachers the opportunity to do what they do best and teach, and students the opportunity to learn." The first stage of the \$45 million redevelopment of Kalgoorlie-Boulder Community High School was officially opened on October 14, with three new classroom blocks, a cafeteria, a refurbished design and technology centre, and upgraded gymnasium change rooms.

Repairs to the school included replacing windows, repairing electrical wiring and cleaning, after vandals caused damage estimated at around \$100,000 to classrooms and staffing areas.

Education to combat Meth in WA



health minister Andrea Mitchell said the workshops will provide a better understanding of the drug. "Through these workshops, parents and teachers in the community who have a concern or interest will be able to obtain accurate information about meth, the possible consequences of its use and what can be done to reduce harm and prevent use by students," she said.

Meth education has entered the timetable in South West schools beside reading and writing, as the drug takes hold in regional WA.

Methamphetamine workshops are part of the state government's \$15 million strategy to combat the destructive drug, with \$500,000 set aside to create and roll out the school program. The mental

Stress management, technology and dance moves on show



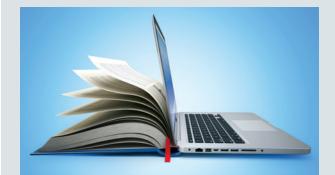
Those in the education industry converged on Melbourne for The Education Show this year, with close to 2,700 visitors attending the three-day event.

Held from September 2 to 4 at the Melbourne Convention and Exhibition Centre, and showcasing over 100 suppliers of education products and services, the show delivered the inspiration for classroom resources, solutions for school administration, as well as career options.

The inaugural National Education Summit saw principals, school leaders, business managers and educators come together and enjoy concurrent conferences, masterclasses and interactive seminars, all under the one roof. Held over all three days of the event, numerous free sessions focused on learning technologies, literacy and classroom management through to teaching and learning programs across the curriculum. A popular feature of the show was the Autism Spectrum Disorder Mini Conference, with keynote speaker Professor Suzanne Carrington.

Suzanne is a professor and head of the school of cultural and professional learning, Faculty of Education at Queensland University of Technology (QUT) in Queensland, Australia and has published in national and international journals in the areas of education for students who have disabilities, inclusive culture, policy and practice, and teaching/ professional development for inclusive education. ►

Digital curriculum a breeze with help from the Hub



Has your school embraced the challenge of implementing the new digital technologies curriculum?

At The Education Show 2016 we met up with many teachers faced with this task; some were excited, others were a little more apprehensive and unsure of where to start.

As we explained to those who visited our stand or attended our workshop, the Digital Technologies Hub can help, whether you're just getting started or a whiz at using digital technologies as part of your teaching.

Teachers wanting to know more about the digital technologies curriculum were shown a selection of our videos that unpack the curriculum. Of huge interest were our resources about programming. We showed them how to search our site for apps, programming languages and lesson ideas.

See for yourself, discover how problem solving and computational thinking can be applied to programming robotic toys to carry out all sorts of actions.

Hands down though, the most valuable part of the site according to many teachers we talked to were the lesson ideas. Check them out, why not use one of our lesson ideas to integrate digital technologies into your teaching?

Enhance and extend your lessons as you introduce relevant computer science concepts and thinking.

With the help of our lesson ideas your students will be constructing and demonstrating their learning as they create their own digital solutions.



News | Education Show



 Attendees took advantage of this important mini conference that has been designed to highlight the latest research on autism from a students' perspective.

On Sunday, participants relaxed into the free Wellbeing Workshop, which focused on how teachers can manage their stress levels, and included a dynamic yoga session.

Attendees will have seen, and heard the REDEd Dance crew dancing up a storm over the fourday exhibition period, but the external learning dance provider also had educators dancing away their Sunday blues.

The workshop, titled, Create an Awesome Dance Class was intended to "supply them with actual practical movements that they could take away with them". Dale Pope of REDEd explained that teachers ring her saying, 'argh I danced 20 years ago and now my principal wants me to teach dance, how do I do it?'.

Class participants were encouraged to identify how core



movements specifically relate to the music, and how they fit with the music. "We did this by getting them up and dancing"...and up they got, with a chorus of 'do I have to?'s and grumbles. "I told them: 'yes, you do! That's exactly how the kids feel'".

As they started to dance, Ms Pope excitedly pointed out their little reluctant smiles, and participants agreed, they actually felt great. "I just wanted them to know how fun and easily relatable these skills are, so they can each be a champion for dance".

The Sunday groovers were all encouraged to build a core body of movements to deliver to a group of students, and sent away with some instructional videos and choreographed dances to work with back at school.

The Education Show will be returning with more of the expected, and a bit of the unexpected, to the Melbourne Convention and Exhibition Centre from September 1 to 3, 2017.



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With collaborative Courage Preshil lives on

In January 2014, Margaret E Lyttle, the brilliant educational visionary who, as headmistress, was the inspiration of Preshil for over 50 years, died at the age of 101 years. She had lived on, after her retirement, in the old homestead at "Arlington" until 2009, continuing to exert a major influence over the school and its extensive community of families and alumni.

At the time of her death Geoff Maslen, the well-known educational commentator, reflected on her life and the extraordinary school he remembered from his many visits during the 1980s and 1990s. He finished his article with the pessimistic, and unfounded, speculation that "without her authority" the school would lose its way and might even be forced to close.

At the time that he wrote what sounded like an obituary for the school as well as for Margaret Lyttle there were many people who were dismayed by his cavalier dismissal, contenting himself with a predictable story of the rise and fall of a personal empire.

This slick narrative ignored the collective spirit of all those individuals Margaret had gathered around her, who grasped the need to articulate the accumulated wisdom underpinning Preshil's progressive



Kinder and prep children 4-5 years - involved in a collaborative project on biodiversity.

approach. An approach responsible for providing such a vibrant alternative to mainstream schools that were increasingly forced to conform to the standardised, politicised and compliant approach to schooling.

Margaret Lyttle's school had developed a robust and indomitable heart, which would continue to beat despite Margaret's passing, due to the enduring strength and educational validity of her ideas, rather than because of her personal dominance. Of course the school had needed to navigate the difficult transition, from a family organisation inspired by a charismatic leader to an independent institution with transferable governance and leadership structures.

In 2009, a determined group of parents, teachers and alumni worked together over several months collaborating to produce an extraordinary document called *Courage*. This group "read the original source documents of the school to distil them into a succinct statement of the principles of Preshil." Preshil arose out of the Progressive Movement of Europe, England and America at the turn of the twentieth century, emphasising individuality, creative and critical thinking, social inclusion and democratic ideals.

The school's culture was never based on a factory model of standardised, industrial training, nor was it based on a military or religious establishment of authoritarian discipline, nor on the traditions of the socially elite English private schools.



The kindergarten is at the heart of the Arlington campus



Margaret E Lyttle in her sitting room at Arlington

 We are very fortunate in not having to dismantle these powerful conventions, as many schools struggle to do, in order to provide a truly contemporary approach to schooling.

In 2012, the Preshil Council completed a new strategic plan with the mission:

At our core remains an unshakeable commitment to encouraging all children to progress towards their own goals, and to be respected as individuals in their own right. A commitment to our children to be nurtured and challenged in an atmosphere that inspires creativity and independent thinking in all areas of life and does not, overtly or subtly, use competition or punishment to motivate through the fear of failure.

In recent years, Preshil has found a framework which suits our progressive approach to teaching and learning in the International Baccalaureate. We are seeking to establish a primary years program as a natural fit with Preshil's own ideals. On the surface this makes little change, and allows all of our teachers to participate in the rigorous planning, professional development and the collegial networks of outstanding international educators that the IB provides.

As with John Marsden's Candlebark School, Preshil does



Principal, Marilyn Smith and students at Blackhall Kalimna

not want children to be uniform, either in their appearance or in their thinking. We don't want to prevent children from active play and outdoor explorations by insisting they wear formal woollen skirts and blazers. We don't mandate that boys get to wear trousers and girls have to wear skirts. Learning is experiential, sometimes messy and genuinely collaborative - for all children whether schools recognise this or not.

For these reasons - and for many others - Preshil attracts families who don't want their children to be moulded into a cookie-cutter shape, but want them to flourish, academically, creatively and emotionally, in a culture that respects them as critical thinkers and thoughtful global citizens.

Our parents are independent thinkers themselves; confident people who understand that the standardisation of rigid, old-fashioned educational models are increasingly failing to prepare young people for the contemporary and future world. The families who look to a school to motivate their child through conformity, fear of failure or fear of punishment do not choose Preshil.

This is also why we attract such outstanding teachers. Great teachers want to engage with students in rich and genuinely engaging education. Our families have high expectations of our teachers; they understand that enquiry-based, differentiated learning requires extensive planning and highly developed pedagogical knowledge.

Our parents understand the role of genuine feedback for their sons and daughters rather than superficial assessments.

Men and women who are able to teach successfully without the props of authoritarian and controlling school systems, without resorting to punitive measures to motivate children, find their place and flourish at Preshil.



Music rehearsal in the Kevin Borland hall at Arlington.



Small classes and dedicated teachers give students maximum support



Arlington's rambling garden is a place for adventure and play

At Preshil we do not appoint student leaders. Students who step forward to take up opportunities for leadership are often not the typical, confident performers we have all admired at traditional school events. They are more likely to be motivated by a passion for a particular interest or cause, often unpopular ones that do not immediately win them accolades. We encourage all students to speak out, to take ownership of their beliefs and to question the views and assumptions of others.

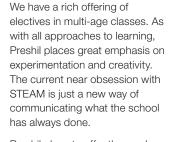
Encouraging students to question opinions and conventions also lies at the heart of our commitment to teach philosophy at all levels of the school, from kindergarten to year 12, and a highlight of our year is the Preshil Philosophy Conference. Hundreds of students, and an increasing number of adults, from across the state attend this conference and we are able to attract philosophers of international standing as speakers. A Preshil alumnus, Professor Peter Singer, was our first keynote. He remembered the impact of Margaret Lyttle on his own thinking as a little boy and the freedom she allowed for children to think and to learn in their own way.

Preshil comprises a kindergarten and primary school, "Arlington", and a secondary school, "Blackhall Kalimna". Both of these campuses are beautiful. "Arlington" is almost rustic; its unique buildings nestled in grounds with mature trees and rambling gardens. From inside the campus, it is hard to reconcile this natural, slightly untamed setting with the surrounding manicured suburb. "Blackhall Kalimna" is anchored by two large Victorian houses, and has an atmosphere of comfortably faded grandeur, housing some truly vibrant learning spaces.

"Arlington" is where the school's philosophy is most visible, with its invitation to the children to build cubbies, hammer and saw, climb trees and play in spaces without asphalt or plastic. The contemporary Makerspace movement has been well established at Preshil for decades where imagination is recognised as the key to all later learning.

The kindergarten has always been seen as key to the later development of curious, creative and confident learners. Our teachers are specialists in their field of play pedagogy. The children are respected as being capable of big conceptual ideas, big questions and solving sophisticated problems in a world that is also delightful and full of fun. They are included in philosophical enquiry and are eager to share their discoveries with the older children.

At Preshil's secondary school we are well on the way to becoming an exclusively International Baccalaureate school. The IB Learner Profile supports them to be open-minded as well as caring; risk-takers as well as principled.



Preshil plans to offer the newly developed careers programme alongside the diploma course, which is particularly suited to those students who already know their career path and who need to focus all their energies on building portfolios and specific skills, rather than to pursue a broadbased range of subjects. These two offerings allow students to select subjects in ways that result in a genuinely bespoke course. They honour the same regard for individuals that has always distinguished the school.

Returning to Geoff Maslen, he noted that:

When I first went to Preshil, I found it still abided by that philosophy, that it was then, as it must have begun, a very happy school; a place where the children were cheerfully busy, relaxed and socially confident; where their feelings and rights were respected and their attitudes and opinions taken seriously by the adults around them.

If he were to visit today he would recognise that while much has changed, the enduring elements of Margaret Lyttle's vision sit very well in their contemporary setting.

By Marilyn Smith, principal, Preshil School, Kew



Students socialising and collaborating on Blackhall's stone verandah

Is the quest for success harming our kids?

There's a lot of discussion – particularly at this time of year – about the amount of pressure on kids in schools today. Lucy Clark is the author of *Beautiful Failures*, which begins with "I want to tell you a story about my daughter, my beautiful failure." Lucy spoke with Suzy Barry about pressure, parent-teacher relations and the pitfalls of "the quest for success".

You set out to track down the sources of pressure on kids, after your daughter spent her school years struggling with pressure and feeling like a failure, what did you find?

This was so interesting because everyone talks about the pressure, and how terrible it is, but so many parents say they don't know where it comes from and that they don't pressure their kids. At the same time there is all this discussion about how we can help kids cope with the pressure.

Just recently there was a story that said mental health organisations were providing extra counselling during exam time ... to help parents cope with the pressure of their kids' exams! It feels utterly crazy – everyone is talking about how to cope with the terrible pressure, but to me it's the wrong question. We should be asking about how to systematically reduce the pressure in our kids' lives. It's too much.

To do this, we have to understand the sources of pressure. I did really set out to track these down, and I found that the pressure works on a number of different levels. It starts in the home and it starts early, because we've all received the societal messages that tell us that academic outcomes are so important, and the way to get ahead. We believe that we should try to get our kids into gifted and talented programs from the moment they start school. We believe they have to get the edge over all the other kids, because all the messaging is around education being a kind of race.



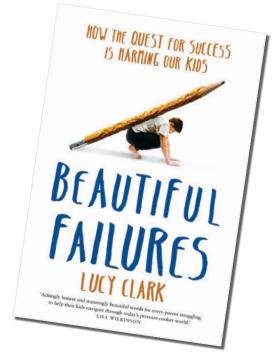
Lucy Clark, author of Beautiful Failures

We don't really question the role of this competition in education, although we should. So I looked into competition in education – the research here was so fascinating, and goes right to the heart of the human condition. It's confronting!

Then there is the pressure on teachers and principals to collect data and ensure the kids are getting good outcomes.

Then there is the overarching global pressure that comes from the PISA program of testing that ranks countries, and politicians start talking about how we must do better in the international rankings, and the pressure on everyone gets turned up a notch.

I went to Paris to interview Andreas Schleicher, who runs the PISA testing, and it was a fascinating discussion. We talked about bureaucratic, prescriptive systems (like Australia) and how it was hard on both teachers and the end users – the kids. He's big on trusting teachers, valuing teachers, and letting them get on with their job. The best performing systems do that.



What sorts of approaches have you see from teachers and school leaders that best support students who are feeling the pressure?

The best schools I saw genuinely put kids at the centre, and instituted systems that supported that ethos, rather than just saying it.

This automatically lessens pressure because academic outcomes take a backseat to valuing the whole child, and come second to engagement with ideas and learning. Some of the pressure on kids comes from them feeling like they don't matter (the research on this is very interesting), like they don't have a say in anything.

I saw principals making fantastic progress through actively involving students in their learning, even handing over complete control over their learning program. It does mean relinquishing the old command and control model, but giving a child a sense of agency will increase their engagement in the learning... and lead to better outcomes naturally. Most importantly, the teachers and school leaders who understand that the noncognitive supports the cognitive are the ones best supporting students and their wellbeing. The mental health of our adolescents seems to be at some kind of crisis point, so a lot of my book looks into that and where these issues intersect with schooling, and what schools are doing about it.

What did you learn about the best way parents and teachers can communicate with each other about children's education?

Just about every educator I spoke to said the words "everyone thinks they know how to run a school because they've been in one". It was mostly said in a tired tone! And I understand how tiresome it must be dealing with parents who think they know how to run schools, but don't. Of course parents don't know how to run schools, but we know when something is going wrong with our kids and we're entitled to ask questions when that happens. Of course there are ways to do this, and respect must be the starting point. Parents need to understand that teachers are the experts in pedagogy and curriculum, but teachers need to understand that the parents are the experts on their individual child, and therefore has much valuable information about that child to share.

The problem is that the system doesn't care much for individuals. Teachers are strapped for time and resources, which makes it harder and harder to care about individuals and their needs. So the kids have to fit the cookie mould, and a lot of them just can't. These kids are generally punished one way or another, which is terrible. They are made to feel wrong, or like failures, and this can start from a very young age.

I think it would be a good start to shift the conversation away from grades and outcomes, away from letters and numbers, to talk about the way individual kids learn and engage, about their strengths. Not just about whether they are going to get an A or B or a D. It seems like a little thing, but if we only ever talk about the grades then parents – and kids – are going to go on thinking that's the only thing that matters.

I interviewed a lot of terrific teachers and school leaders who have great ideas about this.

What sort of feedback have you received since the publication from your book?

I've been overwhelmed by the number of people expressing relief actually! It's been so interesting talking to both parents and teachers about all of this. Parents are relieved because they sense that things are kind of crazy, but they haven't been able to put their finger on how it happens. And teachers have expressed gratitude that my message to parents is to back off on the pressure, and that I'm trying to start a vital conversation about a system that doesn't seem to



be working for anyone. Mostly I sense a great hunger for reform from so many working in the system, and I interviewed some really amazing people who have outlined that reform, and others who are living it. It's exciting.

What is the main message you would like all stakeholders in education – parents, principals, teachers, and politicians alike – to take away from your book?

Firstly, that the wellbeing of children is more important than academic outcomes, and that the former shouldn't be sacrificed to achieve the latter (some of the stories in my book broke my heart). We need to broaden our ideas of success and value all kids.

We need to challenge all the accepted wisdoms about school and education that we take on

board without blinking an eye; all those things we perpetuate just because that's the way things have always been done, and because they're the rules.

I challenge everyone to question the rules, question authority, including their own. Especially their own. Genuinely ask: is this really the best way to achieve what we want?

But then the question becomes what do we want, doesn't it?

We want kids who love learning and want to do it for the rest of their lives. We want creative thinkers, original thinkers, not box-tickers or rote learners.

As we head into an uncertain future, we know we are going to need great thinkers to solve unforeseen problems; there is nothing more important that the



education of new generations of kids, the fostering of our future great thinkers.

What about when not everybody wants the same thing? Or is there validity in designing systems for what everybody 'needs' instead?

This is the beauty of pedagogical concepts like student-led learning, or dispensing with year levels and letting kids progress at their own pace, which are more disposed to dealing with individual wants and needs. These ideas work for all types of kids.

There are examples in my book where schools are operating to these concepts with great success, so we know it can work if there is the will for reform, for shaking things up.

And a happy by-product is that the mental wellbeing of kids is promoted. Principals reported to me that maladaptive behaviour in kids is all but eradicated very quickly.

So what next?

We need to have a communitywide discussion about what education should be and what school is for, both philosophically and practically speaking. Because right now, not only is the system making kids suffer, it barely seems fit for purpose.

Suzy Barry with Lucy Clark

Could two-way learning 'close the gap' and teach us a thing or two?

Bill 'Swampy' Marsh released a 2016 addition to his *Outback Stories* series, *Great Australian Outback Teaching Stories*. Tales abound of fly-in-fly-out teaching appointments (fly in at the beginning and out at the end that is), young male teachers required to instruct on breastfeeding, one shed schools in the middle of paddocks, and actually, there were a few *no* shed schools...

Entertainment aside, teachers experienced transformative interludes on the sunburnt plains, the dusty outcrops and the marshy seasonal prison of the top end. There's much to be learnt on Country.

2013 documentary *First Footprints* illustrated the complexity of the ancient mental water-map passed down through the desert tribes of Australia, a road-map to survival in one of the driest places on earth – a roadmap that many lost explorers might have appreciated.

Batchelor College educates students through two way or both-ways learning. In his 1990 book Two-way Aboriginal schooling: education and cultural survival, Stephen Harris referred to the practice as 'drawing on two necessarily separate domains of knowledge'. Australian National University website www. livingknowledge.anu.edu.au states that "more recently, the terms 'two-way learning' and 'both-way learning' have come to indicate the acceptance of a mixing of western and Indigenous knowledge".

In our last Indigenous Education article, we quoted Batchelor student Amelia Kunoth-Monks. "More kids would go, and parents would be encouraging them to go to school, if the lessons were more relevant, taught in both languages with a strong focus on our culture" and "having both-ways and the two cultures there, is absolutely amazing, rather than being at school and feeling like you're not really wanted in society".

For all the energy spent on trying to "close the gap" and 'fix the problems' with Indigenous students' performance within a European dominated culture, it seems Batchelor College may have closed the gap for Amelia by 'speaking her language'.

So back to the book... Apart from fleeting perfunctory inspections, teachers were on their own, at liberty to appraise their actual situation and their actual students for clues on how to teach them.

In the story titled '*Back from the Dead*', a teacher stationed at Ti Tree School in the Northern Territory instinctively, albeit passively, applied two-way learning.

Teaching the upper level meant that the elders would call students out of class for necessary cultural learning, like stories, hunting, tracking, and bush tucker. This teacher sat down with the elders and suggested that he call every Friday 'Cultural Studies'.

After that, Fridays involved empty classes or a couple of kids who weren't ready for the knowledge. "By the end of the second term I was allowed to go to some of their cultural days and that was a real privilege" the story continued.

Yes. That was a real privilege, and it seems quite likely one that wouldn't have been available to him, had he privileged the education department curriculum's over their elders' own 'cultural curriculum'.



Budburra Books, created by Cherbourg State School encompasses both-ways learning principles. The books embed cultural awareness and local knowledge into English literacy learning. The Speedy family at the book launch



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Scholarship and accelerated learning program testing

As Melbourne recovers from the Spring Racing Carnival and Australia prepares for the approaching festive season, all around Australia, families are preparing for another imminent period of great activity – 'scholarship season'.

Handled well, scholarships are a win-win situation.

Schools enhance their diversity and talent base and market key aspects of their school's offering, while some families who are unable to afford private school fees enjoy a quality education.

In a highly competitive education marketplace, schools are seeking to attract the best and brightest students to their schools. For scholarships or accelerated learning program

I quote from an opinion article published on www.rightnow. com.au, a website dedicated to human rights in Australia. Munanjahli and South Sea Islander academic, Dr Chelsea Bond wrote on the complexities of being an Indigenous academic in her article titled: 'When the object teaches: Indigenous academics in Australian universities'. In that context, she referred to "how race, racism and whiteness are operationalised in teaching and learning environments".

In a journal article titled: 'The unexamined whiteness of teaching...", in *Race Ethnicity and Education*, Bree Picower defines this as the lack of awareness about racial identity that comes with being the 'default' race. The invisibility of the dominant culture, she argues, results in an 'operationalising' effect of race. Within a school setting, this might affect educational themes, methods, and expectations.

I would argue that this extends to policy making, where an arguable Euro-centricity prevails.

In a paper titled '*Literacy Learning: What works for young* candidate selection, schools need an assessment tool that will allow them to screen and select these students.

Schools are more interested in having intelligent, creative thinkers with leadership skills and ideas, than students who have rote-learned how to perform in an exam.

Parents also expect a quality assessment process. Competition for scholarships is tough.

Being awarded a scholarship to an independent school or a place in an accelerated learning program is a prize many dream of for their children.

It offers the hope of educational opportunity, diverse cocurricular offerings and so much more.

When choosing a testing provider for your school there are many factors to consider:

- What modes of testing can they offer?
- Can they administer both paper and online testing?
- Which testing mode would you like to be able to use?
- Can paper and online testing be combined, for example to accommodate students who are absent on the actual testing day?
- What do the company's tests actually assess?
- Are they just tests of ability or do they cover achievement and prior learning as well?
- Is ability assessed as a separate construct?

- Are the tests year level specific or are students grouped into bands?
- Are you able to choose your own testing date?
- Does the company offer an online registration system?
- Can you design your own registration site with customised questions that are pertinent to your school and your scholarships or is there a standard form that you have to use?
- Are practice tests available for your candidates?
- What support can you expect from your testing company?
- Will there be a particular person with whom you liaise who will look after you throughout the process?

page continues, "they can then design their classroom activities to both accommodate these cultural differences and to scaffold Australian English literacy and cultural literacy for their students."

In 2007, The Western Australian Department of Education released a video series called *Ways of Being, Ways of Talk.* One video recommends we "acknowledge and celebrate the diversity of linguistic and cultural diversity that we have within our educational context, but use them as a kind of resource to our benefit."

The video also emphasised the value of cultivating what we know about the cultures of Indigenous students for use in lesson design and classroom management.

When educators are supported to acknowledge the value of Indigenous cultures, consultative and shared approaches to learning become possible. Sources included in this article indicated that 'interculturalising' education could result in a far richer, more equitable, and reciprocally formative experience.

By Suzy Barry, industry reporter



The planning stages of the book making process with Ratartat artist Peter Widmer, Cherbourg Elder, artist Venus Rabbitt and Cherbourg young artists

Indigenous students?', Buckley et al. describe a narrow view of literacy that "focusses exclusively on the ability to read and write and does not acknowledge the way in which literacy development is embedded in a social and cultural context". They assert that viewing Indigenous cultures as 'pre-literate' disregards a more appropriate definition of literacy from an Indigenous perspective; one that "encompasses the language and literacy practices of Indigenous culture that are traditionally oral and visual".

Could awareness of this cultural difference inform an entirely different approach to literacy with Indigenous students?

The NSW Board of Studies (BOSTES) website suggested that using a two-way or intercultural approach can assist in helping students identify with literacy resources. Through using a two-way approach, the web

- Does the company provide a help desk service for parents so that they can field many of the questions about how to register and the scholarships process in general, taking a lot of the pressure away from you?
- If the company does provide a help desk is it responsive to enquiries? Ask other schools.
- To what degree will the company administer the testing process on the day for you?
- Will they send examination information to parents and follow up prior to the day to ensure that they have received their examination information or do you have to send out information about the examination yourself?

• How quickly will your results be returned to you?

Educational assessments

With so many variables, it's clear that determining what solution best fits your school's needs requires careful consideration.

Quality educational assessments provide the foundation that assists schools with their goal of ensuring that every student reaches their potential. As schools prepare to welcome their incoming cohort of new students for 2017, a worthy question might be: 'What do you know about your new students and their learning?' In an era of increased demand for accountability, targeted teaching, school improvement and individual learning plans, the relevance and importance

of good data to inform teaching practice cannot be underestimated. Carefully constructed, objective and purposeful assessment is a powerful ongoing tool for schools.

Educational assessment testing enables schools to:

- Conduct group testing of an entire cohort to assess overall ability and achievement levels of the group
- Assess an individual's ability and academic achievement, and design individual learning programmes
- Highlight areas of strength and weakness in individual students through diagnostic data
- Pinpoint individual students who are either under or over

utest

achieving, allowing a school to develop the best support or enrichment programmes for those students

- Measure the school's 'value added' component through ongoing testing
- Undertake longitudinal tracking of student performance

Educational assessment testing is a systematic approach to collecting, analysing and reviewing objective data in order to improve teaching and learning. The best assessment activities supply us with meaningful information that can be used as the basis for improving educational programs and outcomes, surely an ongoing goal for all schools. ★

By Fiona Sherry, operations manager, Edutest

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Education 2025: are educators teaching what the future needs?

Elaine Shuck, director of education, Polycom



Education 2025: Are Educators Teaching What's Needed for Students to Succeed in the Workforce of the Future?

The widespread availability and rapid advances in digital technology are causing changes to work, not seen since the industrial revolution. A recent study by Chartered Accountants Australia and New Zealand suggests 60 percent of Australian jobs are at risk of automation in the next twenty years. Students set to enter the workforce in five, ten, even fifteen years from now, are likely to have several different careers ahead of them compared to previous 'job for life' generations. Many will also choose to be selfemployed, or seek roles that offer more flexible working options.

With jobs, and even entire industries set to change or disappear, it's clear that a more adaptable workforce will be needed. This will mean relooking at what we teach students today to ensure they will succeed tomorrow.

More responsive and personalised education pathways may be needed to meet the demands of a workforce that needs to be resilient and more adaptable. I'm not saying that academic achievement will become irrelevant, I am saying that in a world where multiple vocations are expected to be the new normal, where computers will do jobs previously done by people, we will need a more rounded approach to learning. Teaching entrepreneurial and life skills like innovation, teamwork, collaboration, problem solving and communication skills will be as important as academic qualifications. It's vital that technologies and tools created today will support the rapid pace of change taking place inside the classroom. To help us understand what Australia and New Zealand (ANZ) educators need to succeed in the classroom of the future, we recently undertook a 2025 Education Technology Innovation Survey.

Over 700 educators from Australia



The way we use technology in the classroom is changing rapidly

and New Zealand (ANZ) responded with a diverse range of job roles – the majority being teachers and principals and 90 percent were above the age of 30. Outlined below are some of the key findings:

1. Education accessibility: More investment needed

For educators within ANZ, a big concern was the accessibility of education, especially in remote areas with 40 percent of educators believing parents and students alike are demanding more mobile and remote access to services. Currently 58 percent also feel that government is not keeping up with education innovation. Furthermore, respondents also believed that future education models will likely come from educators themselves rather than the government or private sector. A majority also believe the education sector will be investing in Virtual Learning Environments (VLE).

2. Curriculum catch up required: Improving quality of teachers versus personalised and contextual learning

Right now. The largest inhibitor for the future of education is seen as the curriculum not keeping pace with future workforce needs. However, when it comes to potential solutions, there was a difference of opinion. More than one quarter (27 percent) surveyed think that improving the quality of teacher-learning should be the primary focus, while 23 percent felt that the priority should be on personalized and contextual learning.

3. Technology in the Classroom: Laptop versus real time collaboration from anywhere

A majority of 51 percent of respondents feel that the potential of technology to support meaningful learning in the classroom is currently underutilised. Currently laptops and in-classroom learning are the ways in which students engage with material and content in 2015. However, fast forward to 2025 and educators believe real-time video collaboration and mobile devices will the main ways students will be engaging with content and material.

4. Delivery of education: Teachers collaborating with industry experts

Respondents believe that teachers and lecturers are currently the best channel to deliver education, but they also feel that by 2025, the industry experts and online learning consortiums will be the best way to deliver education. With the aid of technology, a greater collaboration between schools and corporations, (as well as defined career pathways), will be the likely scenarios in 2025.

The future of education

It's clear from these findings that while the future holds uncertainty, the next decade will be an exciting time to be involved in education. As an industry we are set to go through our own workplace transformation.

The way in which we learn, teach and collaborate as educational professionals is set to change significantly. It has to, if we are to succeed in supporting the educational requirements of our future workforce. They will be expected to be more adaptable and resilient than ever before.

Both the government and private sectors are expected to play significant roles in driving this change.

Elaine Shuck, with a background in technology, curriculum, and integration, is the global director of education, for Polycom. She is a leader in collaborative learning and interactive videoconferencing. For close to two decades she has brought stimulating and engaging learning opportunities to K-20 classrooms. Elaine works with a host of educational groups and is currently the president of the United States Distance Learning Association (USDLA).

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Teachers who make you feel like saying "Oh Captain My Captain"

Although we may have lost Robin Williams, that phrase from Dead Poets' Society will never die. "Oh Captain My Captain" will forever echo in the minds of educators around the world.

Last issue, School News invited high school students from around Australia to acknowledge a teacher they would stand on their desk to honour...

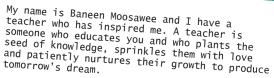
Teachers really do matter, and School News is excited to announce our first winning entry. A special young woman called Baneen Moosawee from Holroyd High, a Sydney school with 60 percent of students from a refugee background, and 88 percent with English as their second language has overcome what could have been 'second language limitations'.



Baneen Moosawee

Baneen has honoured Miss Kate Bailey, with some evocative imagery and ardent appreciation.

Baneen has also won \$500 worth of books from publisher Scholastic Australia for her school library, so well done Baneen.



I have a teacher who I think has inspired and helped me along with many other students. To the world she may be just a teacher, but to me she is my hero. Her name is Miss Bailey, she is my year adviser and also my geography

When I met her I was in year seven and I was astonished by the way she spoke to me. At first I was a bit scared to talk to her, because I wasn't confident enough to talk, but when I talked to her I wasn't scared anymore. She talked to me as if she knew me.

Miss Kate Bailey

There are no good enough words that can describe her, she has done so much for her students and also for the school.

A bunch of students and myself wanted a netball team so we could practise and get better at it, so she organised a netball team and taught us how to play. She also organised "the homework help" after school for all the students to come and study and help them with their work. She also started students to come and study and help them with their work. She also started "the enrichment group", which we went on a lot of excursions, including going to the newspaper company.

I adore her so much, she sacrifices her time to help us learn better and achieve our goals. Our netball team is getting stronger and it is all because she encourages us and doesn't let us give up.

I am amazed how she comes up with great ideas and activities and helps us achieve our optimum goal. I want be as helpful and nice hearted as she is, I never want to let her down as she has done so much for me. I want to make her feel proud because she is always there when I need her help. I wish I could do something in return, she is like my mother at school.

She always keeps repeating things until we understand it and all of us get good marks in exams. She is always ready to sacrifice her lunch time to help us with our studies. Today she is teaching, so tomorrow her students lead the world. She is not only preparing us for tests or exams but for the real life as well

All of our teachers are willing to help us but Miss Bailey is always ready to help us, she is like a hero in my eyes, whenever her students' need help

She opens many doors of opportunity for us and also teaches us how to enter that door. I wish there was a way that I could thank her as she has helped us and inspired me a lot.





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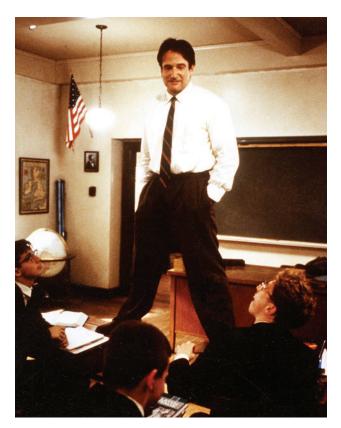
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Entries must include:

- Composition of no more than 500 words
- A photo of student and teacher (not necessarily together)
- Student name
- Age and year level
- School name and contact details



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Passion. Shared.



Organisation key for calm collaborative, teaching

Any professional role requires a modicum of organisational prowess to manage the multiplicity of tasks; communications, schedules, updates, and those time-sucking memos that characterise operations in many an industry.

Let us all pause for a moment to pay tribute to those in the education industry, yourselves, educators. These incredible (possibly super-human) beings manage that dizzying list of tasks, obligations and interruptions with up to thirty-five students chattering, emoting, and needing things...

Teacher organisation is at the heart of what separates the selfassured smooth operator from the mere mortality of a fraught teacher.

In early primary years, a wonderful opportunity exists for teachers to model organisational skills in the context of daily operational and personal task. Daily and weekly planners can enhance the teacher's ability to institutionalise this rhythmic program of achievements, from the simple daily task of placing bags on hooks, to a set of reading objectives, prominently displayed.

High school years herald an increased work load, with assessment schedules that can threaten to cave in on a disorganised teenaged learner. An opportunity exists for secondary teachers to transfer solid selfmanagement skills and attitudes to students, who will ultimately emerge into a frenetic and fastpaced industrial landscape.

Organisation follows the oxygen mask principle; teachers can only assist students if their own feet are free from the chaotic quagmire of unmet tasks.

Daily planners are more than just a place to record your appointments. Planners can be specifically geared towards

primary or secondary teachers, allowing you to stay on top of class activities, student records, and learning outcomes in one daily planner.

Choose a planner geared to teachers, a good planner will include features such as blank timetables, must do activities, space to list meetings and duties, attendance records, a section for student notes and even a seating plan. Products will come in daily and weekly versions, and you can streamline everything required into one binder.

Team-teaching, as recommended by education experts such as John Hattie, and Field Rickards of the Melbourne Graduate School or Education, can be supported by collaborative planning. All teachers will be aware that teacher-trainers recommend establishing a long term plan and then plotting key milestones on a planner.

Most organised teachers use a combination of digital and paper organisational tools, to maintain collaboration with colleagues and keep their heads together, when 30 eyes are watching them, expectantly.

But what about planning curriculum?

The news and social media is abuzz with references to the stress of NAPLAN for students, but also for teachers. Specific preparation requirements must be implemented by teachers all over Australia. Primary and secondary schools play a central role in ensuring the smooth running of NAPLAN tests.

Australian Teachers Chronicle

When Professor John Hattie synthesised over 800,000 research papers related to student achievement in his meta-study, published in his 2009 book: *Visible Learning*, he found that practice tests had only a small effect on students' subsequent results.

There is far more involved in NAPLAN preparation than just running tests; teachers must identify gaps in student knowledge and adjust lessons to meet desired outcomes.

As with general teaching, being organised can completely transform the preparation phase for teachers and their students.

Organising educational requirements with a curriculum organiser can address the growing number of non-teaching tasks teachers are expected to complete. These web-based programs allow teachers access to Australian Curriculum compliant resources, and to organise their documents online.

There's a general shift towards centralised electronic school management systems in schools, and a benefit of this is collaborative platform conducive to this concept of 'teamteaching' so enthusiastically encouraged by celebrated thinkers.

If schools are to become the collaborative learning environments that visionaries predict, leaders must take a whole school approach to coordinating their curriculum development and planning.

By Suzy Barry, industry reporter





Take your career to the next level with Deakin's Master of Education (Leadership and Management)

Deakin University's Master of Education (Leadership and Management) is founded on the principle that leadership consists of a multiplicity of practices that respond to local circumstances in ways that embrace gender, race, and cultural diversity.

The course commences from the position that there is no one simple formula for effective school leadership in all settings. "Every teacher has different sets of skills and abilities and every school is different so there isn't one right way to do school leadership". Dr Julie Rowlands, Course Director remarked. Publicity surrounding high profile charismatic leadership of 'turnaround schools' might indicate that only transformational leadership can effect change, but Dr Rowlands wants to make it clear that this is simply not the case. With a number of established leadership approaches possible, Deakin's course is designed to promote critical evaluation of school leadership tools and approaches, and their suitability for particular situations. "We highlight those approaches and help teachers to evaluate the available research in relation to each one, so they determine which of the approaches might better suit their circumstances, and the circumstances of their school".

The Master of Education (Leadership and Management) sits within a Faculty of considerable world standing. Deakin's School of Education is ranked fifth in Australia, and number 31 in the world (QS World University Rankings). The range of education courses include the Master of Education (with specialist strands in Professional Education and Training, Inclusive Education and International Education); Master of Education (Leadership and Management); and Master of Languages Teaching (Graduate Certificate also available). Two main themes underpinning the course are achieving leadership for social justice outcomes, and leading for enhancing student learning. These areas of focus are explored through a series of four core coursework units followed by research units with a strong focus on 'action research projects', whereby supported practical application of leadership approaches is facilitated. The course is aimed specifically at current principals and assistant/vice-principals, and those who aspire to those positions.

The focus within Deakin's Master of Education (Leadership and Management) on 'authentic assessment' and real world learning allows students to work on real life issues within their schools. "Teachers not only identify possible ways to solve issues at their schools, but they actually trial them as part of their formal assessment" within some units. This can lead to PhD study if desired.



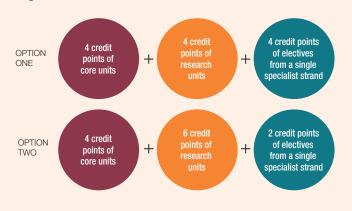
Students are required to successfully complete 12 credit points to be awarded the Master of Education (Leadership and Management) through a flexible combination of core, research and specialist elective units. (See fig. 1). Four credit points for recognition of prior learning are awarded to those with five or more years of experience in a principal-class role.

The course is conducted online, but Dr Rowlands assures that it is by no means "set and forget". With online discussion boards and other online technologies, in which Deakin is a sector leader, there is plenty of opportunity to interact with lecturers, tutors and other students, providing a platform for critical thinking and rigorous academic discussion within learning communities. "With each of the units we create a very active community of practice where the students engage in critical reflection about learning resources, and then draw on their own experiences to actively engage in online discussion".

Student satisfaction at Deakin is consistently high. The university as a whole has the highest student satisfaction rating of any university in Victoria, and has held this position for the past five years. Within the Master of Education (Leadership and Management), for example, Dr Rowlands reports that "the core units achieved 100 percent student satisfaction ratings in all fields for Trimester 2, 2016." Deakin's unique trimester system also provides students with an incredible amount of flexibility and the option to fast track your degree allowing you to complete your studies while you work.

The course team comprises Deakin academics who are leading international researchers in the fields of education policy, education governance and educational leadership. All have prior experience as teachers within Australian schools, including within school leadership positions. ★

Fig 1. Course structure



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*QS World University Rankings by Subject 2016 Deakin University CRICOS Provider Code: 00113B



"The greenest school in the country"

In a search for some of the most sustainable schools in Australia, *School News* trawlers happened upon a catch of significant suitability. Coolbinia Primary School has the wholistic sense of sustainability down to a fine art.

In July 2015, perthnow.com. au called Coolbinia Primary School "the greenest school in Australia".

The school's cross curricular coach, Dr Elaine Lewis works to incorporate the Western Australian Curriculum Outline's cross curriculum priorities, in the context of the school's commitment to the students' education, their community, and their world.

The 'greenest school' title was awarded after their climate change project won them the UN Association of Australia's 2015 Environmental School award, but the school's green credentials don't stop there.

Achievements include a 360 tonne reduction in greenhouse gas emissions, high level achievements as a Waste Wise school, recognition as a 'champion' Waterwise school and a 'double platinum' TravelSmart school award.

Over 130 tonnes of carbon reduction has been achieved, and biodiversity enhanced, by tree planting in salinity affected areas and local bushland. "At the start of October 2016, our solar power system had generated 76979kWh and saved 72621kg of CO2 from being released into the atmosphere since 13 September 2012", Dr Lewis concluded.

During the 1960s, renowned naturalist and environmental conservationist, Harry Butler used to take Coolbinia students on guided walks through the school bushland area. Famous for popular 1976 to 1981 ABC television series In the Wild, Harry Butler died of cancer, aged 85 in December 2015. Dr Lewis was proud of her students' commitment to their display on butterflies in a commemorative wildlife show in his honour. The school community has even written their own butterfly book,



The Upside Down Thermometer measures progress in carbon reduction initiatives

with illustrations created by the children under the guidance of local Noongar artists.

Coolbinia also acknowledges the importance of the 'social handprint'. Born from the Australian Sustainable Schools Initiative (AuSSI) along with better-known concept; 'eco footprint', the social handprint arose from recognition of "student wellbeing as a critical part of sustainability". Community partnerships are also an intrinsic element of the social handprint concept. "It's local action", Dr Lewis clarified. "By working with other community groups, we can enhance the educational experience for the children and help them be empowered to make a positive impact in the world, environmentally and in terms of social justice."

Within the context of social and cultural diversity, Dr Lewis emphasised that "intercultural understanding is vital so all groups feel empowered, so that we can work in partnership in reducing our eco footprint". Dr Lewis is mindful of the human component of behaviour change, "because that's how you facilitate change to happen".

The social handprint concept is depicted using a hand with each element of the social responsibility matrix represented on an individual finger.



Dr Lewis explained the cross curriculum concepts underpinning her activities. "*The Australian Curriculum*'s three cross curriculum priorities are Aboriginal and Torres Strait Islander histories and cultures, Asia and Australia's engagement with Asia and sustainability".

ACARA's website advised, "cross-curriculum priorities are embedded in all learning areas. They will have a strong but varying presence depending on their relevance to the learning areas".

The school's work supporting Solar Sister satisfies several priorities, and fingers of the social handprint and eco footprint simultaneously. The international organisation states that it works to "eradicate energy poverty by empowering women with economic opportunity".

Students raise funds through assembly stalls and fundraising



Coolbinia State School students planting in the bushland

days, to enable Solar Sister to replace polluting kerosene lanterns in developing nations with solar lanterns. This provides a safe and free way to light their homes at night for study or to support themselves through enterprise.

The school also raises money for Pollinate Energy, providing solar lanterns in India, hence contributing to the cross curriculum priority of engagement with Asia.

Dr Lewis explained that the projects allow the children to effect global change, while acting locally.

"We're extending our impact, by taking these and other actions, we are nurturing young global citizens."

Not all schools are lucky enough to have a cross curricular coach, but essentially, Dr Lewis was the driving force, initially applying for grants to fund her own position. Once the programs were in place, the school leadership team acknowledged her contribution by creating a funded position. Dr Lewis urged that for crosscurriculum programs to be successful, they must be "embedded into the curriculum in different learning areas and be a part of the school's business plan and operational plan" and "not just an add-on".

In the school's cooking program, students satisfy science learning objectives by exploring the chemical changes caused by heating, while using produce they have grown in their garden, and these students are not just digging around doing a bit of gardening out there... "They will go outside and check the pH of the soil as part of their science learning objectives".

Each leaf depicts a virtue and the children designed

them to reflect each virtue.

Dr Lewis' satisfaction with the effectiveness of that plan is apparent. "It has to be a case of 'how can we fit that logically?' and 'what *meaningful* action can the students take?'", she galvanized.

As a Waste Wise school, there are also activities that need to be addressed. Similarly, Dr Lewis described that year four science curriculum requires that students look at soil, so, naturally, year four students conduct Waste Wise activities. Having everyone at school behind it is vital. "It all comes back to the vision and planning", was Dr Lewis' concise counsel. A selfconfessed "fan of whole system thinking", she added, "it's the working together, the recognising of different people's strengths".

So what effect does this focus have on children's sense of citizenship? Dr Lewis had both quantitative and qualitative results to share. Surveys have shown gardening program children more prepared to eat vegetables they have grown, "and even setting up vege gardens at home".

Qualitatively, Dr Lewis reports a greater willingness for service from the students. "Year three children were worried about the orangutans in the world, saying 'I want to raise some money, and send it to the Perth Zoo Orangutan project". Within her role as cross curricular coach, she facilitates this and helps them plan, but they do all the work. "It's them taking the initiative to make a difference".

Something is certainly making a difference, and it seems to begin with Dr Elaine Lewis, whose passion is palpable, as her pride almost explodes from the telephone, at the social and ecological stewardship of the young scholars of Coolbinia Primary School. Perhaps all schools need a Dr Lewis.

By Suzy Barry, industry reporter



Checking for macroinvertebrates when conducting water quality testing



Tree planting by Roots and Shoots Club students





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School apps keep parents in touch

The frantic scramble for 30 swimming notes, hunting in lost property for spare goggles, towels, or a size six pair of board shorts... does this sound like the first day of swimming at your school?

I would wager every school administration team has had to work through a phone list of ten families who have one more day to get their camp notes in, and balance paid, or their child will be excluded. For teachers it's a nightmare, and no amount of alerting, newsletter inclusions or even stapling notes to jumpers seems to streamline this process.

Many of them juggle work and home life to within an inch of disaster, many are barely staying afloat, let alone on top of things. The contemporary brain is overloaded; we all know that. We know that we have inundated our down-time with emails, constant work availability and a stream of media, social and otherwise.

Increasingly both parents work, and without a dedicated home manager, anything that doesn't scream for attention might just be overlooked. While researchers explore how this new environment is shaping our brains, those notes on the fridge blend into the white noise between push notifications. Perhaps resistance is futile.

School administration has largely moved towards School Management System technology, (see our article from *School News* Term 3, which is now published on www.school-news.com.au called 'easing school administration woes with SMS'). While SMS certainly provides a one-stop shop for all the administration needs of your school, channelling connectivity into parents' pocket or handbag

Connecting teachers with parents

The tiqbiz school app is ideal for teachers to engage with parents of their class

While providing the most advanced school app features, Tiqbiz enables teachers to build a stronger school/family partnership by engaging parents in the daily activities of the classroom.





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is the next logical step. Push notifications have a 97 percent response rate, and 90 percent are read within three minutes of receipt, according to research published at info.localytics.com. Parents can be informed instantly, and engaged to manage issues relating to their child immediately via a controllable and secure channel.

Many schools use text messages to communicate urgent and non-urgent information to parents, including behaviour and attendance reports. The range of applications include but are not limited to, tracking attendance, student wellbeing monitoring, accountability; academic, sending home behaviour reports to parents; assessment and learning outcomes; scheduling and calendars, and portals for communication.

Communicating through an app is actually more inclusive. Mass text-messaging doesn't reach those who live outside mobile phone coverage, or those relying on wifi for access to the internet via their smartphones during the day. People relying on free library services for their internet needs is more common than many realise, where budgetary restraints prioritise other expenditure.

There's a more serious side to the busyness of the modern family. With far less time, and (in many cases) supervision available for young people, it can be easy to miss vital signs of disengagement with school, such as poor attendance and behavioural patterns.

Government agencies and mental health organisations promote research that consistently reflects a positive correlation between home-school partnerships and student wellbeing.

Sending photos, class updates and newsletters, maintaining communication or requesting appointment are all ways that teachers can keep those channels open, and apps just make that easier, faster and more inclusive.

By Suzy Barry, industry reporter



Order an App for your school today! Call 1300 706 647 appcity.com.au 🔳 👫 🕅

Inclusive and comprehensive mobile solutions for schools

School administrators are fast realising the value of switching their communications to a mobile app platform.

Communication is vital in the modern context, but traditional methods are often plagued by unanswered calls, unheeded messages, and crumpled notes at the bottom of students' bags.

Text messaging is now widely used, but success depends upon mobile coverage. In rural areas text messages can flood the parents' phones days later when parents drive back into coverage. App City creates tailored apps for schools of all sizes, and "as a key supplier to the education industry, we know which functions will support school requirements", Mrs Bartlett stated.

App City also supplies school apps to rural schools with as few as six students. "Our rural schools have limited phone service but families



have wifi, so app technology means they're not shut out of communications".

Schools are able to access and edit their own app at any time. Adding and removing functions can be done through the 'client panel'. "A lot can change in a school term, so the app can change and adapt too" Mrs Bartlett revealed.

With a reported halving of communication costs, having an app built for your school can improve efficiency and build awareness. "It's the simplest and most cost-effective way of keeping in touch with the school community" Mrs Bartlett advised.

According to Mrs Bartlett, "using a school app differs from an SMS in its immediacy and versatility". App holders will receive instant push notifications on their screens, drawing parents' attention with an immediate alert.

App City also assists schools in going mobile, through SEO and website services, creating cohesion, with an online absence form, tuckshop ordering, newsletters and events, all accessible at the touch of a button.

With full training included, schools can manage their own App City site and adjust their content as needed. The full mobile solution, which includes a mobile friendly site and an integrated mobile app communication system, with the benefit of instant messaging, allows you to reach all parents, every time.

Integration the key to enhancing school communication

Schools are busy places, and systems work best when they can interoperate. "Specialised applications need to integrate to enhance the digital experience for schools" Laura Hunt of tiqbiz confirmed.

Recently, the company effected an integration of their app with student assessment tracking software GradeXpert. According to Mrs Hunt, "schools will be able to connect directly to parents via tiqbiz from inside GradeXpert and send reports, behaviour notices and other student information".

The integration creates a powerful tool for schools

because teachers can engage directly with parents, either by sending student information from GradeXpert or calendar alerts and scheduled notices through tiqbiz.

In line with world trends, tiqbiz has built in advanced tools that allows the school to very easily change their account to meet the changing needs of the school. Once the account is set up, the Admin manager takes over and sets teachers with their own access, adjusts class names and monitors who is connected to the school.

Schools are competing with social media, news and chat apps where parents are being bombarded with a constant

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stream of information, "tiqbiz is providing the tools needed to cut through and be heard" Mrs Hunt summarised.

The trend is clear. Small amounts of information, more

frequently. "Schools are adapting rapidly to this "daily soundbite" information delivery format.

Teachers know they need to stay in touch with parents to build a stronger school/ family partnership. "Tiqbiz enables teachers to access the modern parent so they can stay engaged".

By all reports, teachers are seizing this socially relevant model of interaction to great effect. "Its growing so quickly, that the tiqbiz usage has risen from 4.5 million to 9 million views per month since July this year" Mrs Hunt shared.

Staying ahead with school technology

In a competitive education industry, parents increasingly look to schools to provide value-added services for both students and parents – and it's no surprise that these expectations extend to the quality of technology supplied to students.

For schools who both acquire and maintain IT equipment for staff and students, staying ahead of the technology game can present a considerable challenge.

This is particularly the case because of the rapid rate of obsolescence. To side-step the cost and inconvenience of this, many schools have adopted the 'Bring Your Own Device' model.

At face-value, this approach can make sense for schools, but there are a number of factors to consider if adopting this solution.

With IT infrastructure changing constantly, there's a risk of variable learning outcomes for students using inconsistent technology. Furthermore, there's pressure on parents to provide technology solutions for their child; and they may not welcome the suggestion that they acquire a particular laptop.

Technology funding and leasing

A smarter solution may be for schools to consider technology funding and leasing options. A number of lenders currently provide rental or operating lease



solutions that fulfil this purpose. The technology funding approach involves a financier purchasing the IT equipment requested by the school. The school then rents the equipment from the financier for an agreed period of time, which is typically linked to the useful life of the technology and coincides with the changing learning needs of students. For example, students in years seven to nine often use iPads, whereas in years ten to 12, the use of laptops is more common. To cover the cost of providing this equipment, parents would pay the school an agreed and appropriate levy. At the end of the agreed term, there are a number of options available to the school. They can return the equipment

to the lender; make an offer to purchase the equipment from the lender at fair market value, or pay a previously agreed amount to continue to rent the equipment on a monthly basis.

Alternatively, a combination of the above may be agreed. This system of addressing technological equipment needs could benefit the school in several ways, depending on their circumstances. Firstly, the school does not take on the equipment risk, with the inherent danger of technological obsolescence. Equipment can be returned at end of the agreed term and replaced with new equipment (providing they meet any lender conditions, which may apply). Another benefit is flexibility, with schools having the flexibility of upgrading or increasing their equipment during the rental term. Additionally, IT technology does not need to be purchased as a capital outlay upfront, which constitutes a considerable cashflow reprieve. The agreement also has flexible end-of-term options and can carry tax benefits. There is also the ability to structure

rental payments to suit the cashflow situation unique to each school. In certain situations, total payments can total less than the capital cost of the equipment.

What to look for

When considering any type of funding to suit your requirements, it's important to investigate if the financier has an established track record in the industry, and whether the financier is flexible regarding end of term dates and condition of equipment at return.

Choosing a financier that offers you the flexibility of different suppliers means you're not locked in to a manufacturer or supplier, and can meet the changing needs of your school while keeping up to date with current technology. You should also be aware of any hidden fees and charges or extra payments that aren't obvious in the initial quote. Ask potential financiers to clearly explain to you the all-up cost over the contracted term.

By Stewart Creighton, director, Capital Finance Australia Limited

Stewart Creighton is director and financial services executive at Capital Finance Australia Limited, and has been active in the education sector for more than 15 years and has assisted more than 350 schools with their equipment financing needs, including technology equipment.

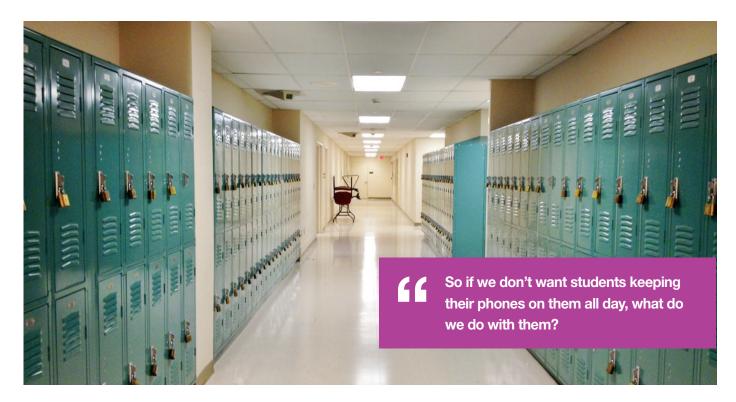
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Easing strain on developing spines with school storage



While private schools in Australia generally have lockers for high school students to store their heavy bags, many state schools report simply not being about to justify funding for the project. Hurdles such as a paucity of available covered areas, no specific designated areas for each year group, and simply the cost of the lockers themselves have school administration prioritising other areas of expenditure more directly linked to educational outcomes over lockers at budget time.

Some schools also cite security as a reason not to install lockers, with theft and vandalism rife in many of the nation's schools. Parents, students, chiropractors and GPs however, increasingly agitate for an end to the backbreaking luggage of bags from classroom to classroom throughout the day. With lesson periods lasting only 45 to 55 minutes, lugging the books required for each class, and food and water for the day mean some serious weightlifting for developing backs.



Student backpack loads include books, food, water and electronic equipment.

A 'fact sheet' released by the Chiropractor's Associate of Australia reports results of a 2011 observational study of more than 340 school children. The key finding of the study revealed 90 percent of school children have bad posture when carrying their bags and could experience spinal damage as a result, while 75 percent are not using their backpack's ergonomic features which could prevent such damage. Many students carrying an average of 17 percent of their body weight on their back, which is almost twice the recommended carrying weight of ten percent.

According to a 2002 international study, 'Backpacks on!, daily backpack carrying is a frequent cause of discomfort for school children. The rising prevalence of laptops in secondary schools goes a little way to alleviating the weight of the bag, but several books are still required.

This same rising prevalence of electronic equipment actually raises another issue; that of security.

Managing property in schools has become far more complex that it once was.

So what are the solutions?

Industry View

School News contacted Jim McAlinden of Premier Lockers for some insight into just how schools are balancing security with budgetary restraints to create locker storage solutions that solve more problems than they cause.

The most significant observation will be expected by many school staff members, many of whom have told me that they are charged with constantly monitoring the (clandestine and otherwise) use of electronic devices. They use them in class, in the playground, in assembly or parade, in the hallway, and yes, (much less easily managed) in the toilets.

So if we don't want students keeping their phones on them all day, what do we do with them?

Mr McAlinden said security was something that had become a problem for schools. "Students now have access to phones, iPads and laptops, all of which require secure storage". The storage required is necessarily of a different nature than was required for storage of books, schoolbags and gym clothes.

This more complex functionality requirement might feel overwhelming for some school budgets. According to Mr McAlinden, the traditional items are still part of the school day, so the space needs to accommodate sports gear, books and the school bag. Many schools require an internal hook for hanging so those expensive school blazers don't come out looking like an old sandwich bag.

With budgets strained, schools are understandable focussed on what they can afford and whether it will last. Refurbished units are available and Mr McAlinden said that while you can get lucky, you can also meet pitfalls. "There might be no warranty to cover subsequent damage, it's likely that a series of replacement parts will be needed – often on a piecemeal and therefore more expensive basis" he warned. Unless they are in perfect condition, there will also be some initial work required to make them ready for use. "Sourcing the requisite number of same, or broadly similar, configurations may be a challenge".

He shared a famous quote from the renowned Victorian social thinker John Ruskin: "When you pay too much, you lose a little money – that's all. When you pay too little, you sometimes lose everything".

Having said that, he added that "the second element was more relevant than the first as costeffectiveness is entirely possible in a new product with full warranty".

So which locker storage solutions are available for schools?

The common room

School common rooms typically include row after row of standard types of lockers, with one for

every student. These need to be big enough so everything fits, but small enough that they all fit in the room.

The exam hall

Valuables lockers make a worthwhile addition to any school hall or gymnasium. Students entering exam conditions can be asked to switch off their mobile phone and store it in a locker.

Gym lockers

You'll want to provide separate types of lockers in gym changing rooms, so that pupils can store their clothes and valuables before participating in sport. Wet area lockers are ideal in poolside locations.

Laptop lockers

Many schools now provide laptops for students to use during their lessons, and some install lockers with charging facilities for their storage.

By Suzy Barry, industry reporter





Premier School Lockers



eXtreme Plastic Lockers

Our eXtreme plastic lockers offer considerable advantages over conventional lockers. A super tough polyethylene construction ensures a uniquely robust, highly vandal resistant, durable and hygienic personal storage solution. Hard-wearing plastic also delivers unbeatable weather resistance, making these lockers the perfect choice for outdoor storage.



Laminate Lockers

Our quality laminate door school lockers are available in single doors, two tier, three tier four tier and two step locker versions with different widths and locking options available to suit any type of school locker room environment. Our range of laminate lockers come with a choice of vibrant door colours such as lilac and lime green, making these laminate lockers the ideal choice when aesthetics and durability are required.



Laptop Lockers

Laptop storage lockers are becoming more and more vital is a wide variety of work and educational environments from offices and workplaces to schools, colleges and universities. Some of the lockers have a separately locking compartment door for each user / device whilst others have a single lockable door with multiple shelves and charging points.



Mail Postal Lockers

The Mail Postal Locker offers a secure and efficient way of dealing with a variety of processes in many different organisations. The locker is an ideal and convenient way of sorting and storing mail, documents or items securely and effectively for individuals or groups of people in offices, shops, flats and student accommodation.



Oz Lokas

Oz Loka® are low-maintenance, light-weight, heavy duty, weather-resistant, stackable, modular, ultra-durable, rust-resistant, custom colour lockers with quiet doors! No more painting, rusting, dented doors; no more slamming/clanging hallways. Oz Loka® are a patented design, engineered to withstand everything that kids can throw at them. They are also incredibly easy to clean.



Powered Laptop Lockers

Our range of Laptop Charging Lockers offer a secure way to protect and charge electrical goods from devices such as iPads, mobile phones, laptops and cameras in unsecured areas. They are designed for use in a wide range of educational environments as well as offices / workplaces, these lockers are effective at deterring the risk of opportunist theft and all of our charging lockers are available in a number of different sizes as well as different options for charging sockets.



Steel School Lockers

Premier Lockers range of school lockers are designed for school storage to be used by students and as staff lockers. A school locker can be used for a variety of applications; many schools provide a locker for students to store their books and belongings during the school day. They can also be used as sports lockers to store sports equipment and / or students clothing during lessons.

PO Box 1032, North Sydney NSW 2059 | Phone 1300 202 557 | Email sales@premier-lockers.com

Body image: taming the beast with media literacy

In 2008, a Victorian government document titled Because Mental Health Matters Consultation Paper argued for 'further development of positive body image programs, in conjunction with healthy eating programs' as a priority activity within the 'early childhood and school' setting.

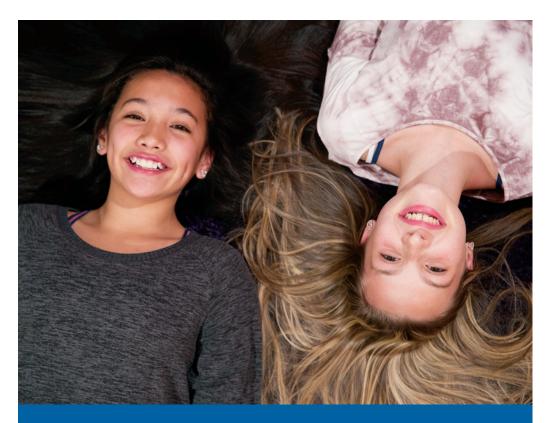
Research into body image pre-dates even Susan Orbach's widely-read *Fat is a Feminist Issue*, but as media channels threaten to saturate every conscious moment in a teen's existence, the stakes are now somewhat higher.

The Australian Institute of Family Studies released results on 'screen time' from The Longitudinal Study of Australian Children in September 2016. Institute Director, Anne Hollonds said by the age of 12 to 13 years, Australian children spent an average of three hours per weekday and almost four hours per weekend day using screens, or around 20 percent of their waking time on weekdays and 30 percent on weekends.

With this volume of exposure to tantalising marketing messages promising high rewards for embodying perfection, is it any wonder that schools are hard at it, trying to short-circuit the constant onslaught of the media's subliminal assault on their students' self-esteem?

The ability to 'read' or decode messages of this kind can mean that instead of 'reading' 'girls should look like this or they are not normal', with training in critical thinking, the message could read 'I want you to buy this, so I will use this airbrushed model to subliminally associate this product with this image of perfection'. Media literacy drags the negative reaction to the surface, and with awareness, it can be put into perspective. Awareness can neutralise it.

Literacy is a two-way skill; it's about messages in, and messages out. Education concerning what messages to



... as soon as they press send or post, they have lost control of the content, the way people use it and how they respond to it.

release into the world wide web is also vital. Students need to understand that whatever they send out, stays there, and as soon as they press send or post, they have lost control of the content, the way people use it and how they respond to it.

Teachers everywhere have been creatively using Facebook to illustrate the viral nature of social media, by posting photos of themselves holding up signs reading: 'Please share this and post your location so my class can see how far social media reaches' or similar.

With wide-spread awareness of the risks, governments, and research teams have been developing programs and resources. One such resource is the *SeeMe Media Literacy* site, developed by the Queen Victoria Women's Centre Trust to promote positive body image and tackle the impact of young people's internalisation of idealised media portrayals of beauty and gender stereotypes. The curriculum aligned program includes useful resources such as a 'principles for teaching about body image' section. More information at: www.seeme.org.au.

Professor Susan Paxton developed a MindMatters program called *Happy Being Me Co-Educational program*, which is a school-based body image prevention program for boys and girls in years seven and eight. In an article published on www. mindmatters.com.au, Professor Paxton also referred to this concept of "media literacy", and that achieving it could protect vulnerable young people from the negative impact of viewing these messages". The program also raises awareness in students about 'the negative impact of making comparisons between themselves and these unrealistic images - as well as appearance comparisons with peers'.

Professor Paxton sent the following comments via email to *School News*. "Our classroom intervention for grade seven students aims to help students critically evaluate the idealised media images they see, and to be alert to the messages behind the image frequently designed to sell a product. She explained that the program "extends to boys because they are also vulnerable to body image concerns, and are also objectified in media".

The co-educational setting also places the body image considerations in context.

According to Professor Paxton, boys "make up an important aspect of the environment for girls and if they understand issues for girls, that is likely to be positive". She added that the same was true in the reverse. The program discusses the presentation of males and females in the media and "how a person looks becomes the most important thing rather than other qualities". While the program is designed with both sexes in mind, "single sex delivery for girls has been shown to be helpful so Happy Being Me can be implemented in either environment", she concluded.

Information on www. mindmatters.com.au states that the peer-based program is designed to help young adolescents deal with some of the social pressures around body image. It attempts to create a positive friendship environment, and peer appearance culture, supporting the prevention of body dissatisfaction and disordered eating within individual participants, and across their broader peer environment.

In a fascinating 2012 Guardian article called 'Uncomfortable in our skin: the body-image report', Karyn Franklin, who co-initiated All Walks Beyond the Catwalk, which encourages diversity in fashion, shed some light on how we came to value the stick-thin body. She told The Guardian that the catwalk used to be more of a factory space, where fashionbuyers were the audience. Seeing the clothes on "tall, bony models" was helpful because it was a shape that is as close to a clothes hanger as possible, with

no hips, or "breasts to bother the line of the shirt". "Since catwalk imagery has gone mainstream (due to digital technology), these model shapes have drifted into the public subconscious", she continued. So the secret is out: our unattainable standard of beauty is actually modelled on a clothes hanger.

The internet age is upon us, more to the point it is on our young people, and it is they who face the unprecedented challenge that entails. The assault on self-esteem we are witnessing is caused by the tyranny of degree – a degree of exposure, and the utter saturation of messages is not going anywhere.

While there has been movement towards improving the standards of behaviour from media outlets and the fashion industry, social media proves hard to control. There is mild mitigation possible, of course, but the problem would seem much larger than that which cursory moderation can resolve.

In research and programs concerning body image education, I perceived a common thread, which I will attempt to summarise: teach young people how to decode and *defuse* the bombardment of messages.

After all, the inconvenient truth is that they love multimedia and social media. It's a powerful tool; it can't be vanquished. They can be extremely creative with it, and will one day inherit it. Perhaps we had better help them tame it instead, but to do so, they must be media literate.

By Suzy Barry, industry reporter

Supplier Profile | Dove Self Esteem Project

A programme designed to help students with body image and self-esteem

Did you know that eigth out of ten girls are so concerned with the way they look that they opt out of important activities?

A recent global study found that in Australia, only 20 percent of women identified themselves as having high self-esteem, putting Australia 11th out of the 13 countries surveyed*.

This is a frightening statistic; however, Dove is working very hard across the world to help change this.

The 'Confident Me' workshop is part of the Dove Self Esteem

project and is a global initiative that helps young girls and boys to develop a positive relationship with the way they look, raise their self-esteem and realise their full potential.

Rebecca H., Assistant Principal from a school in Southern Sydney, talked to us about how many of her students face huge pressure relating to their academic success and achievement.

'Some of the girls become very concerned about what other people think about them personally and their appearances in year five and



six' she said. After hearing about Dove's '*Confident Me*' workshop through an education newsletter, Rebecca trialled the resource with her class. 'The workshop promotes discussion between students and teachers about the issues that students face. Finding out that other people feel the same way is often comforting for students. Students also learnt to use a range of strategies such as positive self-talk and don't compare yourself to others', she then added.

*The Dove Global Beauty and Confidence Report



'Confident Me' is syllabus compliant teacher's resource, it is completely free and can be accessed online by visiting <u>http://selfesteem.mydove.com.au/get-started</u>.

Download it now, help us to reach more young lives and improve their self-esteem!

Catering to the digital native

Learning outcomes are inextricably linked to student engagement and in a technologically charged world, not only do our 'digital native' students expect a slick interactive presentation and application phase of a learning activity, they respond to it.

Scaffolding learning outcomes to technology such as interactive white boards and interactive projectors can turn a boring two-dimensional lesson in to an interactive adventure.

In the following supplier profile, Epson shares the scope and reach of their EB-595Wi finger touchenabled interactive projector.

Epson also offers the new technology and one of its latest contributions to the realm of interactive learning is the EB-595Wi finger touch-enabled interactive projector. Teachers and students can annotate, open and close files, scroll through pages, and move and enlarge objects with their finger. Multiple users can annotate on the interactive area using a combination of two pens and up to six fingers at the same time. Interactive functionality is also available without a PC connection, so drawing on the projected screen is now possible when connected to other devices such as visualisers or DVD players etc. Even when there is no input source, you can annotate on the screen like a whiteboard.

Another advantage for teachers is that when using Epson EasyMP software with a networked interactive projector, they are no longer constrained by cables. They can wirelessly display and interact with content as they move about the classroom with their laptop.

In July 2014, Queensland Australia's Saint Stephen's College introduced Epson EB-595Wi finger touch-enabled interactive projectors to its new science centre and learning support section. The college had been using Epson interactive projectors for a number of years as replacements for their IWBs (Interactive Whiteboard). IT manager David Croft says with projectors in general, but with the new EB-595Wi in particular, Saint Stephen's was looking for consistency and quality. "The initial reaction to the performance of the EB-595Wi was very positive. The EB-595Wi goes further than the other models with its finger-touch capability, the accuracy of the finger touch is very good and the control is intuitive."

He says in the senior school, teaching staff are timetabled in more than one learning space, so it is important for them to be able to move from space to space with a good understanding of how the equipment works. "Critically, any teacher can walk into any one of our new learning spaces and use the technology like they can in the rest of the college. The fact that the college is already using other Epson interactive projectors meant we could implement the EB-595Wi with the confidence that the quality of the hardware would be of the highest standard and ultimately meet our needs."

Last year, when looking for a more dependable resource than the smartboards housed in all its classrooms, Queensland's Northgate State School also decided on the EB-595Wi finger touch-enabled interactive projector. Principal Carol Scriven: "We needed projectors that were affordable and reliable and that the students and staff could use with relative ease. Clarity of images was also very important to us, as was the dual capacity of touchscreen and pen usage.

Finally, a multi-user capability was paramount. So we did our research and the EB-595Wi was assessed to be the ideal projector for our needs. "Ms Scriven says they are enjoying the capacity to go from finger touch to pen touch to whiteboard and the internet in easy steps. "Students from prep through to year 7 are very engaged and motivated by their opportunity to be more interactive than they were ever able to be previously." ▲





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SIMPLE SIMPLER 51 Finger touch interactive projector. No pen required! Now Includes SMART Notebook® Software



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Pen or finger, Epson's interactive projector just got simpler. Learn more at epson.com.au/interactive



Engineering learning experiences with 3D printers



A current hot topic across staff rooms and P&C meetings is the 3D printer, and whether this is a machine worth investing in. What are the benefits? Are there any drawbacks? How cost effective is it for a school? And what can they actually do?

For those who are unaware of the rise of this technological marvel, the 3D printer can build a threedimensional object from scratch, using a variety of materials laid down layer by layer. Creations unfold using metals, polymers, plastics, glass, ceramics, plaster, and even chocolate.

The most obvious benefit of having a 3D printer is the ability to physically manifest the prototype of an idea, or a finished object. Examples vary from sculptures, to replicas of artefacts, to food printing. Jewellers are increasingly using this technique to make wax castings of designs for clients, meaning pieces can be tried on, adjusted and remodelled before even reaching for the precious metals.

So how does this translate to the classroom? The 3D printer can be seen as a valuable asset to students' imaginations and learning. It opens up the ability to replicate a fossil, or design a tool, or create a work of art the potential for ideas is almost endless.

In fact, 3D printing technology could be worked into many areas within the curriculum. Take mathematics as an example: graphs, complex mathematical models and diagrams can be understood through tangible representations rather than flat on the page. This enlivens the lesson, helps those who struggle with traditional teaching methods, and adds a 'cool' factor for many students. History students can replicate curios and relics, making a physical and linear connection with the subject matter. Geography classes can show three-dimensional rock formations, maps, scaled-down land mass, rivers and canyons.

Art and design classes are able to use three-dimensional models to envisage their ideas, and even share these on collaborative projects with other schools – the end results available anywhere that has a 3D printer. Architectural designs can be brought to life with physical representations.

The importance of STEM within the curriculum is an area where 3D printing can be used to great effect. Critical thinking and problem solving benefit from technological resources that help students become inventors and 'learner makers'.

Engineering students can create

prototypes, or robotic parts; science students can print out molecular structures or cross sections of organs – an exciting process to watch, let alone use. Students can test the functional and ergonomic properties of their designs, and appreciate the aesthetics through a solid, rather than virtual, model.

Teaching young people how to use these machines will place them at an advantage, especially if they choose to pursue a STEMbased career, as the use of 3D printers in the 'real world' is only increasing.

Learning to use CAD (computeraided design) software is also advisable for students or teachers, to know how the program works and design effectively with the machine. However, websites, such as Thingiverse and GrabCAD, which allow users to upload 3D images for printing, means this is not imperative. Are there any pitfalls to owning a 3D printer? In the work/ manufacturing environment questions have been raised about copyright issues, and there is also a limit in the size of product one can create, although this is not such a concern within the school and college environment.

Cost is another area to weigh up. As with all new technology, as 3D printers become a more common fixture in business and especially in educational settings, the principle outlay is becoming ever more affordable - though attention to consumables, electricity usage and possible parts replacement over time is still important for budgeting considerations.

Life expectancy is conditional on use and maintenance, but ten years is a reasonable



assumption, based on regular use and a good servicing and maintenance program.

So, now it comes down to whether this technology is a positive investment for schools and colleges? The 3D printer is definitely a learning tool, continually evolving, with endless possibilities in the future within a large range of industries, for those who are adept at using it.

The 'fun factor' is also a recognised method to help children absorb information, rather than just by rote or Q&A session.

What could be more enjoyable than building your own bridge, or designing a creature or making a prototype of an invention? 3D printing offers project-based learning through experimentation, discussion and a threedimensional, tactile result. The imaginative scope for creativity, investigation and analysis proffered by 3D printing, plus the enjoyment of watching ideas, objects and theories manifest, surely outweighs the cost when it comes to education.

By Victoria McGuin

Your Schools Makerspace Partner!



Designed and built in Melbourne, the T3D-845 has been designed specifically for the education sector. With a print bed of 80cm x 40cm x 50cm, a class of 30 students are able to print their individual designs overnight for continued discussion and instruction the following day.

With exacting build quality the T3D-845 is a production grade system capable of meeting the most demanding manufacturing requirements.

Easy to use and offering unrivalled user flexibility with completely customisable printer settings, the T3D-845 is the ultimate printer for use in a myriad of applications.

Grants are available through the National Innovation and Science Agenda that may absorb 100% of the costs.

Service and material supply packages available Contact our sales team on O3 9646 0890 or at sales@333d.com.au



Wonderful reads for children and teens

A Very Good Chance

By Sarah Moore Fitzgerald

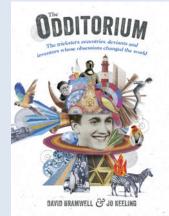


Set in Dublin and Siena, with its dizzying, dare-devil Palio horse race, the novel is about taking chances and seeing the world in a different light. With a dash of Irish humour and plenty of adventure, Fitzgerald invites us to follow Minty into Nettlebog through the twisty-turny trees. As the other world disintegrates, Minty finds refuge in Nettlebog, with her wordless companion, Ned, who just might hold the knowledge that will save the human race.

Hachette For readers 8 to 12

The Odditorium

By David Bramwell and Jo Keeling



For a left-field inclusion, one for those quirky teens who love history, but prefer it to involve shocking stories to bring up in class discussions, or at Christmas dinner, we present, the Odditorium. It's a celebration of the underdog, of the lesserknown but no less remarkable characters from history. Its pages tell of 'the Emperor of America', the world's worse vegetarian, the birth of rock 'n' roll and a Victorian accountant who sent over 30,000 singular objects through the mail, including himself.

While their stories range from heroic failures to great hoaxes, one thing unites them - they all carved their own path through life. Each protagonist exemplifies the human spirit through their dogged determination, willingness to take risks, their unflinching obsession and, often, a good dollop of eccentricity.

Hachette For history buffs 12+

The Secret Cooking Club

By Laurel Remington



In Laurel Remington's debut novel, everything Scarlett does is broadcasted on her mother's successful mummy-blog. Scarlett decides that the only way to beat her mum at her own game is to quit all her activities and become totally boring.

Lonely and unhappy, Scarlett finds solace in the kitchen of an elderly neighbour Mrs Simpson, who has been taken to hospital. Scarlett enters her house to feed the cat and finds a wonderful, fully-stocked kitchen and a handwritten book of recipes with a cryptic inscription: 'to my beloved daughter... may you find the secret ingredient'. In the secrecy of the amazing kitchen, Scarlett decides to teach herself how to cook.

Scholastic For readers 8 to 12

The Fabulous Friend Machine

By Nick Bland



A delightful tale about searching for connection in your mobile phone, while life happens around you and you miss it...

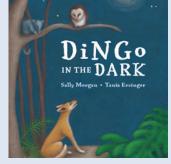
Popcorn is the friendliest chook in the farmyard, until she finds a fabulous friend machine flashing light at her in the barn, a mobile phone. She loses herself in the virtual world of social media, and isolates herself from her real life.

The metaphor of 'a sheep in wolves clothing' is brilliantly played out, quite literally, in this provocative, cautionary tale. In a climate where primary schools need phone policies for students as young as six, it's a vital resource for social media literacy.

Scholastic For readers 4+

Dingo in the Dark

By Sally Morgan



A tale of the loneliness of being scared of the dark. As little Dingo comes to terms with saying goodbye to the sun every day, the archetypal wise one; owl, explains that the moon is also watching over him when he sleeps. A beautiful and comforting rationalisation of day and night, drawing on the natural world to create a story filled with friendship and personal growth for Dingo.

Scholastic For readers 2-6

A Miscellany of Magical Beasts

By Simon Holland



Ever heard of a chimera? What about a cerberus? While the basilisk was made famous by Harry Potter, and we've all heard of werewolves, elves, and mermen, the companions of mermaids, I bet you don't know why griffins collect a gem called agate, or how to put out dragon fire... A Miscellany of Magical Beasts is a beautiful and fascinating menagerie of creatures from the world's timeless mythologies and legends. It's the perfect enticement for beast-loving reluctant readers, beautifully illustrated with rich, enchanting artworks, accompanied by amazing facts. An exciting treasure for the school library.

Bloomsbury Kids For beast lovers 7+

SCHOOLNEWS WELCOMES EDITORIAL CONTRIBUTIONS AND IMAGES ON RELEVANT TOPICS FOR FEATURES, NEW PRODUCT PROFILES AND NEWS ITEMS.

Please email to editorial@schoolnews.com.au. Images should be in high resolution (300dpi) JPEG format.

All Editorial queries should be directed to the editorial department (07) 5440 5322.

Planning your 2017 external learning curriculum

External learning used to mean things like swimming lessons at the local pool. Every week, we walked two abreast (holding hands with a partner) to the local oval for sport with Mr Fuller. He was always forthcoming with training tips and schedules for his favourite sports of touch football and cricket. We didn't mind; we got ice blocks full of preservatives and colours on Wednesday afternoons in terms one and four, and we got to wear our coloured T-shirts with only bloomers. Those were the davs.

Times have changed, and with change has come far greater opportunity for Australian school students, and far fewer artificial colours and preservatives. Schools these days can avail to their students an absolute melange of external learning opportunities. The variety is so plentiful, it could even drift into the too-much-choice territory.

Planning your 2017 external learning curriculum starts in term four. It involves careful examination of the curriculum outcomes, and a survey of what's available to meet those outcomes. For schools with budgetary restraints, it might mean searching for grants as a first step in planning, and for some schools, a discussion with the P&C is a first port of call. What are they willing to pay for? What are their expectations?

Ultimately, school administrators accepts responsibility for any program they implement, and their duty-of-care is unchanged when external instruction occurs. With this in mind, schools undertake careful screening and practice strict adherence to national and state-specific regulations.

The most successful external learning activities are usually planned through collaboration between school leaders, administration and teachers.

Teachers have expertise in

teaching and learning, and the expertise to match activities to outcomes, but they also know the students. With expert knowledge of their students' academic needs, their abilities, and how they learn best, class teachers are well-placed to engage in creating external learning activities for their students.

They also understand their own students as individuals, and within a group dynamic, providing an educated view on the programs that will best meet curriculum requirements, within the context of the behavioural climate of a particular class. Not all programs are suitable for all schools and classes.

Government sources indicated that one-off speakers or sessions, (isolated from the context of a planned approach to education), will have minimal effect in enhancing students' knowledge and skills. Visiting speakers should be used only in situations where their visit adds value to existing teaching and learning practice.

Do the external provider's services and resources:

- focus on the areas of need within the school?
- support the whole-school ethos and education directions of the school?
- take into consideration the diversity of the school community?
- show awareness of the issues or needs of the local community?
- allow equitable access to all students? Is the service free of charge and/or does timetabling enable all students to attend?

Other important questions might be:

- Does the external provider program represent good value for money?
- Are procedures in place to ensure parents/carers will be provided with sufficient information prior to the







program to allow them to consider and permit their child's involvement in the program?

- Are alternative programs available for students who may be unable to access the service?
- Are funds or alternatives in place for students who are unable to access the service?
- If yes, have these alternative programs been evaluated?

Whether these considerations are relevant to your school will vary depending on the circumstances of your school's community, resources, location and existing programs. External learning can take as many forms as your imagination will allow.

School camps remain an eagerly anticipated event, with fundraising, planning, prelearning and social dynamics instruction all part of the adventure. From recreational sport, or endurance and adventure challenges, such as orienteering, rock-climbing and scuba-diving to a Shakespearean play in the city.

It's worth noting that while the education may be external in origin, it is not always conducted outside the school. Inviting providers into the school has gained popularity, and options now exist for things like cultural studies, theatre, and human movement programs such as sports training, dance, and even yoga.

A simple activity, such as exploration of the local waste management centre, or a visit to a local shopping centre with the objective of unpacking marketing strategy, can give way to crosscountry treks to Canberra, and international service tours to south east Asia.

It's all out there waiting to engage the enquiring minds in your charge; it just takes a bit of planning.

By Suzy Barry, industry reporter

The Adventure Camp for schools

The Queensland Recreation Centres have developed an updated adventure program for schools to enjoy. The Adventure Camp offers four different themed programs of instructor-led activities, with an emphasis on health and well-being, team building, resilience and leadership through a fun, challenging, relevant and engaging experiential learning process.

There are main themes to the curriculum-aligned programs: Be Strong, Get Activated, Stand Up, and Unite, giving teachers the opportunity to address those educational outcomes from the eighth and most recent version of the Australian Curriculum.

The themed programs are appropriate for any group, however they have been designed in consultation



with experienced, practising teachers to align with Version eight of the Australian Curriculum. A suite of teacher and student curriculum resources are available for year bands five/six and seven/eight. Please visit our curriculum links page for additional information.

While the program is specifically designed to be

years five-six and years seveneight curriculum compliant, the program is suitable for all ages, offering considerable scope for meeting learning outcomes in curriculum areas such as health and physical education, and general capabilities. Additional alignments with cross-curricular priorities mean the adventure of the school year, provides

a suite of experiences with applicability to other key learning areas, such as teambuilding, leadership, resilience and problem-solving skills.

With two idyllic locations on the Gold Coast and the Sunshine Coast, the camps serve up the best of Queensland: 'sun, surf and coastal waterways'.

Dancing is for everybody

In the early Raw Energy Dancing or REDed days, 17 years ago, a private all boys school in Sydney approached Dale Pope. The sports master was looking for a dance program to suit their energetic and progressive approach to curriculum. "We just want our boys dancing".

"I thought, 'ok, think like a boy', and at the time, there were movies out based around action and humour, like Mission Impossible, and Austin Powers". Said Ms Pope, who accessed the soundtracks of these erstwhile adolescent favourites.

"I want them to feel ok to dance in the high school musical, or at a wedding". The classes are "pitched at the "least 'dance-experienced' common denominator". Ms Pope is determined to "break down the



perception that dance is just for girls, and just for certain types of girls at that". "It's one of the few non-competitive physical activities". "The toughest boy in the back row needs to like it", she explained. The energy and pace mean even experienced dancers don't feel bored. "The trick for all students is to acknowledge their energy and channel it". Staff are trained over a full school term, through instruction, supervision and co-teaching.

For those not in Sydney, Ms Pope has made video lessons available to download for a small cost. •



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Ciro Ferra and students boating in Capri on their WorldStrides tour. Photo: Elisabeth Murdoch College

Educational adventures without the headaches

School News sourced some opinions from experts in the field about current trends in educational tourism, discovering that educational tourism is more than the annual language trip these days.

According to Matt Huttner of WorldStrides, foreign language learning is still "oftentimes the window that drives people to seek out international educational travel experience", but educational tours increasingly satisfy learning objectives across the broader curriculum. Referring to Vietnam trips, Mr Huttner elaborated:

"There's the military history link, specifically the battle of Long Tan". With such richness in military history, culture and culinary pursuits, is it any surprise that South East Asia features in school travel plans?

Peak experiences of historical education are certainly the domain of educational travel, according to TravelBound Education's Nick Bond. "Just imagine an *ANZAC* Day dawn service somewhere like Thailand's Hellfire Pass".

In addition to traditional cultural and historical outcomes, "schools now factor in multi-disciplinary tours which focus on business, economics, STEM and food technology", he continued.

Countries such as Vietnam have much to offer the budding ecologist, linguist, food technologist, social scientist and historian, but Mr Huttner



Positano was a breathtaking photo opportunity for the WorldStrides tour group. Photo: Elisabeth Murdoch College

suggests turning the process on its head. "Rather than start from the destination, let's start with the curriculum outcomes".

Asking "what would you like to learn while you're there?" could land you in Turkey, or in your own backyard. The ubiquitous Canberra visit includes an Aboriginal Tent Embassy visit with WorldStrides. While the outcomes are not always predictable, the custodians have always welcomed the school groups. The Elders are receptive to the students and willing to have the conversation about why the tent embassy is where it is, and to explain the goals of the movement.

Raising awareness of the complexities of the world's social landscape is the focus of many 'service learning' expeditions, according to Rebecca Christian of edu-travel company World Challenge.

"We encourage students to ask questions about any work they may be asked to help with in a community, for instance; how does a toilet improve a girl's participation in school?" It is hoped that the process of learning about the developing world will "break down assumptions or prejudices about the people these issues affect."

"How more developed nations should engage with the less developed world is incredibly complex", Ms Christian asserted, adding that the short term volunteer contribution "must be driven by the community to ensure it will be beneficial in the long term".

She urged that "working hand in hand with local development organisations" means accessing "the expertise and ownership to drive lasting change within the community".

All respondents highlighted how transformative educational travel is for adolescents, from the simplicity of eating more adventurously— "it's not every day a student would consider eating deep fried insects", Mr Bond laughed—to establishing socio-political awareness.

What about security?

We live in uncertain times. The extent of safety and security provided will vary, and this is where the larger more established operatives could put anxious minds at rest.

"We diverted two groups out of Istanbul when the airport was closed due to the military coup earlier this year" Nick Bond relayed, and added that with terrorism on people's minds, "it's important for schools to know they have access to 24-hour support services to mitigate risks".

Mr Huttner urged that selecting a provider with services such as international Doctors-On-Call, and the ability to 'extract' groups when required might help allay fears. Contacts on the ground are also vital in uncertain times. "We have proprietary partnerships with leading global risk management organisations; in the event of a crisis we receive up to the minute information. We don't just get our updates from the evening news."

My intrepid informants, with more than 150 countries between them urged school groups to get creative. 'Shake things up a bit' said Matt Huttner, and 'innovate in the educational tourism space'. Mr Bond offered, "don't just take the same trip you've always taken". With so much out there for students to experience, pardon the cliché but 'the world is your oyster'.

A real Italian experience with WorldStrides

Elisabeth Murdoch College (EMC) deputy principal, Ciro Ferra, began working with WorldStrides in 2014 to create an integrated, multi-faceted trip that pushed the boundaries of the typical tourist experience of "shifting from hotel to hotel, seeing the sights".

EMC language teacher Maria Varsamis and Mr Ferra (who was born in Italy) worked collaboratively on the itinerary with WorldStrides, who were receptive to their desire to incorporate the sister school element, and integrate Mr Ferra's family connections.

They began in Rome, and there was a positive sense of "culture shock at this vibrant city full of archaeological and artistic treasures dating back to 753BC". The usual tourist elements were still present but to go a step further, students were asked to record their reactions, emotional and intellectual, in a journal created by WorldStrides. Incorporating this type of reflective learning content into a trip is an important step in helping students process and understand new experiences.

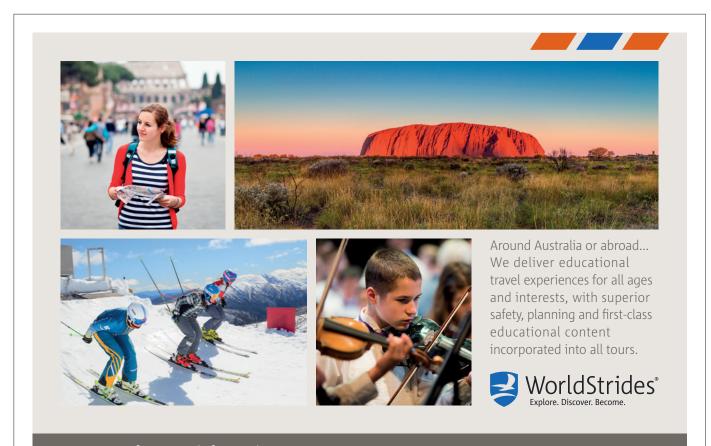
Liguria's La Spezia was all thunderstorms, football fervour, and traditional pesto basil pasta. Students "immersed themselves in the spectacular views of Monterosso, Vernazza and Corniglia", Mr Ferra described. Students also imbibed the works of Dante, De Vinci, Galileo and Michelangelo with a scenic guided bike tour of Firenze. From a Pompeii tour with historian cousin Alfonso, to an insider look at the Roman police force with cousin Eduardo, culminating in a wood-fired pizza extravaganza with cousin Michele in Sorrento, immersion into the real Italy was the key to the students' experience. WorldStrides programs take students beyond the classroom to help them create unforgettable life experience.

In Napoli, the students stayed with host families of their Italian sister school. "Six days of feeding them, washing their clothes, showing them around and sharing a culture that will be remembered for a lifetime" Mr Ferra reflected. "It was as if they had known each other for years."

Floating around on this cloud of art, culture, pizza and pasta was easier with WorldStrides onside. "They really listened to what sort of educational experience we wanted to create", Mr Ferra commented. "We had a few sticky situations in Italy". Mr Ferra told of a few illnesses, and a hospital trip, but the "couple of little disasters" were "promptly sorted out for them". WorldStrides utilises a set of comprehensive, global risk management services and guidelines to ensure the safety of all travellers.

"Feeling more supported in travel plans", they will seek Victorian Registration Quality Assurance (VRQA), to become an authorized sister school hosting college, allowing participation in reciprocal exchanges for longer periods. A Bali trip may also be in the future for students learning Indonesian.

I think, as a school community, they might have caught the travel bug!



Contact us for more information 1800 331 050 | info@worldstrides.com.au | worldstrides.com.au

Canterbury Primary's big adventure

It's not every primary school that jets off to China for a school excursion, but Canterbury Primary School did, with the support of Travelbound Education.

Nick Bond of Travelbound says pre-departure sessions ensure the young travellers are prepared for new experiences. Visa needto-knows, spending money and cultural variances are all on the agenda. Depending on weather events or political climate, health and security might be included. "It's about putting minds at ease, but also providing tools for confident travel."

While Great Wall, Summer Palace and Forbidden City visits enthralled the children, the real-life interactions engaged the students in authentic cultural exchange.

Teacher Brendan Hitchens said incorporation of their partner school in Suzhou, and home-



Celebrating mid-autumn festival with homemade dumplings.

stay accommodation created an immersive experience that disclosed "all aspects of Chinese culture in a way that stockstandard tourism just doesn't".

Nick Bond said students come away with a whole range of new appreciations and skills. "They



Official welcoming; meeting host family friends. Photo: Canterbury Primary School

spill off the plane saying things like: 'hey, I'll cook dinner tonight! I know how to make dumplings!".

"The trips enhance connection with language and culture" Mr Bond continued, "there's a critical understanding of culture in practice, in situ, that you just can't get from a textbook or even YouTube". Brendan Hitchens termed the adventure as a winner for curriculum.

Mandarin curriculum outcomes were complemented by civics, interpersonal development, history and culture.

Promoting emotional intelligence through educational tours

Although Girton Grammar is ostensibly an academic grammar school, the focus is textured by a broadening of the formative process to encompass emotional intelligence and citizenship.

In 2016, 36 students travelled to Thailand and Cambodia with World Challenge to help address these objectives.

Touristic destinations such as walking the route of infamous POW constructed railway, 'Hellfire Pass'; jungle survival training amongst the hill tribes of the Chiang Dao region, and a visit to Angkor Wat gave way to the community engagement that sets World Challenge programs apart.

Home of Faith, Hope, Love is a registered local Cambodian NGO, and a community



Taking some team relaxation time in Chiang Mai. Photo: World Challenge

learning centre located in the rural village of Phum Tany, that recently opened a classroom servicing 30 local students. Girton Grammar students apprenticed themselves to local skilled tradespeople to help create a playground for the children, as well as availing themselves for informal lessons and organising fun outdoor activities.



Suzhou students in the playground. Photo: Canterbury Primary School

Nick Bond emphasised that Travelbound's careful organisation allows teachers to seize every opportunity for learning.

"We coordinate everything so the teacher can do their day job and teach. We worry about all the booking, confirming seats, hotels, transfers – the 'heavy lifting'". Brendan Hitchens always felt supported; Travelbound did everything from hosting parent information evenings and pre-trip sessions to obtaining VISAs. "They were at the airport at 4am for our departure".



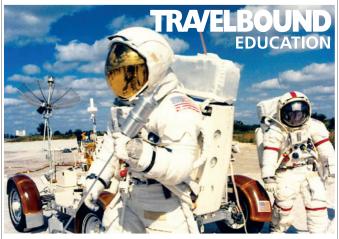
Taking a tuk-tuk ride around Siam Reap. Photo: World Challenge

World Challenge staff offer a pre and post expedition mental health brief, run by a qualified mental health professional.

Girton Grammar teacher Mr Graham Crickmore said the 'coping plan' presented by World Challenge prepared them for what experiences might occur. He said the students were able to identify typical behaviours that might be played in the group dynamic. "It allowed the group to open up about some of their personal 'fears' before departure and then to recognise these are just normal and expected".

A post-expedition debriefing session three days after their return provided a platform for the students to process their feelings about their experiences. "It then became quite obvious that they were all expressing similar emotions, hence normalising what was happening", Mr Crickmore reported.

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Blood sugar spikes and concentration: a nutritionist's perspective

School days have little brains working overtime, and they need a constant supply of blood glucose to fuel it.

Teaching is also far easier without students suffering from sugar highs and sugar lows. Emotional outbursts and temper tantrums are far less likely to occur, once blood sugar levels are addressed.

The solution is surprisingly simple. To keep a child's blood sugar level stable, ensure a little bit of protein is consumed at every meal. The protein acts like an anchor on the meal and ensures that the energy from the meal is released slowly and steadily.

Sending out a reminder to parents can encourage the practice of sending children to school with balanced blood sugar, and the school can help prevent blood sugar fluctuations by fleshing out that healthy eating section of the canteen full of fruit with some protein.

Education about balancing meals is also useful, and provides the flow-on effect of better behaviour and improved concentration in the classroom. Teenagers, who are under considerable academic pressure, are particularly susceptible to emotional outbursts and brain fog, so it is well worth endeavouring to influence teenage snack habits. If they can't buy it on campus, they are much less likely to eat empty carbohydrates and sugary snacks at school.

> Hummus and crudités can be served in a cup with cut veges sticking out of it.



Protein-rich canteen ideas:

Hummus with crudités: carrot sticks, celery, sugar snap peas and so on.

Chocolate Brownies



It looks like a chocolate brownie, it tastes like a brownie, but it has kidney beans, dates and eggs in it...wonderful nutrients, lots of protein and no sugar highs or the lows that follow soon after!

Ingredients

- 2 cups cooked kidney beans, tinned beans work too.
- 20 medjool dates, pitted
- 3 tablespoons coconut oil or melted butter
- 1/2 teaspoon baking soda
- 1 tablespoon vanilla extract
- 1/2 cup unsweetened cocoa powder
- 3 extra-large eggs or four normal eggs

Method

- Preheat oven to 180 degrees Celsius. Generously grease 8" by 8" baking pan.
- In a food processor, place dates, 2 cups of beans and oil or butter and puree until smooth.
- Add baking soda, vanilla, and cocoa powder and puree until completely smooth. Allow food processor to blend for 3 to 5 minutes without stopping.

- Add eggs and blend well.
- Pour batter into greased baking pan. Bake until slightly firm on top and edges pull away from the sides of the pan for 30 - 40 minutes.

Looks and tastes like a chocolate brownie but it packs a protein punch.

Spinach, Feta and Brown Rice Slice

This incredibly easy recipe is great either hot or cold. It ticks so many nutrition boxes and best of all is really tasty.

Ingredients

- 400g of frozen spinach thawed or 2 bunches of English spinach, stalks cut off, washed and placed in a strainer. (Pour boiling water over to wilt, squeeze out most of excess water when cooled to touch and then chop finely)
- 1 scant (a couple of tbs under a cup) cup of cooked medium grain brown rice
- 1 heaped cup of diced feta
- 3 eggs
- 1/4 tsp of nutmeg
- Black pepper

Method

 Combine all ingredients. Put into a greased ceramic baking dish. Cook at 190 degrees Celsius for 25 minutes or until golden on top.

These recipes all contain good amounts of protein and will break down with a steady supply of fuel.

Creating a culture of positive eating, balance and nourishment can have enormous rewards, both inside the classroom and in the playground.

By Kate Cowley, nutritionist



All photos courtesy of Yoga Palette

Yoga in schools a growing trend

Yoga has found its way into mainstream schooling and with good reason. Our students are just not moving enough, and most are not engaging in the kind of unstructured meandering that promotes imagination, allows for contemplative and relaxes the body and mind. You know, all those things adults are trying to squeeze into their busy lives through meditation and yoga classes. Kids didn't used to need classes to find their inner zen; they had time for it to find them.

Stacey Nelson has been teaching yoga at a private girls school in Brisbane for the past ten years. She said "the teachers love it, the students love it, and I loves it!" Here are her words from out there in the field.

The teachers also notice a difference in the children when the yoga program is in session, noting that the girls are not as anxious after yoga, and are able to calm themselves down more easily.

Younger children love making shapes and telling stories with their bodies, for example, roaring like a lion, then hiding their face as they stretch out their back in child's pose, before coming up to roar again. The trick with teaching yoga to young children is to keep them engaged-moving, then

stillness, then repeat, moving then stillness.

You can't expect a five-year-old to calm down and just lie still for five to ten minutes if you haven't guided them to get all of their wriggles out of their system!

That's where a lot of teachers go wrong, they expect them to just be quiet and calm, but we have to guide them there playfully. Once they are ready, they will enjoy the calmness.

Older students also need to have some movement/ stretches to release tension from the body before the stillness, but generally can be still and quiet a lot longer and slip into that state a lot more easily.

It is easy to do a ten-minute guided relaxation with year fives



and up to 15-20 minutes for high school students.

I truly believe that that this quiet time is the most important part for them, to learn how to turn within and calm themselves down, even when it is noisy around them.

Teaching diaphragmatic breathing is the key to teaching kids how to self-regulate their emotions.

Some of the best poses for children are, of course, child pose (stretches the back and calms the mind), mountain pose (teaches good posture), tree pose (balance and focus), bridge pose (helps to balance hormones and calm the brain), and relaxation.

Suzy Barry with Stacey Nelson, yoga teacher





Floor safety more than slips and spills

Health and safety is a primary consideration for schools, with a duty-of-care covering both staff, and students at various levels of development. Apart from the 'archetypal accident'; the slip or fall, other factors relating Indoor Air Quality (IAQ) and the chemical compounds found within the flooring must be considered.

According to the GreenGuard Certification website, "the majority of everyday chemical exposure occurs through the air we breathe in our homes, offices, schools and other indoor environments. These airborne chemicals are commonly referred to as volatile organic compounds (VOC's)". The certifier's objective is to "helps manufacturers create, and helps buyers identify, interior products and materials that have low chemical emissions".

As more is understood about the importance of IAQ, school leaders are including VOC levels in their decision-making process, and selecting materials that contribute to a healthier learning environment.

Industry View

Preventing the slip

David Hack from Spectrum Floors explained that all surfaces can be assessed using a slip-test, which is usually conducted by elevating a surface covered in oil to a certain gradient, until the test subject (person with rubber boots on) slips. This gradient at which they slip determines which 'slip-resistance' score materials are given.

"Personally, I think R9 is sufficient for a school laboratory, but with professional indemnity concerns in mind, architects and designers are recommending R10", he explained. The higher the non-slip rating, the harder the surface is to clean. This caution on the part of the designer, he continued, "can actually leave an ongoing problem for the client, with increased cleaning and maintenance costs".

"The R10 is designed for wet areas, but a school science laboratory is not really a wet area like a shower recess, or a commercial kitchen", though, he added, "it really is for the client to decide".

Another decision for the client is rubber or vinyl; "we do both" he said. While the traditional option has been a 2mm vinyl, rubber is gaining popularity. Vinyl "is relatively hard and noisy, with a sound reduction of only 2DB", while the 5 to 6DB, score for 2mm rubber signals far greater absorption of the discordant racket of stamping feet and scraping stools, and has 'more comfort and warmth underfoot'.

Rubber has better chemical resistance, but they are both chemical resistant to an adequate level.



Photos: Spectrum Floors

Environmental risks

While these factors are

significant, they are eclipsed by

an environmental factor of great

generally promotes better IAQ

than vinyl, with very low VOC

emission. IAQ considerations

"Most synthetics tend to give

off VOCs; vinyls are generally

higher than rubber" Mr Hack

explained, and he said there is a

measurement of 'best of kind' that

recommends the 'least toxic' toxic material; "best of a bad lot", he

Europe.

surmised.

are reportedly more stringent in

import for student health. Rubber

Spectrum Floors installs rubber flooring, which has very low VOC emission and now a German vinyl with very low levels.

The issue of PVC was also raised, and although rigid in its original form; "when used in flooring they add a plasticizer makes it flexible so you can roll it up".

This plasticiser, which is carcinogenic, and manufacturers are now trying to replace it with non-carcinogenic plasticiser.

A German company has had great success using a waste product of sugar beet, with very low VOC emission.



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"Studies have proved that kids learn better in a clean atmosphere", Mr Hack asserted, and "a Norwegian study indicated that toddlers who lived on PVC floor are six times more likely to develop Asthma". Perhaps adding to the reliability of the survey is the fact that young Norwegian children spend nine months of the year cooped up in sealed houses.

And with regard to risk to the wider environment, rubber floors are the greener choice; in fact, "GECA (Good Environmental Choice Australia) won't actually certify viny!".

Other surfaces

For an effective entrance barrier, he suggests their polyamide and vinyl entrance matting strips with 30 percent recycled yarn, which "can take a lot of beating" from the stampede of hundreds of clamouring scholars several times a day. Strips totalling a four-metre width can take 75 percent of dirt and water off the clodhoppers. Otherwise the hallway can become a 'skid-pan', he cautioned. Gymnasiums are also well suited to rubber floors, and are used at the Olympics, though Mr Hack did comment how beautiful timber floors look, they are harder to clean and more expensive to maintain.

Rubber's durability recommends it for high traffic areas such as corridors. I was asked whether I had ever seen a PVC car tyre. "It would chew the tyre to pieces", he exclaimed. Fascinatingly, rubber actually 'heals itself'; it self-repairs scuff marks and abrasions, through an oxidising process.

Could rubber floors even aid

concentration? It's possible, according to the teachers from a high school in Adelaide, who found installing rubber flooring on timber deck somewhat transformative. "Before we put the rubber flooring out there, every time anybody walked past twenty-plus pairs of eyes would shift to the window, after the new deck floor, they weren't distracted" they had reported.

While rubber is ideal for many surfaces, Mr Hack does not recommend rubber flooring for around swimming pools. "The safest thing is a non-slip ceramic tile" he advocated, saying that seepage through concrete can result in migration of moisture to below the surface and actually lift the resilient flooring.

Steps and ramps require special flooring as well. There are particular codes that should be

addressed within the Australian Standard, and understanding regulations in vital. For example, colours are important for stairs and ramps, not only materials. "The comparative light reflectance achieved using white with black insert demonstrates the visual advantage" was the explanation. Red on black, for example, does not provide enough contrast though yellow on black is possible.

Slips and falls, Indoor Air Quality, and the floor's green rating are all considerations for the modern school. While Europe may be leading en masse, many providers have made independent progress towards healthier safer flooring and the employment of IAQ positive materials.

By Suzy Barry, industry reporter



Mental health matters

Mental health. Two little words finally gaining big attention for all the right reasons. Encouragingly, positive conversations within and outside various social, government and political channels have led us here, and there's no place we'd rather be.

The word 'matters' is another popular concept at present. Its collocational usage with the terms 'mental health', 'life', 'people', 'relationships', 'mind' and 'kids' could not be more relevant nor valid, particularly within the realms of education.

At the public primary school where I work, kids most definitely matter.

We have always had an exemplary learning support team led by our principal, and learning support teacher. Being a formally recognised KidsMatter school has allowed us to both acknowledge what we were always doing well, yet it enables new depth and critical evaluation.

We were one of the earliest schools to follow the initial pilot program. Back then, I was researching online for a leadership project centred on student resilience. In the midst of locating a specific resilience program, I stumbled across the KidsMatter pilot program evaluation instead.

"KidsMatter is not a program"; these words have become the mantra of KM trainers and advocates alike.

It has more attributes and facets than first perceived or imagined. While programs are limited in their specialised scope and depth, I see KidsMatter as limitless in possibility and direction.

In essence, it is a framework for all things pertaining to mental and emotional health and wellbeing. Sure, KidsMatter most definitely provides access to specialised resources, however, it recognises that needs change in nature and purpose over time. It also recognises that dynamics and structures should move and breathe along with the students.

For a while, limited funding



KidsMatter was developed by mental health professionals and education and childcare staff, in response to the high rates of school-age children with mental health difficulties and the problems they face getting help. It is a partnership between education and health sectors and is funded by the Australian Government and Beyondblue.

The KidsMatter Primary training is delivered by Principals Australia Institute, who support schools with the implementation process. The Principals Australia Institute programs staff consist of educators, social workers and psychologists.

impeded our enthusiasm. With support from my principal and deputy, we promoted the initiative among regional schools and principals to gain training. We succeeded. Soon enough, The Federal Government dramatically increased funding in response to the momentous success of the pilot program. Successes included raising awareness, earlier detection, and the ultimate prevention of students at risk, as well as significantly raised NAPLAN results.

A serendipitous discovery revealed that October's mental health month theme and our school motto are actually one and the same: 'Learn and Grow'.

Though it is difficult to list every successful outcome thus far, there are some examples of learning and growing that are just too good not to immediately share.

For example, one teacher leads our 'KidsHope' mentoring program. My fellow coordinator has brought the importance of 'belonging' to the forefront of discussion and action. A highly visible KidsMatter board showcases teachers and students' collaborative thematic efforts. Most teachers are also embedding mental health content within literature units.

A small team has done a sensational job of providing weekly tips and correspondence via KidsMatter. Another teacher has lifted resilience through the 'You Can Do It' resilience program, and a former teacher established our 'Community Courtesies'.

'SmilingMind' for mindfulness, 'Class Dojo' for maximum student participation; emotional regulation through Kimochi puppets; library activities, and art clubs are a few other demonstrable examples of conscious and goal-based implementation.

Life hinges on unavoidable

Beth Chant registered teacher, KidsMatter, primary coordinator



transitions. A 'mentally healthy school' both acknowledges and caters for the fluidity and complexities of children's lives.

Needs change; people change. That's why a strong mental health focus in the care of school aged children is a vital foundation for the transition into adulthood. Good mental and emotional health strengthens a person's prospects and character, underpinning academic success. KidsMatter's online resources guarantee private access for families and staff. Everyone can take on and digest as little or as much information as is manageable, providing solace and reassurance.

Teaching mastery of resilience, and the skills required to regulate emotions, bridges the divide between school and home. The two unite through a commonality of language, mindset, and values, diminishing the gap created by miscommunication and misunderstanding. The unity is not just intra-institutional. As KidsMatter schools unite under their namesake, collaborative practices and support structures occur country wide.

Schools share new triumphs over challenges, and apply a new and common language and an explicable purpose to achievements that were previously achieved organically.

For our school, it has provided purposeful strategic direction and an open platform for revisable goals and focuses. Together, we can transform disengagement into connectedness, ignorance into wisdom, and judgement and stigma into acceptance and compassion.

We all function more harmoniously and industriously when our minds feel better. Mental Health.

Two little words: one massive impact.

Beth Chant is in her fifteenth year of primary school teaching and her seventh as school KidsMatter coordinator. Beth has specialised in environmental education, and social work, and has worked with mental health in a hospital setting.

Digital signage for schools

As director of a sign company specialising only in the school market for over 20 years, I believe our reputation is paramount; so when it comes to digital signs, our attention to quality in the LED cabinet is vitally important.

We have a policy where at the time of first discussion we educate our customer on the most important features of the LED cabinet. There are many points of difference, which will have an effect on the lifetime, performance and visual aspects of the sign. For example: airflow and heat build-up will have a drastic effect on the lifespan of the sign; these are very important aspects of which our customers need to be aware.

We want our customers to be armed with as much information as possible so they can make an informed decision on what is a high cost item that will last for a very long time. We have found that schools are not necessarily comparing apples with apples but rather basing their decision on price or aesthetics. I believe that, unfortunately, there are a number of schools paying way more money for digital signs, by basing their decisions on aesthetics and a 3G, webbased management system that



Photos: Signpac

comes at a cost for the 3G sim card, either to the school or the company supplying the sign.

Even though the message is "no ongoing costs to the school", they have factored the ongoing costs into the purchase price, which is inflated by thousands of dollars to offset those cost instead of focussing on the digital cabinet features. In our experience, the number of times a sign message needs to be changed on a weekend, or late at night, does not quantify the extra cost of web-based software. There is free wifi aerial connection available, with remote access to the computer controlling the software, which, in my opinion, is easier to use than web-based and with remote access accessible from anywhere in the world.

There is a concern that where schools are purchasing signs from companies that don't have a long standing record, when they need maintenance or support the company is no longer around, doesn't have parts or cannot offer enough support. We are replacing many signs that have stopped working at schools, which is a double cost that many schools can hardly afford. The point here is that the schools need to make sure they are engaging with a company that has a long successful track record, offers ongoing support for the sign and the staff using it. We have a dedicated person, who only does training, support and maintenance giving our customers peace of mind.

The first step in the process is to engage an electrician to give a quote on the costs to supply electricity to the site; sometimes this cost can blow out the whole process if it's too expensive, so once that's done, we recommend that the school consults with their local council and the traffic authority.

This is very important as we know of cases where the sign was installed but had to be moved shortly afterwards because the council shut it down. ★

By Larry Wainstein, director, Signpac





The evolution of digital signage in schools

School signage has come a long way. Gone are the days of the static department of education sign, with peeling paint between working bee spruce-ups. Even the more modern single colour versions have been replaced by a tool that is so much more than a sign.

Modern technology has harnessed the digital sign, creating a vehicle for marketing, publicity, and school community updates. A school's front sign can remind parents of pupil free days, beg for cakes for fundraising stalls, and publicise clearly that a uniform crackdown is upon them - all on the same morning – in a slide show of school-related news.

Particularly useful is the pre-programming function. Scheduling can be set from the comfort of the office, or even home, and here's the rub; anybody with the secure login ID can do it.

This dizzying emancipation means that messages can be fed into the system remotely, from anywhere, as long as you have access to the software.

The advances in digital signage have given rise to so many new applications that schools considering investing in digital signage for the first time, or upgrading current systems are likely to have a host of questions. What can the software do? What can I upload? Can I play videos? Can a web-based system be really secure?

Industry views

School News called upon industry professionals to provide advice and reassurance on application, security, as well as installation and maintenance.

Rod McCormack of Sunquest Industries assured me that their systems are "secured and safe". "You would need five elements to access the software; the IP address of the server, user name and password of the controller



Images: Corporate Sign Industries



dimensions of the screen and the serial number of the system and the software", he advised.

Tim Goodsell from Corporate Sign Industries (CSI) gave me a crash course in the background of web-based or Cloud-based digital signage software.

Originally data was sent to digital signs via data cables and Bluetooth. After the several state and territory education departments deemed Bluetooth insufficiently secure, an alternative was required. After moving through Bluetooth, data cables, 3G, (and a stage where they provided a laptop for exclusive use with each sign), CSI moved to web-based software.

With web or Cloud-based software, you can log in to a website with username and password from anywhere in the world. "You can be on the way back from school camp and just send a message from the bus that you're running late, directly to the digital sign", Mr Goodsell suggested. "The added benefit of web-based software is that you don't overwrite each other's messages – it's like the difference between GoogleDocs and emailing word docs to each other", was Mr Goodsell's example, which would be particularly relevant if you were pursuing a high-change program for your digital signage.

"The other issue is that most education departments across Australia have disallowed the installation of software with outgoing 3G connections on any local computer or server within school networks. He added that "with web based software works totally independently to the school network, without the need for independent computers or to download software the school network, which eliminates any potential security threats to school network".

So how has the actual sign evolved?

Mr Goodsell says they have evolved considerably from the early changeable digital signs of the early 90s. "We were dealing with 16-20-millimetre pitch back then. Pitch measures the space between the lights, and the tighter the pitch, the better the resolution. That is, the better the image or text will look on the screen", he explained.

With an overall lowering of the cost of equipment, schools are generally choosing screens with a tighter pitch, according to Mr Goodsell.

"Now a six-millimetre pitch (6P) is growing in popularity for outside applications; he contextualised the difference. "With 16-20P you wouldn't be able to display an image clearly. With 6-10P, the swimming carnival announcement can be back-dropped, by an image". The added impact of an exhilarated goggled child breaking the surface of the water triumphantly on a 2 x 4 metre screen is palpable.



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Photo: Sunquest Industries

According to Tim Goodsell, P6-10
is the normal range for outdoor signs, "but a display located on a reception desk would suit a high resolution LCD screen".

Rod McCormack's said that it would depend on the location of the signage, and the positioning to determine whether P6 or P10 was more suitable for that distance reading. "We can supply both P6 and P10; it just depends on the most suitable viewing distance".

Other options include portable screens on wheels, facilitating resource-sharing at schools.

Mr McCormack likens the capacity of Sunquest's portable

Designers

screen option, (which comes in pitch ranging from P3 for indoor and P 5.9, outdoors use,) to "an iPhone the size of a door".

Roadside signs are subject to certain regulations regarding time of day they can be used, and 'light velocity' requirements. Signs installed on roads must not distract drivers "and all signs must be Building Act compliant, Mr McCormack cautioned.

There was consensus that engagement of a town planner or certifier was vital for navigation of this minefield. Each emphasised the trickiness of heritage listed buildings without the experience in managing compliance.

Educational applications

There's a convenience aspect to the use of digital signage in schools, in its facilitation of the topical concept of 'team teaching' and collaborative cross-curriculum. File-sharing is simple, and can be scheduled in a program of presentations, up to 12 months in advance.

Convenience aside, digital screens can educate. Marketing has enjoyed the effects of 'subliminal messages' for as long as it has existed, but accessing the unconscious mind for the purpose of education seems a noble pursuit indeed.

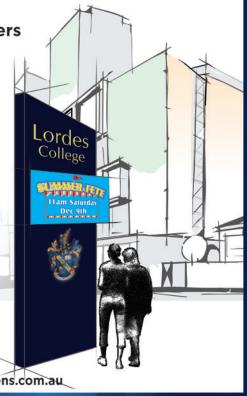
Tim Goodsell described how schools in New South Wales (NSW) are using their digital signage technology to proliferate their Positive Behaviour for Learning (PBL) messages.

According to the NSW education department website, "PBL is an evidence-based whole school process to improve learning outcomes for all students".

Schools are addressing aspects of 'Tier 1': universal prevention requirements', which involves preventing anti-social behaviour in the 80 to 90 percent of students who mostly behave.

One way to achieve this is to subliminally remind students of certain principles of pro-social behaviour, such as "in the playground we are respectful of others' bodies" or "at school we treat others with respect".

For pedagogic classroom application, the drudgery of rotelearning times tables springs to





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mind. Could a rotating digital drill that slips under the radar of times tables resistance reinforce this foundational mathematical skill? It seems likely.

Deciding the purpose of the screen helps determine equipment selection and placement. Mr Goodsell said the viewing angle could make or break the outcome. "Don't forget you are spending a significant amount of money, you want your audience to actually see the sign!".

He suggests you challenge yourself to define its purpose. "I don't mind selling you a sign, but I'd much prefer to solve a problem for you". He also pointed out "No-one picks up a day old newspaper, so update your message!"

Installation and maintenance – averting disaster

Assessing the location for possible hazards is important. From dialling before you dig, to a Polycarbonate protective facing for improved security in high crime areas, according to Mr McCormack, prudent planning will avert most calamities.

Tim Goodsell emphasised the importance of post-purchase commitment to a practice of constant monitoring. "Because it's on the web, we can monitor what's actually happening with the screens with all our signs. For example, we can monitor internal temperatures and general performance".

"It's peace of mind when you're

offering a substantial warranty anyway", he explained. "Knowing what's happening with them gives us the confidence that we won't run into major issues in year four of the warranty". There was consensus again on choosing quality over price point. 'The cheapest is rarely the best'. With engineer certified equipment and some clients 2000 kilometres away, Rod McCormack was adamant that their equipment "needs to be built to last".

'Read the fine print' they said. "Check the terms and conditioned of the warranty, is it parts only or is call-out and labour included?" Tim Goodsell recommended.

His final counsel, which is "probably the most important", was to "ask for a demonstration of the software, sometimes, just because it can do something, it doesn't mean it is easy to do".



Sunquest's "giant iPhone", the Sidewalk Salesman.

Both advised that going for the cheaper product can be false economy. Careful consideration of follow up customer service packages; road-testing software; and choosing equipment fit for purpose can all determine whether you have plain-sailing or a dud, parked outside your school until you replace or remove it.

By Suzy Barry, industry reporter



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Is your student accommodation AC a financial black hole?





How can you make significant split system AC power savings without affecting comfort?

Air conditioning (AC) remains by far the largest user of electricity in any student accommodation room. Industry studies show that AC costs can account for over 75 percent of the total in-room power bill, and 50 percent of that outlay is often wasted energy, either because rooms are empty, or the AC is running too hot or too cold.

The reality is that although most students consider themselves environmentally aware, when it comes to the air conditioning, they generally do not practise good energy-conservation behaviour themselves.

The invisibility of energy as a resource is its worst enemy. When people can't see something being whittled away, the level of concern for energy wastage plummets. Combine this with the fact that they are distracted by work or leisure, and you have extreme wastage issues.

This situation has created a need for accommodation managers to introduce simple but highly costeffective room automation and smart devices to manage usage.

There are various ways to optimise energy output on air conditioning for students and staff, reducing expenditure, and, in turn significantly improving your bottom line.

An ongoing problem

Does this sound familiar? Students walk into their room, put on the AC and turn the temperature down to the maximum available setting. Once the AC is on, it normally stays on – few will turn it off when they leave the room or go out.

Because most people mistakenly believe that a lower setpoint equates to faster cooling and cooler air coming out of the vents,



air conditioning is consistently set at much lower temperatures then necessary for reasonable comfort.

Indeed it has been said that thermal comfort is "90 percent mental and 10 percent physical". What you might not know is that by adjusting the room setpoint by a few degrees, you could save between five and ten percent of power costs for each degree.

How can you take back some measure of control, when the AC settings are managed by the room occupants themselves? There are new well established smart-products available specifically designed for solving these issues, and they can be quickly retrofitted without building works or in-wall wiring.

Universal energy saving smart remotes with placebo effect

Designed to replace any existing hand held remote control, these smart remotes can be programmed to restrict the range of temperatures available to the user. This prevents an air conditioner being set to uneconomic (very high or very low) temperatures. They are also tamperproof, so that owner temperature preferences are completely protected.

The latest models also have a 'placebo effect' feature. This is a unique function where the AC is always runs economically between preset limits, but it appears to AC users that the air conditioner remote is operating without any restriction.

Occupancy sensor controllers for split systems:

Designed to monitor human presence in a room, these units will automatically either 'turn off' split system air conditioning or set it to 'economy mode', when it is left running in an empty room. They have night settings to allow undisturbed sleep, and they are available with wireless door and window sensors, to prevent the AC running if doors and windows are left open for more than a very short time. With air conditioning being by far the most expensive single consumer of power in the education sector, and with energy prices increasing steadily, it makes sense to take these sensible, reliable and cost-effective steps to minimise wastage and optimise usage.

Remember: "The best possible way to combat power price increases is to control existing use as effectively as possible".

John Clifford is the managing director of Aircon Off, developers of a range of products that help schools optimise air conditioning usage to eliminate wastage, save money and conserve energy.

<section-header><section-header><text>









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Synthetic grass the answer to asbestos decontamination?



Manly West Public School after the Grassman installation

In 2012, the Manly West Public School parents became aware that their school oval was contaminated, after fragments of bonded asbestos were sighted on the oval where their children played on a daily basis.

Manly West Public School arranged for the NSW Department of Education to be notified, and the routine response of asbestos screening and removal was instigated. Asbestos was removed and the all clear was given. This was to occur on three separate occasions. A February 2015 article on *www.abc.net.au*, 'Asbestos in schools...' held that education minister, Adrian Piccoli had been

notified at the time by premier and local member Mike Baird.

Having already decided not to use the oval as it was, and faced with a growing concern about their sports ground, Manly West Public School's P&C decided to take matters into their own hands. Following a mammoth fundraising operation, they would later engage Grass Manufacturers Pty Ltd (Grassman) to design and construct a 2,700m2 multipurpose synthetic surface turf playing field to replace existing natural turf.

Grassman's Colin Scotts,

expressed deep concern over what he deems "a danger to the health of our kids".

According to Mr Scotts, the NSW government inspections repeatedly found asbestos; the inspections having been triggered by a sighting from a student, parent or teacher.



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 ABC reporters wrote in 2015 that Mr Scotts "was highly critical of the method often used to clear playgrounds, known as 'chicken picking'".

Chicken picking refers to the process of a line of people in protective clothing double bagging any fragments they find, which sounds like the admittedly low-tech 'emu parade' whole school rubbish collection method from my school days. "They're just skimming the surface and that is a temporary fix," Mr Scotts told the *ABC*, also in 2015.

Mr Scotts told *School News* that after these 'chicken picking'

exercises, "they would cover it up with a bit of dirt, tell everyone it's all good, and give it all clear".

Peter Tighe, the chief executive of the Commonwealth Asbestos Safety and Eradication Agency told *ABC* that he agreed. "To an extent it's tokenism. I mean it's a band-aid treatment for something which might be a greater problem," Mr Tighe was quotes as saying in the same 2015 article.

Colin Scotts remains adamant that "it is not all good" and that the state of many school fields is contributing to the danger. "The sheer traffic on the school sports grounds these days means that they are wearing the grass out", further exposing the asbestos.

Even a cursory Google search reveals that Mr Scotts is not alone in his concern, nor is Manly West alone in their situation. In Queensland, Holland Park State School has had two separate asbestos incidents in 2016, in September 2013, Brisbane's Graceville State School was required to close parts of the oval, due to the discovery of asbestos. Other asbestos closure reports included St Philip's Christian College in Newcastle, and Willetton Senior High School in Western Australia.

In July 2016, parents at Gooseberry Hill Primary School were reported by Nine News to be "outraged that their children have allegedly been playing with asbestos fragments and grinding them up to make 'fairy dust' during their lunchbreaks".

Mr Scotts explained that asbestos came to be under the fields through recycling measures. Unfortunately, at the time that the filler was being repurposed, nobody had any indication of the dangers of asbestos.

By Suzy Barry, industry reporter



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Shaping the future: Innovative Learning Environments



Innovative library space at St Hilda's School, QLD. Photo: Raeco

More than 6000 schools across Australia and New Zealand are taking part in the Innovative Learning Environments and Teacher Change Project (ILETC), a \$2 million Australian Research Council Linkage project that will run for the next four years.

Innovative Learning Environment (ILE) is not just a buzz term, it's a subject of considerable research, and a current area of particular enquiry for University of Melbourne researchers.

The new project follows on from another three-year-long study: Evaluation of 21st Century Learning Environments (E21LE), which was implemented by the Melbourne Graduate School of Education and the University of Melbourne's Faculty of Architecture, Building and Planning, through the Learning Environments and Applied Research Network (LEaRN).

Associate Professor Wesley Imms is the lead-researcher for both studies, and his long-held interest in learning space innovation dates back to a very special voyage, revealed in an article titled 'Changing the shape of teaching', published in *Pursuit* magazine.

The article introduces a 1960s early-career teacher who, after having absorbed some "edgy educational thinking" in the UK, returned to a Tasmanian primary school (with a liberal-minded principal) raring to implement some fresh perspectives. "50 years ago Wesley Imms' classroom was a ship".

On the first day of school, this teacher had her students throwing streamers out the windows, as their parents waved them off for their maiden voyage on "SS Discovery". 'Quartermaster Imms' and his shipmates had a year to remember on that ship. According to the article, Professor Imms' memories "sparked his quest for learning spaces to fit the needs of 21st century schoolkids".

Grants for extensive research seem compelling evidence that something has shifted towards the development of ILEs. A strong realisation of the need for teachers to change the way they interact with the space is underpinning the ILETC project, for which development of strategies to assist teachers in harnessing the spaces is also an objective. So pedagogy matters; a teacher will need to be open to new ways of teaching in the new environment. The message is clear though, if they can learn new tricks, outcomes will follow.

What else matters? The research is clocking up some clear directives about pedagogy, but the how-to of supporting that pedagogical process remains obscured to many. How do we set it up? What elements are vital? Can we do it with smaller spaces?

Industry Views

To answer these questions, we've called upon some industry voices to shed some light on the current trends, principles of designing an ILEs, as well as trends, possibilities and limitations.

Empirical data suggests that lectern and audience style lesson formats should be used sparingly. To researcher Wesley Imms, as reported by *Pursuit*, an ILE is 'not a classroom, it's a learning environment'. Although we know that people retain less from simply being talked at, he remains "an advocate of lecture theatres", due to their efficiency with big groups – but you can't just stay there.

He emphasised that you need flexibility to move on to such spaces as "private cubby holes" for independent research, or group-work spaces for collaboration.

Trevor McCann from Raeco Library and Education Solutions agreed, saying "the contemporary innovative learning space is a place for interaction, engagement, collaboration, and transiency both within and between spaces". The message for schools looking to update their learning spaces to ILE format? It needs to be flexible.

"Activities within ILEs are transforming from conventional pieces such as desks and chairs in rows and formation, to landscapes of furniture to reflect changing pedagogy" Mr McCann expanded.



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Photo: Abax Kingfisher

Educational pioneers have been advocating open plan classes, and a move away from lectern style teaching, towards learner collaboration for decades. Damian Moore from Abax Kingfisher prompted a recollection of Maria Montessori, now—only 70 years later—joined in her assertion that there is 'an almost mathematical relationship between a child's surroundings, activity and learning development'.

To support the 'surrounding' part of this equation, Mr Moore recommended "flexibility in design, and furniture that can be rapidly reconfigured to support different learning activities within the same space". "Furniture designed for 'activity based learning' facilitates different learning styles and teaching methods within a single learning space" Mr Moore elaborated. "They can actually occur simultaneously, or consecutively, with rapid reconfiguration back to whole of class or lecture style activities".

Mr Moore had an interesting perspective on the process of that reconfiguration that included benefits for creating a sense of agency for students. "It seems when children feel ownership of their classroom through regular involvement in reconfiguration, they have been found to absorb, memorize and recall information better". Both informants agreed that ILE-friendly furniture must be rapidly and easily reconfigured, as well as facilitating new ways of learning.

A library provides an excellent case study for how educational needs have changed. Trevor McCann commented that "library landscapes are transforming the user experience". Libraries have progressed from those quiet space with librarians saying "shush", he reflected, "where food and drinks were completely banned, and '*No This*' and '*No That*' signs warned the user of extreme disciplinary consequences for noncompliance".

Libraries are now full of 'zones' such as quiet reading, learning, collaboration, discussion, sanctuaries to 'escape', breakout places to play and plan, and areas of navigation where digital resources are accessible, Mr McCann painted the next generation library; an innovated learning environment.

"The concept of 'maker spaces' are evolving either adjacent to, or within library spaces" he said. "Selecting shelving and furniture that is mobile and flexible will complement interplay and flexibility between zones".

Possibly indicating acceptance of the changing face of learning, Damian Moore said interest has waxed in "redesigned and innovative libraries, across primary, secondary, and tertiary education". Libraries now have a multimedia focus and require a wide range of innovative solutions to create differentiated areas. "A library is a space for fun, for thoroughfare, a place to explore and discover, a place to be comfortable, and a place where a sense of 'being there' is promoted", he sketched. Furniture for the next generation library is more than shelves, desks and chairs. "It's a combination of benches, stools, soft seating, with cove shaped shelf collections or colosseums for active learning and collaboration" Trevor McCann ran off a list of common fixtures, and added that "with school libraries becoming a central area for engagement, careful planning and consultation is advised, to ensure that libraries reflect the key objectives of the school's master plan."

Libraries are like knowledgeseeker-collectives, from the fact-thirsty primary school kids at lunchtime, to (educational of course) multimedia devouring teenagers in free periods, and it's no secret that teenagers have been meeting in libraries for decades.

Principals consulted said that with innovative design, the library is able to service a more progressive approach to teaching. Teachers can now reserve library space, re-configured for purpose, in a space suitable for team-teaching. People have always wanted to come together and 'commune', perhaps that's why the librarians were always saying "shhh".

By Suzy Barry, industry reporter



Professor Imms' teacher had her students throwing streamers out the windows, as their parents waved them off for their maiden voyage on "SS Discovery".



Creative Learning Spaces

Maria Montessori was right about there being an almost mathematical relationship between a child's surroundings, activity and learning development, and rightly or wrongly, a school is judged by its NAPLAN results. **Innovative learning environments** have been found by Deakin University to result in sustained improvement in NAPLAN over three years.

A study from the National Training Laboratories shows that smarter **classroom design equals more active learning and greater attention**. But we're not just talking about computers. **Classroom layouts affect attention**. An active learning classroom where students can easily move and rearrange their seating enables them to be more focused and stay attentive. Classrooms configured for multiple learning styles, easy access to content and mobile furniture offer even more flexibility and collaborative options.

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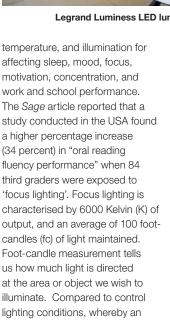
LED lighting for optimum learning environments

Most people have a rudimentary understanding of the effect of lighting on the human condition. We are familiar with the circadian rhythm. We have all felt sympathy for those in the far north of Scandinavia with their winters of endless night, but the concept goes far deeper than just light and dark, daylight and the night sky.

Parents of sleepless infants may have been advised that blue light is calming, while warm red lights may excite the precious offspring you are so desperate to hypnotise into restful bliss, but what of calming light at school? What about concentration? Can the brightness and hue really make that much difference? Studies have shown that they can, and experts are nodding in agreement. Lighting does matter, and it really should give pause to any school administration looking to upgrade lighting, or even analysing the learning environments for suitability for purpose.

A paper published in science journal Sage, titled 'Illuminating the effects of dynamic lighting on student learning', stated in its abstract that "light quality varies substantially in nature and in controlled environments, leading to questions of which artificial light characteristics facilitate maximum learning".

Recent research has examined lighting variables of colour





With sensors, lights will switch off when human presence is not detected. Photo: Legrand



Legrand Luminess LED luminaires provide even light distribution, avoiding glare and shadows

increase of just 17 percent was recorded, the difference was substantial.

A Korean study, conducted by Kyungah Choi and Hyeon-Jeong Suk, the results of which were published in specialist medical journal, Optics Express, further explored the effects of dynamic lighting systems for the learning environment.

Standard fluorescent lights were used to light one half of a group of 54 year-four students, while the other half were placed in a room with LED lights that could be tuned to CCTs of 3500 K (which is a "warm" yellowish white), 5000 K (neutral), and 6500 K (a "cool," bluish white that mimics natural daylight).

"The preliminary study and the field experiment fully supported a positive effect of 6500 K lighting on academic performance and 3500 K lighting on encouraging recess activities", reported author Kyungah Choi in The Huffington Post.

In a fascinating 1995 study conducted by E.M. Grangaard, and reported in Color and light effects on learning, 11 six-year-olds were measured for on and off task behaviour, and blood pressure

fluctuations. When moved from the fluorescent lit classroom to one with blue walls and fullspectrum lighting, researchers recorded a one percent reduction in blood pressure, and a "dramatic decrease" (22 percent) in off-task behaviours, under the experimental lighting conditions.

Perhaps the most remarkable and extensive study was conducted in Hamburg in Germany. The study involved 166 children, aged between eight and 16, and 18 teachers. Dynamic lighting was installed in a test group. Teachers were able to select from four different settings; normal (for regular class activities); energy (to invigorate for higher activity requirements); focus (to aid concentration); and calm (to relax students). LED lighting was utilised, as it is well suited to environments that require such flexibility.

The results tabled a significant improvement in performance, including a 45 percent reduction in errors, (interpreted as improved concentration), and 76 percent reduction in hyperactivity, when using the 'calm' setting during maths. The study was conducted by Professor Dr. Michael Schulte-Markwort, at the University Medical Centre Hamburg-Eppendorf.

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Industry viewpoints

School News reached out to three supplier experts for their thoughts on the matter.

Lighting in schools can be achieved through a combination of elements, not just the actual lights. Mahmoud Kebbi from LeGrand Australia explained that lighting providers will need to conduct a thorough assessment of your school prior to making recommendations.

For example, the placement of windows will determine how much natural light is available, therefore minimising the artificial light required. "It involves dimming the light fixtures to ensure the correct light level is achieved, this way we have more natural daylight than artificial light".

Actual daylight is not the only factor; the degree of 'reflectance' from internal surfaces also contribute. "With reflectances, I am referring to the colour and finish of the walls, ceiling and carpet" Mr Kebbi elaborated.

These factors are vital to the creation of a positive learning environment.

According to Mr Kebbi, lighting can also influence our moods and learning capacity. "Trying to learn in a class room that is poorly lit can result in frustration and stress.

Mark Robinson of Verbatim concurred. "Creating an environment that replicates



Using a combination of LED tubes, globes and exterior floodlights, Westall Primary has improved lighting quality in the school, and saved 65 percent on their lighting energy consumption. Photo: Shine On

daylight improves both student and teacher ability to concentrate, especially when used for more than a few hours".

The message is crystal clear; lighting matters, so with all of these factors, what should school management teams be looking for in a lighting system provider? Stefan Manolidis of Shine On Lighting said it's vital to "ask the right questions".

The success or failure can depend on the quality of the equipment. "You need to ask to see the data sheets, what's the lifetime of the chip? What about the driver that runs the luminaire? You need to be informed about the depreciation of the product."

What about the cost?

Mark Robinson said, "swapping from fluorescent tubes to LED will improve the lighting in and around the classroom while lowering the amount of energy usage". Mr Robinson put a figure of 50 percent on the reduction in energy required for lighting, after the switch.

All suppliers I spoke with agreed that the initial cost is slightly higher for LEDs.



Star of the Sea College school library retrofitted by Shine On

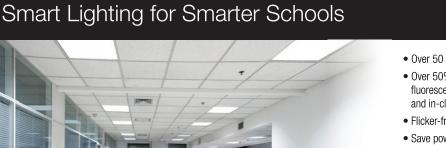
They also agreed that when considered in the context of the considerable savings; reduction in maintenance, reduction in electricity costs, it could table an average ROI of three years. Mark Robinson added that "LED prices have come down considerably in the last 12 months and with increasing costs of energy the payback period is sure to decrease".

Stefan Manolidis suggests you ask, "for every Watt you put in to that fixture, how much light are you going to get out of it?", though price is not the starting point in Shine On's process. "We look at best functional outcome first".

Defining the function of the space

The starting point for all experts was educational purpose. What is the area to be used for?

In the case of outdoor lighting, Mahmoud Kebbi recommended LED outdoor lighting with motion sensors is the ideal solution for reducing energy consumption.



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Photo: Shine On

Other applications that can benefit from the cost-saving efficiency of LED, in conjunction with sensors, include floodlighting on the sports fields, bulkheads on the building exterior for general security and carpark lighting, for those candle burning lesson planners.

"Basic sensors with time delay in classrooms is a simple and effective way to save energy and reduce CO2 emissions". According to Mr Kebbi, the installation is simple with savings "that far outweigh the cost of the sensor".

For indoor spaces, the focus is still on the efficiency of lighting control but would begin with the question: what activities are performed in the area? This is where the concept of dynamic lighting mentioned earlier is salient. The benefits of a dynamic LED system are exemplified by the ability of the educators at the Hamburg test school to modulate lighting for their students, hence creating the ideal ambience for tasks ranging from high-activity based learning to quiet time.

The next important question is: 'who is using the space?' All providers agreed that the purpose of the space is vital, and intrinsic to this are the intended users of the educational facility. Do the users have special needs? Are they vision impaired? How old are they?

The variability of end-user requirements was made apparent by an example in an article titled 'Normal vision development in babies and children' published by the American Academy of Ophthalmology in 2014. The article stated that "focus, tracking, depth perception, and other aspects of vision continue to develop throughout early and middle childhood" and that "convergence, the ability of both eyes to focus on an object simultaneously, becomes more fully developed by about age seven".

"While these facilities are developing, younger children require more direct light to increase the depth view" Mahmoud Kebbi contextualised.

With all this to consider, and several experts from which to draw, it seemed logical to collate a summary of advice based on their views. Collecting a list of the biggest mistakes suppliers see schools making with their lighting resulted in plenty of overlap.

Here is the summary of how to avoid the pitfalls:

- Switch off lighting in an unoccupied rooms or even better install sensors and timers to do it for you.
- Carefully consider what you have already. Utilise natural light and dim lighting fixtures accordingly.
- Understand the current market. Stefan Manolidis advised that educating yourself about the products is paramount.
 "people want to believe that the cheaper product is as good; it's about understanding good quality from bad ones".
- Consider the effects of glare on students; ensure light fixtures comply with glare rating as stated with AS/NZS 1680 (indoor lighting standard for Australia and New Zealand).
- Work with a company who is established and prepared to back all performance claims with warranty periods.
- Is your provider willing to put you in contact with a school they have provided with a LED installation? Speaking to 'real people' at schools who have implemented the lighting solutions can be invaluable. Viewing the installation and actually seeing the lighting in action can iron out questions you might never have thought to ask.

By Suzy Barry, industry reporter

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