

SchoolNews

The essential industry guide

Issue 21 | Term 3, 2021

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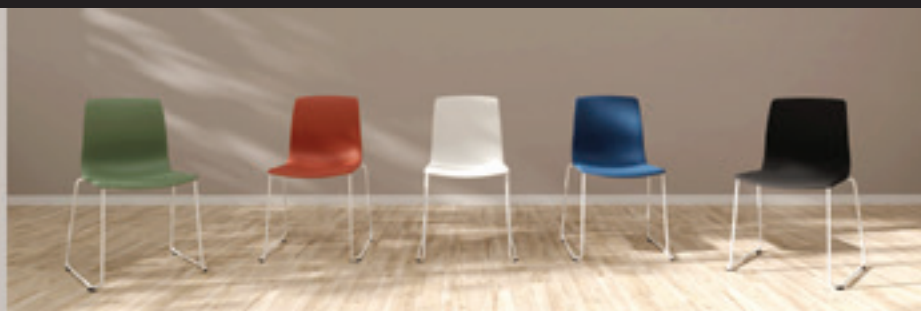


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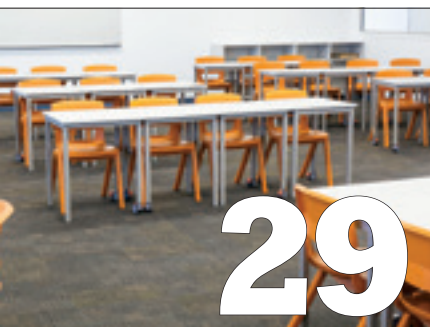
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Delta strain sweeps schools

As we go to print this issue, Queensland is in lockdown following a dangerous outbreak of the Delta strain, which began with a Brisbane school transmission event.

With more than half of positive cases from the latest QLD outbreak occurring in people under the age of 19, it's sparked demand for teachers to be immediately vaccinated, and for kids to wear masks *and* get vaccinated where health bodies recommend they can be. Speaking for myself, I was deemed a casual contact after passing through a delta exposure site following a class I was teaching. Luckily for me, I tested negative and was able to get my second dose of the Pfizer vaccine later that week, during lockdown. Most of my students are in quarantine, some of them



Rosie Clarke,
Editor, *SchoolNews*
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are deemed close contacts and are awaiting test results, none of us are too keen to get back to campus while the risk of another outbreak is so high but we all have Zoom fatigue after the last 18 months, so aren't too thrilled with the prospect of indefinite online classes! I'm sure you and your students feel the same.

All we can do is commiserate with one another and hope for

the best: It's a frustrating, trying time. Let's hope the Federal Government gets its act together so everybody's vaccinated, and we can finally move on.

In the meantime, write in and let us know what you and your amazing school communities are doing around the country to keep students engaged in their online learning—we would love to feature some stories of teachers and schools overcoming such challenges.

Has anyone at your school tested positive? Check out Pete Burdon's useful article on page 32, where he outlines what media strategy you should have in place.

Elsewhere this issue, industry reporter Sheetal Singh provides us with an important update on proposed changes to the Australian Curriculum (page 10). On page 8, she also interviews the wonderful and impressive Jennifer Boyall, who has been

awarded the prestigious Harvard Principal's Scholarship for the incredible leadership she has shown at Katoomba High School.

Also this issue, we have a range of features showcasing different solutions, technologies, and product options available to schools. Beginning with the fascinating case study of Elizabeth Grove Primary School's bin audit on page 14, and a look at tools that can make classrooms more inclusive on page 16. Check out all things classroom acoustics on page 24, and our comprehensive look at seating options on page 29. Need to give your staff a pep talk? Flick to page 33 for some tips and advice from teacher wellbeing expert, Daniela Falecki.

If you want to showcase the work of your teachers and students, write in and let us know!

Enjoy this issue of *School News* and stay safe! ■

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Blue Mountains principal awarded Harvard scholarship

By Sheetal Singh
Industry Reporter

Blue Mountains Public School Principal, who changed the school's reputation locally, has been awarded the prestigious Harvard Principal's Scholarship.

Katoomba High Principal Jennifer Boyall is one of the three Australian public-school principals to receive the scholarship.

The grant, valued at US\$16,000, provides principals worldwide to undertake a short teaching course at Harvard Graduate School of Education.

Under the program, Ms Boyall, with other awardees from all over the world, will undergo professional training designed to reinforce the skills of these selected educational experts.

Ms Boyall, who feels "very humbled" and "extremely excited" to have received the award, spoke to School News about her leadership style and the school's journey.

"It is a wonderful recognition for the journey of the school," she said.

"Although I am the one receiving the award, I believe it is recognition of the great work the school community has achieved together."

"It is a story of the amazing work that can occur when there is a genuine partnership between a school and its community. With a shared vision, great things can be accomplished".

Since joining as the principal at Katoomba High in 2013, Ms Boyall has worked towards changing the community's perception of the school.

The public high school's enrolment has increased by about 90 percent, with 970 students enrolled in 2021 compared to 520 in 2013.

The modest principal contributes this achievement to all her staff and teachers. She says the school has a non-hierarchical leadership style which makes the school "achieve great things".

"At Katoomba High, everyone is important, and everyone is heard. We focus on staff and students alike," she said.

Leadership Style at Katoomba High

The distributive leadership style at Katoomba High allows the teachers, including the principal, to be accountable to the students, parents, and the community.

"Our school has a beautiful story. You hear of examples of distributive leadership, and this is an example that shows that when it is enacted, amazing things can happen," Ms Boyall said.

The public high school's enrolment has increased by about 90 percent, with 970 students enrolled in 2021 compared to 520 in 2013.

Ms Boyall says she remains very visible in the school and stresses that her door is always open for students and staff.

"I have a strong open-door policy. The community is always welcome to come in and raise issues or concerns. It is important to me that students and parents feel heard and valued," Ms Boyall said.

"Students can make an appointment with me or just knock on my door during their lunch break to come and see me and talk about anything that's bothering them."

"I do my bit, so the students know they have a voice, and there is a strong focus in this school for each student to have a voice."

Ms Boyall ensures she is very accessible as a principal, a teacher, and a listener.

She says everyone has a perspective about "the good and the bad" of the school.

"Anyone can come and talk honestly to me about how they think the school is going. I then take the time to celebrate and acknowledge the school's strengths, as well as seeking creative solutions to any problems," Ms Boyall said.

"I welcome constructive criticism and try not to be defensive.

"I think it is imperative to genuinely hear and validate people's opinions and explore the creative ways in which we can move forward."

Ms Boyall has a mantra that she tells her teachers- "if the students don't know that you care, they are not gonna be interested in what you are teaching."

Katoomba High, under Principal Boyall's leadership, focuses on student well-being and respect for each student. ►



Jennifer Boyall

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I listen, and I listen in a way that it can all be converted to a greater good. My strength is to help people, regardless of who they are, to the school, and let them know that they matter.

”



◀ However, she adds that the school does have some bad days where everyone collectively comes together to keep the school standing.

“There are over 900 students; there are bound to be bad days where the situation is not ideal. But we are never afraid or shy away from the physical conversation on difficult topics.”

As a registered psychologist and a teacher herself, Ms Boyall gives special attention to understanding people and forming a connection with her staff, students, and community.

She believes her accessibility also works because of the location of her office. Sitting close to the entrance, she can meet the parents and other guests as they come in.

“The idea is to make the school visible to the community, and that happens when the principal interacts with the people,” Ms Boyall said.

“My office is right next to the gate from where people come in. I make sure to greet them and talk to them when they do.”

But her most significant strength is listening.



Jennifer Boyall with her school leaders

“I listen, and I listen in a way that it can all be converted to a greater good. My strength is to help people, regardless of who they are, to the school, and let them know that they matter. This has been very significant in changing the image of the school.”

Journey of the School

The stark increase in the school’s enrolment and now a Harvard Scholarship begs the question, how did this happen?

The proud principal said the journey of the school and its story is beautiful. Beaming with

pride, she said the school had achieved so many things in the past few years because of the abled teachers that the school has and the community’s support.

“When I joined the school about 70 students were enrolling into Year 7. This year we have over 200 Year 7 students,” she said.

“There is no new housing development in my area. The increase in enrolments has come from the change in community perception of the school. Katoomba High is now the school of choice for 90 percent of the students in the local area.”

“It is the journey of the school, and that is why this scholarship is really a wonderful acknowledgement of the dedication of all the staff and the wider school community.”

Ms Boyall said the school wasn’t popular initially: “I wanted to build greater trust between the school and the community.

“For whatever reason, people appeared to be concerned that their children wouldn’t be looked after. That is why student wellbeing became an important focus of the school.”

When she joined the school, she



Katoomba High senior executive team

employed people who aligned with her vision for the school. Her vision is to build trust in the community and value the students' well-being in the school.

"I wanted the vision of the school to be shared and that's why distributing leadership across the school is central to its culture.

"I promote that well-being and learning are connected and go together."

Apart from the staff, she contributes the school's success to her area's public education system and the local school.

"The local public schools, we all decided we will work together. We honoured the boundaries, and this was a change," Ms Boyall said.

"There was one school that had very high numbers as they were taking a lot of students from out of area."

"This led to other principals in neighbouring public schools, encouraging new parents to come and meet with me if their child resided in my area."

"This was a fantastic support, as it allowed me to share the new vision of the school."



At the beginning of each year, the school commences with a smoking ceremony as students walk through the gates, to honour the traditional Aboriginal owners of the land upon which the school is built.

She said she is grateful for the support of her colleagues and for sending people her way.

Ms Boyall also bestows the changing perception of the school to the community itself. She never advertised the school and relied solely on 'word of mouth'.

"Ours is a very vocal community and I have seen a ripple effect in the community," she said. "Once they met me, I was able to share the new vision of the school, and that appears to have changed the conversation in the community."

"The school gained back its reputation in the community by people just sharing their positive experiences of the school."

She believes each child has different capabilities, and she aims to value every child.

In recognition of her efforts, leadership style and passion for the school, Ms Boyall is one of the three people receiving the prestigious scholarship.

Once the COVID restrictions ease, she will travel to the United States with her fellow awardees.

She says she is "thrilled" to contribute to what she believes would be a conference.

"I think we will travel sometime in July or August next year," she said.

"I'm still unsure of all the details but I think it will be a conference."

She told us that she wants to share the beautiful story of her school at the conference and talk about the role of the community in the school's journey.

"I am not sure if I will get a chance to contribute but I also want to renew the vision of the educators around the world and tell them about my learning," she said.

"I want to share the message about authentic leadership and genuine partnership with the community."

"I am very excited about collegiality and learning and sharing ideas with such experienced educators from around the world."

Ms Boyall received the honour with Damien Keel from Yarrawonga College in Victoria and Catherine O'Dea from Christies Beach Primary School in South Australia. ■

Curriculum Update:

Has Anything Changed?

By Sheetal Singh
Industry Reporter

On February 18, the teachusconsent.com petition stirred up the education system and pointed out a glaringly misogynistic culture in Australian schools.

With over 42,000 signatures and more than 6500 testimonies, the petition showed how deep rape culture is embedded in some of our nation's private schools.

Recent analysis of the petition by the Teach Us Consent group highlights stories involving male students of Sydney's prestigious private schools, including Cranbrook and Scots College. Pioneer of the petition and consent advocate, Chanel Contos, said she had meetings with schools after the petition came out.

"I have had initial contacts with Cranbrook and Scots and I had follow-up meetings with Cranbrook," she said.

News.com reported that Scots College Principal Ian Lambert addressed the parents and teachers in an email. "I am deeply saddened that these young women have experienced such trauma and have had to resort to this public call for help," Dr Lambert wrote in the email.

Recent Changes

The large amount of anecdotal evidence from the petition forced a review of the Australian curriculum focused on consent.

A Victorian policy updated on April 16 states that sexuality education is now mandatory in all government and catholic schools from Foundation to Year 12.

The policy also mentions that schools are no longer required to seek parental permission to teach sexuality education.

"Comprehensive sexuality education is most effective when it has a whole-school learning approach and is underpinned by a strong research evidence base," the policy reads.

Ms Contos has also welcomed the recent changes.

"The VIC government made consent education mandatory which is a big step, and they're

working on improving their sexuality education and adding new modules," she said.

Mooroolbark resident and mother to two boys said she is happy with the policy but can also understand why it would not sit well with other parents.

"Some of my close friends, who are parents, say they are okay with consent education as long as it doesn't involve sexual education at such a young age," she said.

"I'm okay with it because they need to know this at some point."

The Federal Government also initiated the *Respect Matter* Program in April, while some state governments took necessary steps.

The Victorian Government has initiated talks for an online informal reporting platform, which allows for

victim's anonymity while reporting a crime.

Since the petition, the New South Wales government has launched Operation Vest, allowing victims to report their assault without necessarily starting a criminal proceeding.

Respect Matters and The Good Society

In response to calls for action, the federal government launched the *Respect Matters* Program for primary and secondary school students across public schools in Australia to teach them about consent and relationships.

The schools will have over 350 videos, digital stories, and other materials free for teachers, students and parents through 'The Good Society' website as a part of the program.

The website provides a model for high school teachers to teach about healthy relationships and mutual respect.

In a press release, Minister for Education and Youth Alan Tudge said education was crucial in building and maintaining respectful relationships from a young age.

"The most important people in teaching kids about respect and relationships are parents, but schools can also play a vital role," Minister Tudge said.

The large amount of anecdotal evidence from the petition forced a review of the Australian curriculum focused on consent.



"These materials will provide additional support to better educate young Australians on these issues and have been designed to complement programs already being offered by states and territories."

The Australian Government has invested \$7.8 million in the *Respect Matters* program to support and promote positive attitudes, behaviours and equality in schools to help prevent domestic, family, and sexual violence.

In a press statement, Minister for Women's Safety Anne Ruston said early intervention and education were key to achieving our future goal without domestic violence.

"School years are crucial in a child's development, and we want to guarantee that whether it be at home, at school or even playing weekend sport, that kids and their parents have been informed about what is respectful behaviour and what is not," Minister Ruston said.

Melbourne's Oakleigh Grammar School Principal Mark Robertson welcomes the *Respect Matters* Program. He told *School News* "the school already has the core elements of consent education present in its teaching."

"The program provides additional resources from which our staff can draw upon to further the teaching," Principal Robertson said.

"Ours is a Christian Orthodox school, so the consent is already present. For Junior school, we teach them how to identify feelings. In middle school, we teach our students about online safety and in senior school, we teach students about consent, relationships and mutual respect."

Principal Robertson said consent education is taught to students as a part of their physical education subject and part of the *Pastoral Care Plan*.

He said he was pleased with the round table discussions at the school after the petition came to light.

"Most students come to Oakleigh Grammar at an early stage so it's like an extended family. We don't tend to have issues like the other schools had and I was very happy to hear this," Mr Robertson said.

Informal Reporting

In April, Ms Contos said she met with the Victorian Government to discuss an online platform for informal reporting.

Unlike the rest of the nation, Victoria still does not have informal reporting options. Informal reporting is separate from making an official complaint or taking matters to court.

As a part of Alternative Reporting Options (ARO), informal reporting allows victims to let the authorities know about a potential perpetrator while remaining anonymous.

Ms Contos said it is a great way to hold perpetrators accountable without going to court.

"Court processes are scary especially to a teenager," Ms Contos said. "Informal reporting lets you do it in the comfort of your home and that too online. Walking up to a police station is shocking and daunting for a teenager."

Ms Contos believes it is a crucial step, especially for women who wish to report their assault later.

"It's always not possible for a victim, who has just been through trauma, to go in front of a law enforcement officer and just file a complaint," she said.

"Sometimes it takes years to recover and till then, it's too late to report.

"Some women come up with sexual assault reports when they see someone that assaulted them got into power and people ask why are you coming now, you'll ruin his career."

She said it is not easy for victims to come forward

against someone powerful, but it is also unfair that the perpetrator rises through ranks.

"It was because of the historical backlog that didn't allow her to report. In these instances, informal reporting will help."

Ms Contos believes informal reporting will also help against victim-blaming.

She said the platform would pick against repeat offenders, which will reduce victim-blaming: "You know the victim isn't lying when you can see the track record of repeat offenders on the platform."

The online platform can also be used by individuals who know personnel practising inappropriate behaviour without disclosing their identity.

The New South Wales Government has also taken further necessary steps as a response to the petition.

Operation Vest

Soon after the petition was launched in February, Ms Contos said she'd been working on *Operation Vest* in collaboration with Detective Superintendent Stacey Maloney and consent expert Joy Townsend.

The operation saw an unprecedented 61 percent increase in reports of sexual assault.

"The number was unprecedented and amplified to Police and Politicians how unreported this problem truly is," she said

Operation Vest aims to create an empowering environment for victims of sexual assault and normalise speaking about and reporting it.

"The goal is to provide closure to many victims, and it can be used to support future victims who choose to come forward in cases where the perpetrator is a repeat offender," the Teach Us Consent team said in their Instagram post.

"*Operation Vest* reports will be used as a call for educational, cultural and structural reforms in our society.

"It will also be used to emphasise the need for a Sexual Violence Policy to be implemented in the NSW police force, and for funding to go into this software for it to be optimise and rolled out Australia-wide."

The operation will use the Sexual Assault Reporting Option (SARO).

SARO is an online form that individuals complete if they have decided not to make a formal complaint. The form does not initiate a criminal investigation.

Filling the SARO questionnaire, anonymous individuals allow the NSW government to collect data on repeat offenders.

The Operation simply records data to be used by the Child Abuse and Sex Crimes Squad to gather information.

No criminal investigations are initiated unless the victim later chooses to report to the police. Alternatively, the data is also utilised if the perpetrator comes up in multiple reports or is being investigated in sexual assault cases. SARO gives victims options outside of court proceedings, empowering them to record their accounts and potentially support other victims.

Ms Contos said the goal is to emphasise the need for structural reform in our society. "My hope is that this will normalise reporting sexual assault and give support and validation to those who formally report in the future," she said.

"Victims deserve to be heard. As it is done online, you can gain this closure without the potentially triggering experience of going to a police station to report a historical case."

Ms Contos stresses it is never too late in submitting a SARO. ■



EXCLUSIVE:

Aussie high schools contribute to global vaccine research

Ground-breaking five-year research project, the 'B Part of It Study' has concluded thanks to 237 South Australian schools!

School News spoke exclusively with lead investigator and Professor at the University of Adelaide, Helen Marshall, who could not speak more highly of both the schools and the students who got involved and the results of the study.

The research project has become the largest meningococcal B vaccine herd immunity study in the world, vaccinating almost 35,000 South Australian high school students against meningococcal B throughout 2017 and 2018.

Professor Marshall informed us: "The aim of the study was to assess whether Meningococcal B vaccine can protect not only against meningococcal disease but also against carriage of the meningococcus bacteria. We recruited adolescents and young people through schools because they have high rates of carriage of the meningococcus bacteria.

"The meningococcus bacteria lives at back of the throat and is shared via coughing, kissing and also linked to smoking – that's why this age group is particularly at risk. The study offered student participation for Years 10, 11, and 12 because adolescents have the highest rates of carriage."

Unique study presents vital findings

"This is the first time that I'm aware of where schools have been randomised on such a large scale to either receiving the vaccine in 2017 or receiving it in 2018, meaning some didn't receive the vaccine in the first year of the study," revealed Professor Marshall. "So, the effects of the vaccine could



University of Adelaide Professor Helen Marshall with her students.

Largest meningococcal B herd immunity study in the world rallies 237 SA schools



be compared in vaccinated students versus unvaccinated students. I should note that all non-vaccinated students were offered the vaccine at the end of the study.

"We found a significant reduction in meningococcal disease cases, but we didn't see any effect on carriage. This means that the vaccine is unlikely to prevent transmission and proves how important it is to vaccinate those at high risk of catching the disease."

Rollled out in stages across the state, 237 schools participated and all Year 10, 11 and 12 students in 2017 were given the opportunity to participate and receive the meningococcal B vaccine (Bexsero®) for free. Each registered school was visited by immunisation nurses across the two years. At their school visit, students received throat swabs, as well as two vaccinations, to provide protection against the potentially

deadly meningococcal B disease. Students and staff alike were enthusiastic about B-ing part of it, and the level of community involvement is really what made the study such a success.

Professor Marshall added: "For the world, the study has shown how important it is to identify highest risk population and vaccinate them; under 5s and 15-to-20-year-olds should be vaccinated to prevent disease.

"We approached all schools in South Australia and got a fantastic 90 percent involvement – so I want to say a big thank you to all involved! We are very grateful for the support from all the immunisation providers who ran the programmes inside schools. We also received very strong support from executive leads right across the three main education sectors in SA. They helped communicate the importance of the study to all participants and encouraged schools to get on board.

We are also thankful for the enthusiastic support from principals and school nurses.

"The study was very robust and definitive because it was undertaken so well, and the results have been published in the *New England Journal of Medicine*, which is the highest ranked journal in medicine and a well-respected journal. This is a testament to the dedication of all involved – everyone gave 100 percent attention to detail and to the protocols that had to be followed.

Most importantly, huge thank you to the students, who were incredible, we had very high return rates for all their appointments and this contribution really made the study such a marvellous success.

"It was such a large study – almost 35 thousand students participated – and this means each student has contributed enormously to the impacts on global immunisation. This is a definitive study – so solid and conclusive because it was so large and robust, and this is because of every participant who contributed."

By undertaking the study in South Australia, an estimated 15 cases of meningococcal disease in young people were prevented, and one to two deaths averted. The study has also now been recognised with the *Excellence in Research Collaboration Award* at the *SA Science Excellence and Innovation Awards*. An incredible impact made by everyone involved in the study, from researchers to staff and students.

Of course, Professor Marshall added, "the global success of this study also highlights that SA is a fabulous place to undertake research and that is because of the close collaboration between health and education and the strong support we received." ▲



Thank you, South Australia.

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Bin audit:

Building sustainable initiatives at school

By Shannon Brookes, Teacher,
Elizabeth Grove Primary
School, SA

Elizabeth Grove Primary school (EGPS) has always been committed to making a difference and taking care of our planet and local environment.

In the beginning, this strong sustainability focus was driven by the development of the school's kitchen garden program. About 8 years ago this program saw transformational work happen at our site. A number of amazing educators drove the development of the school garden, Kaurna Garden and cooking space. With the support of Greenhill Living students began to learn where their food comes from and how to care for the environment, including composting and recycling. This foundation resulted in great interest and passion from students and the community, which I believe was the key driver behind our success and set the wheels in motion for subsequent sustainability programs and initiatives, such as BINSHIFT.

I took over the role in 2019 as a newly graduated teacher, having completed an UNISA internship



Bin Shift founder Carole Gordon

in the National Exceptional Teachers for Disadvantaged Schools program at the school in 2018. I was so inspired by the warm and welcoming school community, the highly committed educators and the amazing student group. Therefore, when I was provided this opportunity to lead the environmental sustainability at EGPS I was ecstatic as this role combined my own personal passion of caring for our environment, with my love of teaching and the belief that students no matter what their background can achieve.

This familiarity with the school allowed me to quickly progress the program by creating strong curriculum-focused learning, connecting to areas of STEM,

sustainability, literacy, and numeracy. I developed a whole-school scope and sequenced approach to environmental sustainability with the key focus on students taking real world sustainable action as active and informed citizens in their school, local and broader community. In turn, students are empowered to create their own sustainable future. With the support of a hard-working team and unconditional commitment from the leadership, particularly our former principal Dan Jarrad we were able to provide quality and authentic learning experiences to students that connects specialist subject and classroom learning through holistic student led inquiry in support of site priorities in literacy and numeracy. Students have over the last two years participated in the following sustainability initiatives:

- Monarto Zoo Propagating program, where students learn how to propagate and grow their own seedlings at school.
- Joe's connected garden-community garden where students help and visit the community.
- Student-led farmers' markets and stalls.
- Greenhill Living program.

- 3D printed design solutions and robotic to support and solve local sustainability issues.
- Bird box and insect hotels building to increase school biodiversity.
- Learning about Native Foods in association with The FoodPrint experience.
- Collaborative partnerships with Playford International College (local high school) in the areas of agriculture, STEM, animal science and design and technology.
- Buffers to Bushland program
- Community outreach
- Frog pond inquiry
- BINSHIFT Program

With staff I was also able to develop a site environment management plan (SEMP) and it is hoped that leading into 2021 we will increase student led responsibility and care for the school environment, increase staff capacity to undertake literacy and numeracy learning in the outdoor environment, and develop a student and staff environmental sustainability committee. This committee will collect and monitor data (numeracy), set goals to further reduce landfill, report to the community at assemblies their



EGPS Year 6 and 7 students



From left to right, Amir Zaki (age 13), Jeremy Beek (age 13) and Alamdar Abbas (age 11).



From left to right, Shannon Brookes (teacher), Alamdard Abbas (age 11), Amir Zaki (age 13), and Jeremy Beek (age 13).



Carole Gordon from BIN SHIFT congratulate students on their landfill waste reduction.

learning and progress, and develop new student-based interest initiatives. All these goals for 2021 is based on feedback from BINSHIFT, KESAB (our bin audit), staff and students.

To further build on our success with BINSHIFT I am developing students' knowledge on the waste hierarchy in terms of the reducing, reusing, and how resources are recycled (it's not about waste but resource recovery). In particular, supporting nude foods actions and waging war of single used plastic and paper by getting students to create their own paper and bee waxes wraps.

Tips for interested schools

Start simple. Set simple goals and build on them. In the beginning the school started with a 10c deposit bin, compost, and paper bin. Students connected this learning to the garden by exploring how compost is used to make good soil.

Student attitudes. Students' passion and interest is key to success. Get students interested in environmental sustainability. Be positive, solution based and communicate to students that together we can make a

difference and that our actions matter. This contrasts with often negative and hopeless views portrayed through the media. Connect students to the school environment; they cannot care for something they know nothing about or have experience with. Provide engaging and hands on learning experiences with the community.

Student-led initiatives. Students are the drivers. At our school, a small group of year 6/7 students created a BINSHIFT business with a detailed business model and schedules, as part of their business and economic lessons with their classroom teachers. Students throughout the year collected the 10c deposit bin, paper bin and compost bins. Each classroom is responsible for the mixed recycle, landfill, compost, and soft plastic bins. The year 6/7 students would give peer feedback to classes to reduce contamination.

School culture/staff support – The positive school culture of caring for the environment was developed at the school over a long period of time. It is important when leading change to ensure staff are involved and heard every step of the way. This includes running staff

workshops and presentations, offering continuous support, leading by example and role modelling not only to students but staff as well. It is important that it is recognised that staff and students are on a learning journey together and mistakes are made; no one is an 'expert'. One such example was when our former principal Dan Jarrad found contamination in the staff bins and at assembly together he showed the students that we are all in this together, and students were then able to identify to staff what bin each piece of waste should go in.

Learning should be at the centre- it is important that learning is the focus around the infrastructure. Putting a bin in a classroom will not automatically lead to reduced waste to landfill or educational outcomes. Implement learning through student led inquiry before and after introducing the bins. Teach students where waste goes (its journey) to create broader world views and get students to recognise the consequences of our actions. Ask 'what if' questions to build vision and motivation for actions. Break it down into one bin at a time. Link to the science curriculum and focus on chemical science,

regarding the materials of objects. Repeated practice and modelling to students, particularly those in the early years is key. Incorporate literacy and numeracy by focusing on vocabulary and data collection methods.

With a clear vision, detailed planning, support from leadership and continued sustainability teaching in specialist lessons, we were able to keep on track with our key sustainability action of waste management for 2020. It is inspirational to hear the following from students:

"I like recycling and putting cans in the 10c deposit bin because it makes me feels good to keep the Earth safe," – Reception student

"Our bins make the planet healthy as it doesn't go to landfill instead food waste can be put in the compost to make soil for our new plants to grow and make food for us," – Year 5 student. ■

Editor's Note: Between penning this profile and its publication, Shannon transitioned to the role of Environmental Sustainability and Science Curriculum Leader at Alberton Primary School. School News wishes her all the best!



EGPS assembly



Carole Gordon (right) presents Award for Outstanding Impact to Shannon Brookes (left) of EGPS.



Tools to make classrooms more inclusive

Images courtesy of MyBurrow

By Heather Barker Vermeer
Industry Reporter

As a concept, inclusion is often associated with minority groups such as people who experience disability, but inclusion is about everyone.

Schools have legally binding obligations to include and provide a quality education for all learners under the United Nations Convention on the Rights of Persons with Disabilities, as well as the national disability strategy.

In an educational setting, inclusion requires processes and environments are conducive to personalised learning. Students with disabilities need to be able to engage in learning in the same way as their peers.

This involves consultation with the student/caregiver to identify and assess what adjustments are required to fit the needs of the student. There also must be ongoing review to ensure the adjustments remain relevant and appropriate, depending on age and stage.

The range of needs and adjustments teaching staff may be required to make can vary as much as the students themselves and personalisation is key.

For example, a student with particular visual impairments may benefit from the use of simple, sans serif font, such as Arial at a 12pt font size or above, in order to enhance their ability to make out characters. They may require a slope board, physical objects perhaps with textures to use as sensory learning tools.

A student with limited mobility may require mobility assistance, specialised furniture or specific tools for communicating their learning if they are unable hold a pencil, pen or paintbrush and cannot use a standard keyboard. Classroom material may need to be adapted for students with hearing impairments or need sign language interpretation.

Teaching strategies that work effectively for students with intellectual impairments or learning difficulties can be useful for all students. Working with small groups or one-on-one, can allow teachers to give clearer, ore targeted instruction, for example. ►

In an educational setting, inclusion requires processes and environments are conducive to personalised learning





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Visual aids such as picture books, coded charts, and photographs can benefit some students and tactile aids such as counters, abacus, soft shapes and ribbons can be useful for some students with some attention disorders and intellectual impairments. Some students may also require support in developing social skills – inside and outside the classroom. The importance of this cannot be underplayed and is relevant for everyone.

Practical guidance is available for teachers and education leaders to help recognise, plan for, and meet the learning and wellbeing needs of diverse learners. Educators can find information online pertaining to the different educational needs of mixed ability learners from those who have acquired brain injury, experience ADHD or allergies, to those who experience low vision, deafness or speech challenges.

With care taken to adapt to the needs of the individual, and with whole school support, each student will be equally placed to thrive in their own educational setting. Inclusive, accessible learning is a birth right and building a culture of inclusion helps remove discrimination and benefits us all.



Image courtesy of Spectronics

Industry insights

Spectronics representative, Michael O'Leary, took us through some strategies, techniques, sensory tools, and environments that educators can implement in the classroom.

He said: "The major trend is the continuing move toward universal (=multi-platform), cloud based, subscription software, for which there are many advantages, including automatic updates, ready-made activities, download installations, and at-home student login capability.

"It is important to consider data security, as many Education Departments demand software developers comply with international standards. Preferably, students and teachers should also be able to interact with the software even when they are off-line.

"Another trend is the popularity of scanning pens, which were very difficult to use when they were first introduced some years ago.

However, modern scanning pens use a combination of camera technology and OCR (Optical Character Recognition), making them much easier and more reliable to use.

"Many states and territories have also approved the use of exam reader pens for students in their exams. This means that students who have reading difficulties such as dyslexia can independently take exams knowing that they can read and understand the questions. No special access arrangements are required."

Dimitra Baveas and Helena Smith from inclusive teaching tool manufacturer, MyBurrow,

explained that some "schools are outsourcing for materials and tools to address developmental and learning gaps they have noticed in their populations.

Sensory tools are most effective when they allow schools to address the interventions recommended by therapists to address multiple learning and developmental issues across a wide age/grade/ability range.

"The goal should be to facilitate inclusion of students who would otherwise have to have their needs addressed either out of classroom or off campus.

Sensory tools in particular can be used as a part of learning experience as well as an area that can be enjoyed by students to re-set and re-focus.

Students with one or more significant sensory deficits such as vision and/or hearing need to be encouraged to explore their environment using their other senses.

As they explore, students learn to control the amount of sensory feedback that addresses their individual sensory needs. The positive sensory feedback resulting from their interaction encourages further exploration, which is consistent with Dr Lilli Lielson's theory of active learning for visually impaired students." ■

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Assistant Principal, Taylors Lakes School, Melbourne, VIC

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Learning Support Team, Bossley Park High School, NSW

The ReaderPen is endorsed by Dyslexia organisations and speech pathologists globally. It also helps students with a low reading level or students learning English. The pen is GST free as it is an accredited assistive technology device. Scanning Pens is a registered NDIS Provider. ▲

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Brisbane Grammar School models modular classrooms

By Rosie Clarke, Editor

Brisbane Grammar School recently commenced its largest ever building project... And for a school with a 153-year history, that means one huge project!

To make way for the school's newly incoming STEAM building, three existing buildings containing 20 classrooms had to be demolished, so ATCO Structures & Logistics was brought onboard to kickstart the journey. ATCO was commissioned to design and build 10 modular buildings, create six new classrooms, and four new science labs. These temporary classrooms would house students while the new building is under construction for approximately 12-18 months.

The project was complex as the buildings had to be over three metres high on the edge of the sports oval and had to be joined to existing access to the rest of school; existing access was not fully suitable as the pathways were uneven where the temporary buildings had to link together. All this was taken into account by ATCO during the tender submission process.

Brisbane Grammar Facilities Manager, Craig Derrick told us he was thrilled with the outcome and smooth installation process.

He said: "The timelines for the construction and installation of the new ATCO buildings were very



Image courtesy of ATCO

tight, with the planned installation scheduled during the term 1 break, ATCO worked well with the school to ensure this process ran smoothly, to our expectations, timelines, and with minimum disruption.

"The new ATCO classrooms are spacious, and bright, incorporating a skylight within the sloping roof design, the staff and students have adapted well to their new accommodation, which are used for several teaching disciplines."

ATCO's Business Development Manager, Clint Cunial described some of the challenges his team faced on the project and how they were overcome.

"We only had 10 weeks to manufacture 10 new classrooms and have them fully installed and connected to services, but we overcame this by programming the building manufacture efficiently and having our site crews work six days a week and up to 10 hours a day on site.

"The second challenge was building

height due to classrooms needing to retain existing access to the rest of the school. This was solved by using fully engineered and certified footing detail with extra bracing to suit the design and negotiating the location for the classrooms to best suit the desired outcome.

"The Heritage-listed site was also a challenge. Heritage detail came into play along the way as no-one knew at the beginning the actual boundary lines for the Heritage areas. The surrounding area of where the temporary classrooms were to be installed was Heritage-listed and was therefore not to be disturbed. This area also encroached on our building site so to overcome this we had negotiate with the client and move the buildings further back from the existing infrastructure. New footings and site design, including suitable access, had to be approved. The school didn't want more of their oval space taken, and moving the buildings back used more oval space."

Mr Derrick reflected: "One of the major challenges we had during the construction was the weather, we had heavy rain the week before delivery, but the installation of a temporary road surface across the school's ovals allowed for the scheduled delivery and crange to proceed as planned."

Providing a timeline for the project, Mr Cunial told us that it was awarded February 8, with a requirement to have the buildings handed over and operational by April 19. "We were able to manufacture 10 new classrooms and have them delivered and fully installed by April 26. We had to delay a week due to bad weather on the delivery date of the buildings. Ultimately, the total installation of all 10 classrooms and all associated site works only took six weeks (this excludes the manufacture of the buildings)."

The results of the innovative design and installation speak for themselves in the images, but Mr Derrick added that staff and students could not be more thrilled with the modular buildings. He highly recommends that other schools looking for a modular solution reach out to ATCO:

"ATCO met all our needs in regard to listening to our design requirements for our custom-build, turnkey modular classrooms, they also have a large portfolio of previous projects, which was useful in adapting these previous designs to suit the school requirements, for our custom build – well done ATCO!" ▲



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Beautiful, practical acoustics for Radford College

Radford College is a modern Anglican co-educational school committed to helping every child—from pre-k to year 12—fulfil their potential. Understanding that good acoustics are crucial to learning and development, Radford College sought the help of Autex preferred installers, Prestige Acoustics, to create classrooms where both students and teachers can thrive.

Without acoustic treatment, classrooms are noisy, stressful spaces. On average, students mishear every fourth word, and teachers have to strain their voices to be heard—putting them at risk of health complications. Applying acoustically absorbent surfaces in the classroom reduces distractions and keeps ambient noise levels down, making it easier for students and teachers to hear each other clearly.

Radford College required an acoustic solution that was aesthetically pleasing, yet practical and tough. While the college caters to all ages, these classrooms are home to primary school classes. Young children are active and often learn through play, so classroom furnishings need to be robust enough to withstand a variety of learning activities.

Symphony®, a roll form acoustic wallcovering, was perfect for the space. Made from 100% needle punched, thermally bonded polyester fibre—with a minimum of 60% recycled fibre—Symphony is durable with a sleek, flat pile finish. Pinnable and self-healing, the classes have plenty of space to display artwork, posters and lesson resources. “I love it, it has made such a huge difference to our day-to-day. The colours are great and we can pin all over it,” one teacher noted.

With acoustic treatment, the classrooms offer the children a balanced environment to focus on quiet individual work, dictated lessons, and group activities. Teachers don’t have to raise their voice to be heard, reducing stress, fatigue, and vocal strain. Designed to take anything life throws at it, Symphony offers peace of mind; no matter how hands on the children are, it will maintain a neat, tidy aesthetic. ▲



It has made such a huge difference to our day-to-day!

”



Excessive noise *and* reverberation interfere with *speech* intelligibility, resulting in *reduced* understanding and therefore *reduced* learning.

That means *that*, in speech intelligibility tests, listeners with normal *hearing* can understand only 75 percent of the *words* read from a list.

Imagine reading a *textbook* with every fourth *word* missing, and being *expected* to understand the *material* and be tested *on* it. Sounds ridiculous?

If your classroom does *not* have adequate acoustic *treatment*, this is the *situation* your students could be facing every day.

*Seep, Benjamin., Glosemeyer, Robin., Hulce, Emily., Linn, Matt. Aytar, Pamela.
(2009) Classroom Acoustics – A Resource for Creating Learning Environments with Desirable Learning Conditions. Retrieved from <http://files.eric.ed.gov/fulltext/ED451697.pdf>



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Image courtesy of Prolinx

By Heather Barker Vermeer
Industry Reporter

Pumping house music anthem Darude's Sandstorm around the school as the start of the day reminder 'bell' is one use for a school PA system.

One school I visited may have chosen this spirit-lifting dance track as a way to send pupils into class with a sense of urgency – and likely a smile – but a school PA system has many more not so light-hearted uses too. It's a system that can not only be timesaving, and uplifting, but lifesaving.

Widely used across Europe and the USA for decades, network public announcement systems that relay sound throughout schools are gaining popularity in Australia. Used for emergency messaging, such as a security lockdown or evacuation through to ambient music streaming, the PA system is the most effective means by which to convey a message

widely, and fast. They can also be useful for notifying students of upcoming lesson changes, alternate venues, or changes to arranged class meeting points, quickly and effectively reaching the whole school or a class group. Messages can be broadcast across the entire campus, throughout a particular building, or even just one classroom.

Fire alarms bells can be integrated into a school's PA system and allow more fluidity of messaging than a simple bell. Similarly, change of period notification alerts can be shared through the network, with additional messaging accompanying the sounds should the need arise.

If a school should face an intruder threat, experience a sudden natural disaster or another serious emergency, staff need simple emergency protocol to follow. Having a modern PA system fitted ensures emergency communication is automated and alerts school occupants to take prompt action. ►



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◀ A multi-function public address system can mean the difference between a close call and a disaster, while also offering other useful functionality. School songs, national anthems or ambient background music can all be beamed around the school too.

Having the flexibility to share automated messages as well as make ad hoc announcements is one of the beauties of having a school-wide public address set up. This can work wonders in creating a positive school culture and increasing staff/student morale. Fun 'shout outs' such as students' or teachers' birthday announcements, prize winner notifications, or award news can reach the masses and make a different to many people's days.

Paging perspectives from the industry

Michael Stephens, Sales Engineer-Installed Systems from The P.A. People, shared his key considerations for schools looking to install or upgrade their IP paging or PA system:

"Many current IP paging/PA systems are designed with school requirements in mind.



Image courtesy of Prolinx

Hence charted bells and period end notifications are easily programmed by the staff of the front office. This enables the suspension of bells over school holidays and public holidays. Subject to the way in which the system has been designed and installed, it may be possible to isolate the bells in a specific area of the campus - ideal when exams are taking place in the hall for example - a 'zone' that only needs to hear specific bells, and this can be easily programmed by staff. Control is also available via the use of smart mobile phones, allowing another layer of useability in the system. Due to the inherent design of the IP paging system, it can be installed on a schools existing

IP network. This is attractive as a cost saving feature particularly if the network is currently in place or requires a small modification as it will save on infrastructure required by some analogue systems.

"An available network port will be required in all locations that will require a decoder. The decoder is a device that converts the digital signal, traveling on the IP network, into an analogue signal that will be amplified and broadcast via loudspeakers. Should no network port be available in a location, the network will need to have the capacity expanded to handle the new requirements. Looking forward, as the campus grows and the IP network expands, the paging

system can grow too. If building a new campus or upgrading an existing analogue system, then undertaking a cost evaluation of an IP paging/PA System should be strongly considered."

Prolinx Audio Visual Director, Michael Kaloudis outlined some benefits to portable PA systems and different classroom options: "Portable PAs have come a long way over the years. Multiple systems can be wirelessly linked together so they can provide sound to large areas. This is perfect for school carnivals and sporting events, outdoor fetes, etc. Bluetooth, CD players, and multiple microphones can be installed within a single portable PA, and battery life has also increased over the years.

For classrooms: "IP Systems have come into the market over the last few years. The benefit to these is that they utilise existing managed data infrastructure, as well as computer-based software. On the other hand, most primary schools do not have a dedicated permanent staff member to manage their network infrastructure, so in this case if the school network

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Image courtesy of JACQUES

goes down, the PA system will as well. Slow bandwidth could also mean delays in paging/bells throughout different areas of the school and it is generally a more costly installation.

"We generally recommend a standalone PA system as there are no interruptions due to the possibility of network failure in an IP system. We always install a dedicated speaker line, which can be linked to multiple buildings. While some teachers/principals may say that they have internal paging through the phone system (though a tiny speaker which has very poor sound quality) it's certainly nowhere near enough to cut through the noise normally experienced in a standard classroom populated with many students. Another downfall is that if a bell rings or PA page has been made through a phone system, it will not be heard on any handset involved in a call at the time the bell rings or the page takes place."

For Rebecca Richardson, JACQUES Product Innovation and Marketing Manager, it is important to offer schools a solution that is easy to install and cost effective: "Many schools need

to upgrade to an IP system with existing speaker infrastructure, and the solution can be as simple as – a controller, master station and a PA zone controller. This includes a user-friendly bell and announcement scheduling software that allows for the upload of any audio file for broadcast.

"Key considerations while installing an IP system include network, audio coverage, system design, and budget. Many schools looking to upgrade to IP have the common issue of 'what do we do with our existing analogue speakers and amplifiers? And there are two clear pathways for schools:

- A full IP system with IP speakers in every classroom;
- A mixed solution with existing speaker hardware.

"Both pathways provide schools with an IP system and the ability to communicate with select, many or all audio zones. The mixed solution uses a PA zone controller, providing schools with a cost-effective upgrade to IP. Each PA zone controller (connected to an amplifier) can control multiple speakers – creating a zone. ►



Image courtesy of JACQUES

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◀ "Ideally, I recommend each building as a zone. However, this can be configured as per your school requirements; separate zones for primary, middle, and high school. The announcement scheduling software allows for custom names and colours for schedules allowing for easy differentiation while viewing the calendar. This is also beneficial during school exams where the exam block will have a separate bell schedule from the rest of the school.

"IP speakers provide flexibility while doing PA announcements to select areas of a school. As these are PoE powered speakers; power and data are via the same connection, which is cost effective. This means speakers in certain areas of the school can be grouped with virtual tags, creating zones to suit your school needs."

"Featuring a built-in microphone, speakers can monitor audio levels in each classroom and report increased noise levels. When audio levels reach their pre-defined threshold, an alarm is sent to the system. Schools can setup automatic PA announcements to that classroom (asking them to settle down)."



Image courtesy of Advance-NET

Advance-NET representative, Linus Pinto described some purchasing trends he has noticed among Australian schools:

"IP Network PA has become a fast-growing area, the implementation of NBN and breakthroughs in IP Audio technology have opened an array of new possibilities for integrating IP PA systems into school networks.

"While many schools with existing legacy PA systems are testing the waters by integrating IP Bell & PA systems with existing infrastructure or expanding existing PA networks, most schools are

moving towards SIP enabled IP PA (IP+SIP) systems which offer the option to integrate with IP Phones/VoIP networks. Integrating PA with phones offers major savings on hardware costs and offers the ability to make announcements / trigger pre-recorded messages from IP telephone handsets/mobile phones at the touch of a button without distance limitations.

"Emerging technology trends include IP + SIP Speakers with integrated mic for two-way audio. Integration of visual message/time displays are also emerging as a versatile addition to IP PA enabling

delivery of visual messages for critical situations/general messaging in noisy environments and providing synchronised time. Cloud-managed IP audio is fast becoming the next big growth area, cloud integration will enable school IT staff to remotely provision, and manage multiple devices spread over different geographical sites.

"I think some key things to consider when installing IP PA system should be:

1. Whether the new system is compatible with the schools existing PA and network infrastructure.
2. Whether the new system can integrate with IP telephones/ NBN VoIP networks.
3. Whether the new system supports paging a single classroom/speaker/zone.
4. Whether the system is modular and scalable, and whether it can be expanded as the school needs grow.
5. Does it have the ability to integrate with emergency buttons, alarms, CCTV cameras, and mobile phones." ■

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Zoning allows the user to target the announcement to the relevant zone without disturbing the remainder of the school.

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each school's requirements to meet their individual needs, not just immediately, but for years to come.

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Students take a seat

Image courtesy of Sebel Furniture

By Heather Barker Vermeer
Industry Reporter

Flexible seating: it seems the only way to go these days. But how flexible do you want to get?

Wobble stools, balance balls, butterfly stools, scoop rockers, wobble cushions, ball chairs... There's flexible, then there's *flexible!* Across the USA, the trend for unconventional seating in schools has exploded, with every imaginable configuration, colour, material, and mode making its way into classrooms and onto campus.

Stacked foam stools are kind of like circular foam Lego-type discs that lock into one another to form a seat at a height dependent on how many of the bright, block colour discs are used. They add colour and a sense of ownership and individuality to the classroom. Another novel invention is the Scooper Rocker. These concaved 'scoop' seats look like so much fun, allowing children to experience a comforting rocking motion whilst, for example, reading.

In her Edutopia article, middle school teacher Brooke Markle advocates for taking a student-centric approach to flexible seating. "Changes to a learning environment are often driven by the teacher's philosophy regarding how students learn best. When I decided to remove the student desks from my Grade 7 English classroom for the last school year, I was motivated to do so after

observing the way my students learned and analysing how I could best support them in that learning."

Markle was careful not to prioritise aesthetics. "Once I started researching options to shift the classroom environment, I was careful not to attempt a "Pinterest perfect" classroom and instead maintained focus on the purpose of flexible seating: allowing students a voice and a choice within their classroom. I incorporated various types of seating at different levels throughout the room, and students were able to find workspaces where comfort met capability."

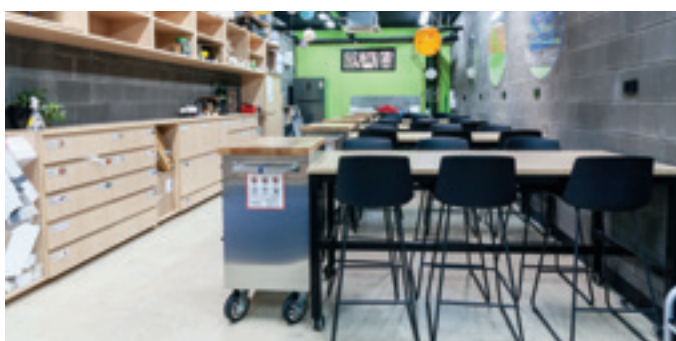
And sometimes, standing up, is the new sitting down...stand up desks and accompanying stools are now rife across the corporate world and have started making their way into classrooms too.

Flexible seating know-how from supplier experts

Sebel Furniture representative Stephanie Cox has noticed that "secondary schools tend to prefer a combination of high benches and standard height tables, enabling the older students to have more options."

"Moreover, we found that stools with backrests are very popular, as they allow students to sit for longer periods without back fatigue."

"With regards to old versus newer built schools, an interesting insight we have seen is the development and catering to flexible learning, with the bigger floor area allowing more furniture options. ►



Images courtesy of Resource Furniture

◀ "In contrast, the older classroom haven't been designed for this same flexibility, dominated predominately by single square tables facing the front. In these situations, we find castors are popular on the tables as they provide the option to move together for collaboration when required.

"This year has seen the continued growth of classrooms with mixed seating, with the following chairs being a popular part within classrooms.

- Ottomans; a soft upholstered, often round or square chair.
- Tik Tok stools; a small stool with an uneven base, enabling children a slight wobble movement.
- Stackable, lightweight classroom chairs, which are a durable and have a sturdy backrest.
- Booth seating; a soft seating option with a table.
- Standing tables or high benches with stools

"Outside of the classroom, we have found that within gymnasiums tiered stadium-style seating is



Image courtesy of Sebel Furniture

popular, while in auditoriums stadium-style upholstered chairs are often required."

"However, due to today's use of gymnasiums for multiple uses, options that provide greater flexibility with seating are preferable.

"Ultimately, my top tip would be to not over crowd the room! Design the space with how you

want to use the space rather than what looks visually the best."

Resource Furniture representative Michael Merlino told us his team has recently been involved in a number of new and refurbished builds as part of the Building Better Schools Program.

"There has been a strong design focus to create a cohesive flow of seating options. Incorporating

a family of products helps to create aesthetic spaces that feel connected. A family of products include standard height sled chairs, stools and soft seating options that complement with regards to design, colours, and finishes. Soft seating continues to be popular for collaboration, in both common and classroom spaces as they allow students to go off and focus in dedicated



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Image courtesy of Sebel Furniture

and comfortable areas. Schools are seeing the value in spending a bit more on aesthetics and functionality with their furniture as they can see the positive outcomes it has with student learning.

"Teachers are moving away from vinyls on upholstered pieces as the quality of fabrics has improved significantly and the warmth, texture and style of fabrics is so much more inviting and significantly adds to the design and feel of a space.

"Stackable sled chairs are the most popular element of any learning space. Sled base chairs are preferred over four-leg chairs from a rocking and safety

point of view and the ability to quickly stack chairs away and reconfigure spaces is key. There has been a strong push towards stools in classroom learning spaces to provide students with a choice of seating options and are often the most popular as students tend to gravitate to them as their first option.

"With regards to colour, we have moved away from primary colours and have transitioned to more muted tones. Sage green, coral and black have been very popular as schools and designers are opting for a more sophisticated colour palette that more represents a university feel and style." ■



Image courtesy of Resource Furniture

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How to get media ready after COVID+ case

COVID-19 has become the latest issue where school leaders can be thrust into the national media spotlight without warning. Few are ready for this and the stress of reporters swarming around the school and demanding interviews significantly adds to an already serious situation.

What's the answer?

There are two things every school needs in place as an insurance policy against this happening. First, they need a basic *Crisis Communication Plan* that outlines exactly what to do if this does eventuate. More on that shortly. Second, they need two spokespeople who know how to talk to media. Not just those who are good communicators, but those who understand how a media interview is quite unlike any other conversation and how to master it.

This is not rocket science and doesn't take long to sort, but many schools and school leaders have been caught without anything in place. This damages their reputations and those of their schools.

I have heard some school leaders say that the media can just wait, but that doesn't work in this age of 24/7 news and social media. If a school doesn't communicate quickly and effectively with both its own community and the media, it will be made out to be a villain rather than a victim because it appears that they either don't



Pete Burdon

*Media Training Specialist,
PeteBurdon.com*

care or don't know what is going on. They pay a heavy price for this on social and traditional media where others start to speculate about what is happening and emotional parents are only too willing to share their views through their own channels and by talking with reporters.

What should the *Crisis Communication Plan* have in it?

The first thing the plan needs is what are called holding statements. These are short media releases that say very little, but let your community and media know that you are aware of the situation and are doing all that you can to resolve it, or support those affected. That lets your community know you are in control and means you will feature in early news stories about the issue. The alternative is a line in news stories saying, 'the school refused to comment,' which is never a good look and suggests you are hiding something. Those stories then make their way into social media where people comment on them.

Second, there are various roles that need to be filled. Someone has to lead the communication response, and this is unlikely to be the principal because he/she will be too busy doing other tasks. If you have a communications team, the leader of that would hold this position, otherwise a DP or AP is usually the best person.

The spokesperson position is usually held by the Principal, possibly in conjunction with the Board Chair. It's best to use only one if possible, but sometimes both will be needed. The Online Manager is another vital role. This involves monitoring social media, and not just the school sites. There will be times when misinformation must be corrected, and messages shared with the community.

The plan also needs contact information for multiple people, different channels to communicate with them, while a number of places need to be organised to accommodate different groups when a negative issue strikes. For example, where to put reporters when they arrive at school. You don't want them hanging around reception or outside the gate where they will try to talk to emotional parents and staff.

While there is more to a *School Crisis Communication Plan* than can be explained in this article, it's not difficult to prepare and doesn't have to take long.

However, it does need to be done because there's nothing more stressful for a school leadership team than dealing with an issue like this without a plan of action. It's too late to plan once something happens.

Media interview skills

The other thing a school needs are trained media spokespeople. That's because there will be times when a school needs to front up to media.

Often a statement will work at the initial stage, but later media will demand to talk.

It's usually best to agree to this because it gives you the power to control the story, rather than leave that to others who may not be sympathetic or communicate misinformation.

With most media interviews, reporters only use snippets of your conversation.

That's why you need a clear message and the skills to return to it regularly. You also need to know how to package your message in media friendly ways. By doing this, you have far more control over what they focus on in their stories than you may believe.

Your message is likely to focus on empathy for victims and what you are doing to help them.

By being ready with a plan and media trained spokespeople, you can turn a negative issue into one that will grow your reputation by showing you care and are doing everything you can to help.

That's all most people want to hear in situations like a COVID-19 case or any other issue where there are victims.

But failing to do this quickly and being unaware of the traps, the opposite often happens.

Pete Burdon is a media training specialist with a focus on schools. ★

Pep talks for teachers

Lockdowns, change, anxiety, and more work for teachers.

If 2020 has taught us anything, it is that we know how to be flexible in 2021. But this doesn't change the fact we still have to plan, assess, and report on learning, not to mention ensure the mental health and wellbeing of students and sometimes colleagues and parents. The result is that teachers being educators, counsellors, carers, mediators, assessors, reporters and let's not forget computer technicians when it comes to remote learning.

Basically, teachers must be everything to everybody. But does it have to be this way?

Sometimes we as educators are our own worst enemy with the expectations that we put on ourselves.

Hearing and catching our thoughts can be a powerful way to soften the inner critic that is telling us we need to do more.



Daniela Falecki

*Educator, Speaker, Coach,
teacher-wellbeing.com.au*

Don't get me wrong, I'm all for going above and beyond when it comes to meeting student needs, but at what cost to our own wellbeing?

There is so much happening globally, and frankly, we are suffering what psychologists call Covid fatigue, a "deep weariness arising from more

than a year of life in a global pandemic" (Waters, 2021).

Parents and students look to their teachers for guidance, support, and strength. But who is caring for you, the teacher?

I repeatedly see teachers pushing themselves with long hours preparing both face to face and remote learning activities. I hear them punish themselves for not doing more, or they respond to self-care initiatives with comments such as "I don't have time for that," "If I don't do this, who will?," "My students need me".

Now, while it's important to be passionate, engaged and committed. There is a line that, when crossed, can move people into thoughts of the Martyr "I have to..."; the Victim "I'm told to ..."; and the Saboteur "Others need me ...". Hearing and catching our thoughts can be a powerful way to soften the inner critic that is telling us we need to do more. The truth is, the way to do more is to be more, that is, fill your own cup by recognising the amazing work you already do.

Teachers are great at giving pep talks to others to show kindness and care, so I wanted to share a

few affirmations as pep talks to help you reframe your thoughts to ones of self-compassion.

I encourage you to choose one or a few phrases below that resonate for you, write it out and place it somewhere you will see every day.

Share them with others or even put them up on a staff notice board.

Each time you hear your inner critic, affirm to yourself one of the following...

Affirmations for teacher wellbeing

- Whatever gets done or is left undone today, it is enough
- Today I manage my energy, not my time
- I am a human being, not a human doing
- I give myself permission to switch off today as an act of self-care
- I deserve to be cared for just as I care deeply about others
- I can't be everything to everyone – I am enough as I am ★

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Workshopping laser cutters + CNC routers

By Heather Barker Vermeer
Industry Reporter

Lasers can process such a diverse range of low-cost materials that they have opened new and exciting developments in design and technology.

Their use has revolutionised the teaching, and associated areas of industry, of many subjects from engineering to food technology, jewellery making to woodwork, architecture to the arts, and beyond.

Producing quality products at high speed, the simple to use Universal Laser Systems have become an essential tool in schools, universities and makerspace labs across Australia. But what exactly is a laser cutter? The University of Auckland explains, "Laser cutting uses a computer controlled high powered laser to cut or engrave a vector design out of a chosen material. It does this by either melting, burning, or vaporising small amounts of material."

And what can you do with it? "A laser cutter can be used with acrylic, wood, MDF, leather and cardboard to cut out and engrave designs. What can you create with this machine? The sky is the limit! Some examples include 3D structures like boxes, lanterns and cases; and simpler 2D items like keychains, ID badges and tokens."

And a CNC router? This is a 'computer numerical control' machine that cuts hard materials like wood, stone and metal, as well as softer materials such as various types of plastics and foam. They do not use a laser beam, instead cutting directly into whatever material is being used. Users enter their designs in software that transmits the instructions to the router to carry out the design instructions.

Laser cutters and CNC routers are some of the latest examples of cutting edge classroom technology. More and more schools are adding them to

their toolkits and technology suites, with endless possibilities of purpose. They serve as an attractive drawcard to prospective students keen to engage in the most up-to-the-minute learning.

Laser cutters 'are ideal learning and production platforms for students', according to the university. Who would argue? Certainly not those keen to embrace and create innovative, future-focused 21st learning environments.

Speaking with supplier experts...

Reece from Trotec Laser explained how schools are making use of laser technology, and what teachers should consider.

"A popular idea is to integrate the laser into a "greater good" program. This can be as simple as creating a laser group within the school that can bring some benefit to the wider community. For example, laser cutting COVID masks for nursing homes; working with the local Men's or Community

Shed; support a charitable initiative or outreach program from within the school system.

"Traditionally, laser technology has been predominantly used in secondary schools, however we are experiencing increased integration between primary, early learning, and senior schools.

"As the needs of a school tend to change over time, one of the most important considerations should always be whether the laser supplier is committed to providing professional service, on-going maintenance, expert training, and future upgrades."

"Attention should also be given to the laser software and being aware that its functionality plays a key role in the students learning outcomes.

"From the school's perspective, open plan and multi-use spaces enhance collaborative learning, encourage accountability, and maximise the potential for integrating the laser across many areas of the curriculum."



Image courtesy of Trotec

Safety must-dos:

"Do not compromise on student safety with the equipment you purchase. To accomplish this, understand how compliant the supplier is and reduce the risk wherever possible. Understand the laser safety classification and the safety protocols of the machine. Good safety practices and ensuring you have a well-documented operating procedure is critical. Utilise available training sessions provided by the laser supplier to continually upskill your operators in current safety requirements, as this will keep the information fluent and precise and ensure student safety.

Advice for teachers:

"Alongside the traditional design and technology curriculum, consider opportunities to integrate the laser into studies related to enterprise and business innovation. It is not uncommon for students after leaving year 12, to have started a successful laser business by utilising the classroom skills they learnt in school. ►

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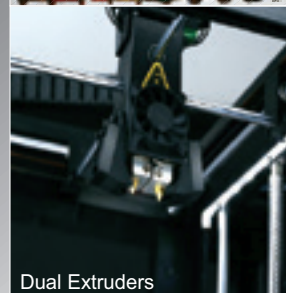
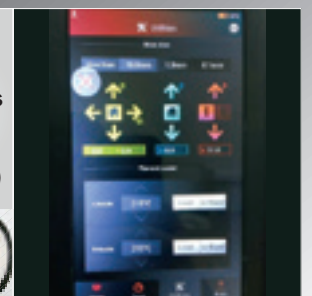


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◀ “Think outside the box, the traditional concepts of using the laser to make a “keychain” are far behind us. Think about processing different levels of material testing and reporting. Collaborate with mathematics for instruction in creating geometric shapes using Bezier curves for example. Involve the future generations and have some collaborative projects between early learning and senior school.”

Multicam’s Stephen Heusz described some current trends he has noticed around CNC router use: “Rather than just producing a simple job, CNC routers in education have been used more holistically on larger projects. These can be as in-depth as imagining and researching a project, producing designs, testing the designs, testing the need/market, using computer CAD/CAM software to envisage the end product, choosing suitable materials, machining the product and then finally presenting the finished product.

Think outside the box,
the traditional concepts
of using the laser to
make a “keychain”
are far behind us.



“Machines are also becoming easier to use, with little interaction required to commence and complete a job. CNC Routers offer unrivalled opportunity for students to be creative in the design and manufacture of products and projects. From simple 2D signs and cut out shapes, 3D engraving to complex 3D models, the end result is really only limited by the student’s imagination. Their project can also form part of a greater learning experience by encompassing

multiple disciplines and areas of study. For example, a hand drawn sketch can be designed and rendered on a computer, manipulated, and fine-tuned in software, and then machined on the CNC router. Final production might involve assembly, decoration and presentation as part a greater project. Many STEM projects involve this all-encompassing approach.

“By their very nature, CNC routers are suited to machining flat sheet or block type products. Timber,

plastic, foam, aluminium and composite materials are just some of the materials commonly used. There is a vast array of tooling available that will make machining these products easy, with different shaped tools producing different effects.

On student safety, he added: “CNC Routers are built with a lot of inherent safety features, but in the end, they are still mechanical devices capable of causing injury if not treated with respect. The safe use of these machines is no different to the safe use of a hand saw, drill press, lathe, or chisel. Students must always be supervised when using the CNC machine and should not be allowed to operate the machine on their own.

“CNC routers should be able to have specific user levels set, thereby restricting access to more complex functions on the machine and reducing the opportunity for students to access functions or controls on which they are not trained.” ■



Images courtesy of Multicam

Cutting edge student design at Salisbury High School

As part of the \$692 million "Building Better Schools" program by the South Australian state government, Salisbury High School were able to upgrade their infrastructure.

The school added a new building and redeveloped an area into a Makerspace.

David Eldridge is the Digital Technology and Engineering Technology Teacher at Salisbury High School, and he told us: "Once we got our wonderful Makerspace, we decided we needed a laser cutter.

He said: "I had previously used a Trotec laser machine and was impressed, so I organised a meeting with Ben Branford at the Trotec showroom. We discussed and considered all of the laser cutting



units from Trotec but chose their Speedy 360 Flexx unit alongside the Ruby Laser Software, as it seemed to best suit our requirements.

"The unit was installed just over a month ago and so we at the beginning of our exciting journey. Eventually the cutter will be used by students from Year 7 to 12 but for now it's our Year 9 and 10 students who are working with it.

"We plan to use the laser cutter for designing circuit boards, key tags and jewellery, but basically anything the kids can come up with! Right now, my engineering students, as part of their robotics class, will be using the laser cutter to make the main frame.

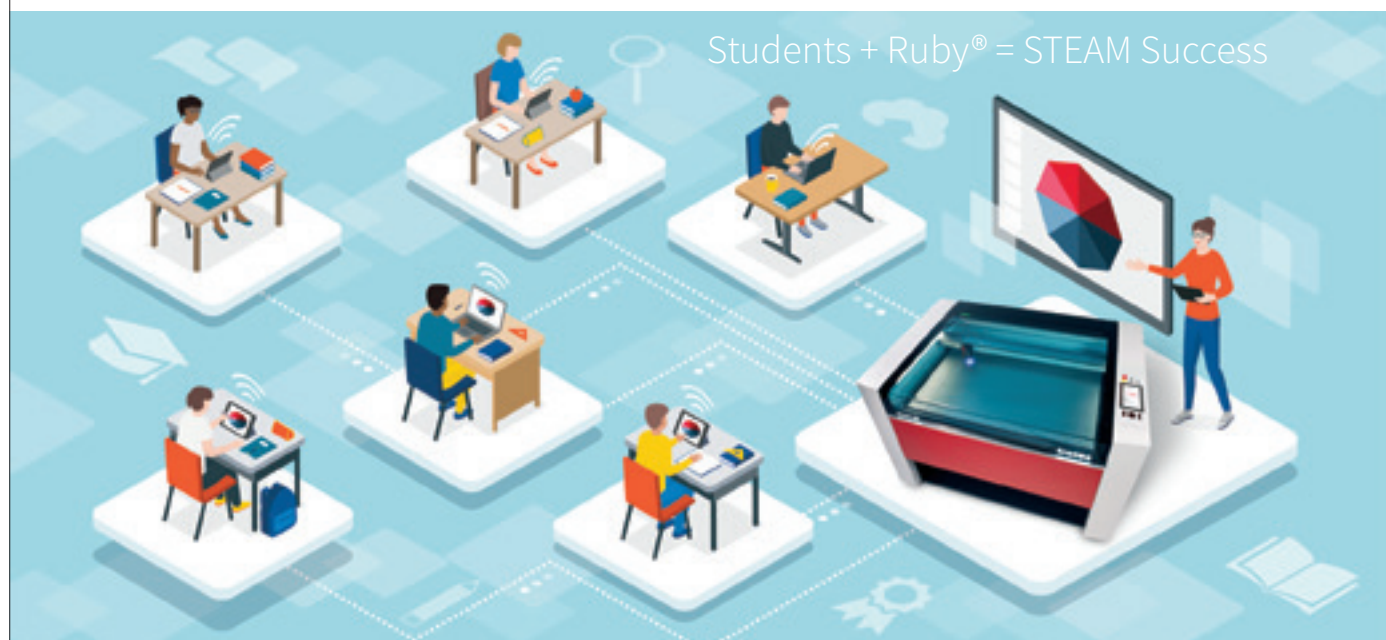
"We love the flexibility of the unit and its quick turnaround time. We are also really impressed by the flexibility of the Ruby Laser Software we like

that the students can use their own handheld devices. They can get their design ready on their own desktop, but they have to be directly in front of the laser machine to press start."

For Salisbury High School design, technology and engineering students, the Speedy 360 Flexx and Ruby Laser Software is a game changer. It's flexible, safe, quick, and very convenient. ▲

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EdTech solutions to enhance teaching and learning

By Rosie Clarke, Editor

School News scoured the sector this issue to find out about some of the hottest new edtech trends and solutions on offer to Aussie schools that might help foster greater student participation and teamwork in your classrooms.

Edtech solutions of the future are built to be invaluable learning resources. These technologies are flexible and designed to cater to different learning styles, helping close the gap on any learning divide your learners may be facing. We spoke exclusively with several key suppliers to the school sector this issue as they offered essential tips for schools and shared the purchasing observations they've made in recent years.

What edtech trends are proving popular with schools?

"One of the main differences we see between public and private schools in the size of interactive display they choose," explained Martin Moelle, Managing Director of BenQ Australia. "Public schools are mainly going with the 65 inch size, whereas private schools are opting to go big for 75 inch or above. This could be due to several different factors including curriculum requirements, flexibility of classroom operations or simply differences between school environments. Private schools are adopting technology very rapidly and utilising the latest and greatest devices. Public is moving in the right direction, but not quite as fast.

"How do schools safely, efficiently and seamlessly integrate blended learning technology into their classrooms? The reality is many classrooms are very fragmented when it comes to their devices. Linking different devices together so they link seamlessly can be problematic if brand or software agnostic solutions aren't properly considered. New technology,



Images courtesy of BenQ



like cloud whiteboarding platforms, aims to tackle these incompatibility issues. After all, teachers are great at teaching. They're not technology experts. Therefore, we need to make learning and implementing new technology as easy as possible.

He outlined the ways in which edtech devices are being used to engage students: "Getting children together in the same place and with the ability to work collaboratively in groups is essential for their future development."

"Touch tables, teaching stations and interactive displays are like the equivalent of the 'huddle space' in an office setting. These types of environments are helping to equip young people with the skills needed for life after school, setting them up for a team

environment. The advantage of interactive flat panel is the ability to collaborate group to group, no matter the location.

"Schools are taking into consideration what technology will help them stay collaborative, no matter whether they're delivering lessons in person or remotely. Ease of use, seamless sharing and device compatibility are some of the main benefits that teachers and IT managers are seeing when adopting interactive teaching styles through the latest interactive technology. We want to enable schools with the right tools to continue positive learning outcomes, no matter the situation or geographic location."

Using tech to boost engagement

Gene Ng, Head of APAC and ANZ at Promethean, said: "In our

recent edtech survey, the State of Technology in Education Report 2021, almost half of all respondents indicated that they plan to use technology to boost engagement during lessons – and we anticipate that purchasing trends will follow these strategic priorities.

"Similarly, while technology has been used to enhance classroom activities for many years, we have recently seen an increase in schools seeking to boost collaboration using edtech solutions. We are also seeing purchasing trends evolve to reflect the growing importance of cybersecurity. Many schools are looking more closely than ever at the cybersecurity implications of new technologies, both in terms of pupil safeguarding and infrastructural concerns such as data protection.

"Interactive devices are a valuable tool for promoting collaboration and engagement in the classroom, and schools can take this even further by creating an edtech ecosystem that is greater than the sum of its parts. This means finding classroom solutions which are compatible with one another, and can be used in tandem to create innovative new activities.

"For example, some interactive displays can facilitate screen sharing to and from individual devices like tablets or laptops, so that students can show their work at the front of the class. ►

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- ◀ This is a great way to encourage collaborative activities like peer-to-peer feedback sessions and give students new ways to engage with the learning experience.

"According to our recent survey, interactive panels and interactive whiteboards are now the most commonly used classroom technology, with 99 percent of educators using them at least occasionally. It's clear that the flexibility and versatility they offer is a huge benefit for schools.

"Finding a solution that suits all kinds of teaching methods and classroom setups is key, and interactive displays can give teachers all the resources they need to craft varied lessons for each and every topic."

Learning style diversity requires diverse tech solutions

For Epson Australia's Nathan Fulcher, "One of the key positive trends in education for many years now has been the incorporation of more and more elements of fundamental learning styles, often cited as visual, auditory, kinaesthetic, and reading/writing.

"All learning styles have their complimentary teaching methods and though every student employs a combination of all styles, we now understand that being able to cater to all of them is key to better global outcomes. Particular importance should be placed on visual learning given the complexity of the human vision system and its importance in how we process information. As much as 90 percent of the information transmitted to our brains is visual and 40 percent of the nerve fibres in our bodies are linked to the retina. Our eyes can register 36,000 visual messages per hour and it's estimated that visuals are processed 60,000 times faster in the brain than text. This means



Image courtesy of Ig3 Education

that great emphasis should be placed on the type of display technologies used in an education setting. First, displays have to be large enough for every student in the room to see every detail.

"A study conducted by Radius Research in multiple U.S. markets found that 58 percent of students wrote down at least one item incorrectly when asked to find and note data from basic content – an Excel spreadsheet and a PowerPoint schematic – shown on a 70" conventional flat panel display. Projection technology, on the other hand, can achieve display sizes of 300" and beyond. Because display size is measured on the diagonal, even a 100" projection display has an area that is actually four times greater than that of a 50" display, not two times.

"And projectors are not what they used to be... Modern iterations are 'all singing, all dancing' that teachers and students can

interact with as you would with an electronic whiteboard; you can annotate on top of the image, print out from it, have multiple pages open simultaneously to scroll through, and much more. To fully take advantage of the power of visual learning, you need the right sized display. Size matters!"

Primary and secondary schools have different edtech needs

Ig3 Education's Tony Church told us that "over the last couple of years, primary schools in particular have favored Interactive LED panels over other technologies, including interactive projectors and interactive whiteboards".

"Secondary schools are different, and while a large number install interactive LED panels, the majority are used mainly for display purposes. As such, many secondary schools would favor non-interactive display technologies such as projectors and TVs. When comparing TVs with Interactive LED panels, it is often more advantageous to go with the interactive LEDs for the following reasons:

- Competitive price
- Longer warranty
- Anti-glare screen
- Toughened glass
- Wireless display connectivity, etc.

"Most classrooms are based around a teacher-centered model, so updating the classroom/ teacher presentation system with products to enable seamless integration and use of teacher and student technology devices, irrespective of the technology platform, is extremely important. It is also important to consider the fact that the technology replacement cycle will be much longer with interactive LEDs, so ensuring that the right product is selected is equally important to ensuring that the right supplier is selected. The importance of training and support should also never be discounted.

"Interactive LED panels should include the following 'minimum' features:

1. Multi-touch
2. Anti-glare toughened glass
3. Built-in android, which allows for the use of the panel without having a PC connected
4. Wireless display capability from any handheld device, including Windows Laptops, Mac, IOS, Android, and Chromebooks.
5. Supplemental curriculum software resources
6. Optional Built-in PC
7. On-site warranty
8. Lesson creation software tools
9. Teacher training
10. Support

"Multi-touch functionality is useful for schools. For example, a 20-touch panel allows for up to 10 students to use the product simultaneously but it is also important to consider the physical space available, in other words how many students can comfortably fit in around or in front of the panel?

"I've noticed that popular sizes for classroom interactive LEDs are currently 65" and 75", although other sizes are available, including 55", 86" and 98". Adding high quality webcams to the panels is becoming more and more popular, especially with COVID and teachers often having to teach student online." ●

To fully take advantage of the power of visual learning, you need the right sized display. Size matters!





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*Leading 70-inch class 4k resolution flat panel in a 22" (width) by 27" (depth) classroom-style arrangement. When asked to copy down six short items of information from slides being displayed, 58% of students ages 12-22 copied at least one item incorrectly. Based on an independent, quantitative study conducted by Radius Research in multiple U.S. markets.



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Achieving great professional learning in the age of COVID-19



Image courtesy of Integrate AV

As a high school teacher in an independent Sydney school, I experienced a great many professional learning sessions.

Of all these sessions, it was after only a handful I left feeling legitimately energized, inspired, and empowered with skills or knowledge that would make a difference to my everyday teaching practice. Despite the very best of intentions from both the school and the presenters of these professional learning sessions, I found that the vast majority lacked one of two critical requirements: relevance and practicality.

In essence, great PL needs to bridge the gap between theory and practice. Professional learning that discusses only theory doesn't empower teachers to apply that theory in their classroom practice. Professional learning that focuses on practice without appropriate



Chris Ransom
Integrate AV

theory and content simply isn't applied, as the relevance of that content isn't embedded into the practice itself. Learning a new skill isn't useful if it is irrelevant to your needs or aims, and learning a new idea is immaterial if you're unable to use the knowledge you've gained.

I have moved on from teaching young adults, and as the Head of Training and Development at Integrate AV, I now teach teachers. Despite the context changing, good teaching looks and feels the same, and is equally rewarding. Good teaching

in any context needs to be dynamic, relevant, practical, and student-centred. As Marzano wrote in *The Art and Science of Teaching*, teachers need to model the kind of attitudes towards learning that they wish to see in their students, and display "high energy as a stimulus for engagement".

As I am writing this, numerous capital cities are in lockdown, and a great many teachers are required to deliver lessons remotely (including all teachers in Sydney, and all teachers in the state of Victoria). The same is true for deliverers of professional learning. If educators are ultimately committed to full student engagement, this presents a very significant challenge for teachers delivering lessons remotely. Luckily, with the technological tools currently available, we are living in the best time in history for remote learning. And now, more than ever, as teachers support their students in an unfamiliar learning environment, it's vital that providers of PL likewise

support teachers. Simply put, teachers deserve the best PL and training we can offer.

At Integrate AV, we realised early in 2020 that we would be delivering the vast majority of our PL remotely, and as a result we repurposed our Training and Development Centre. Rather than a space where teachers can come and engage in professional learning and training in person, the space was transformed into a filming suite to produce training videos and (hopefully) the highest quality live online training sessions available.

We faced very similar challenges to schools transitioning to teaching remotely. It took some time to find the video conferencing platforms which best suited our needs for webinars and live trainings, and compatible with school IT. We needed to test, tweak, and refine our hardware, and perhaps more importantly, refine the way we deliver training and PL.

As teachers across the country have learned in the last 18



Image courtesy of Integrate AV

months, keeping students engaged during remote learning is even more difficult than in the classroom. Teachers can't gauge students' subtle physical cues that we can in person, which alert us to when a student's engagement is beginning to waver. In face-to-face teaching, teachers have control over the environment in which the students are learning – they can monitor noise levels, light, and potential distractions. Having no control over a student's environment when they are learning remotely makes engaging students even more challenging.

The truth is that old methods of lesson delivery simply don't work well in a remote learning context. While screensharing PowerPoints and PDFs to students does expose them to content, this learning is essentially passive, and counterproductive to what research shows is the most effective way of engaging students: active learning. Naturally, this is very hard to achieve remotely.

In order to make our online training sessions as engaging as possible, we now present sessions with large audiences (20+) using a platform which features a live chat, and have at least one member of our training team monitoring that chat throughout the session. Teachers can therefore ask questions and seek clarification without interrupting the session, and have their questions

answered immediately, without having to wait until the end. Likewise, the team member monitoring the chat can drop links and resources into the chat at the right time, as well as at the end of the session for later reference. The live chat also raises the likelihood of teachers asking questions and seeking clarification, as it lowers the barrier of entry – the teacher doesn't need to stop the session and interrupt the flow in order for the question to be asked and answered.

Crucially, we also use SMART's online learning platform, Lumio (formerly called the SMART Learning Suite Online), and it is this that really takes learning from passive to active. Teachers are able to take their passive resources (the PowerPoints and PDFs already mentioned) and transform them into engaging, interactive resources which can be shared out to student devices in real time. Obviously, Lumio can be used in a classroom setting just as effectively, but the way it works makes it particularly powerful for remote learning.

Once I have uploaded a resource to Lumio, whether a PowerPoint, PDF or SMART Notebook, I can then add additional elements to the resource – YouTube videos, interactive educational games produced via SMART Lab, quizzes, and spaces for sharing ideas in real time. When I'm ready for my online learning session, I connect with the class using my video conference platform of

choice, and then get my students (teachers, in my case), to open an internet browser and navigate to [hellosmart.com](https://www.hellosmart.com). There, they can sign in using my unique teacher number. My students learning from home will be using their own devices, so being able to access the lesson via a browser, rather than needing additional software, is perfect. Once students are signed in, I can choose either 'teacher pacing' or 'student pacing'. In 'teacher pacing', I lead the lesson and bring my students with me. What I see, they see, and I determine when each activity is carried out. When 'student pacing' is chosen, students are at liberty to work through the lesson at their own pace, and complete activities at their own speed, both during a live lesson and when working independently in their own time.

I can also turn any page into an Individual Handout or a Workspace. In an Individual Handout, a student can work on a page as their own activity, adding text, images, or drawings. As the teacher, I can see what each student is doing in real time, and work on that same page myself, perhaps giving instant, simultaneous feedback. For Workspaces, I can group my class into teams and have them collaborate, live, in the same

virtual space. Within this shared environment, as the teacher I can see who has contributed what, and can also contribute myself, providing guidance or giving feedback. I am also able to include audio instructions on each page, which is particularly helpful for students participating in activities in their own time.

In addition to the multi-modal additions to my old resource (such as videos, games, and assessment activities) which boost engagement, Lumio is predicated on embedding interactivity and collaboration within the lesson itself. Content and practice are no longer separated, they are integrated, and learning has turned from passive to active. With a clever combination of video conferencing software, a good camera, and Lumio, students can see and interact with me, my lesson, and each other simultaneously.

High-quality remote teaching requires a combination of good technology and good teaching practice, and as educators, our Training and Development Team at Integrate AV strive to combine this to provide the best possible learning and support to Australian teachers. ▲

Chris Ransom (PhB, GradDipEd) is Head of Training and Development at Integrate AV. Chris has taught at universities and in NSW high schools. In his current role, his main passion is to help teachers create the most interactive and engaging learning experiences for their students with the assistance of cutting-edge classroom technologies.

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Premium Dealer

Promethean solutions promote flexibility for schools

The Promethean State of Technology in Education Report 2021 recently revealed that interactive panels and interactive whiteboards are now Australia's most commonly used classroom technology, with 99% of educators using them at least occasionally. And, with front-of-class solutions increasingly becoming the connected hub of the modern classroom, it's easy to see why.

The Promethean ActivPanel Elements Series is one such solution. Designed by teachers, for teachers, the interactive display comprehensively supports teaching and learning – and following a series of targeted product improvements and innovations, the ActivPanel now offers even greater usability, flexibility and functionality:

Distance Learning Bundle

Teaching and learning in the classroom will continue to be the norm, but schools will benefit from preparedness and flexibility in the event



that circumstances change unexpectedly. Promethean's new product bundle for remote learning includes a teacher-facing webcam which connects to the teacher's computer, and an extendable tripod for desk and floor mounting to open up new options for placement and viewing angles.

The webcam, along with its complementary tripod, can be set up quickly and easily in the classroom to capture both the teacher and the ActivPanel simultaneously. And, as the ActivPanel is compatible with popular videoconferencing solutions like Zoom and Microsoft Teams, it is simpler than ever to accommodate remote learners. With the webcam set up, remote

learners will benefit from a clear view of the classroom so that they can engage just as if they were present.

The remote learning bundle helps schools to maintain quality teaching and learning experiences no matter the situation, streamlining the transition between in-classroom, remote and hybrid learning whenever it is required.

ActivPanel software

With the latest ActivPanel software update, teachers can now take a self-guided tour of the interactive display right from the home screen. This simplifies ActivPanel setup, and makes it even easier for teachers to access support and training resources.

The new self-guided tour is the perfect introduction to the ActivPanel for new users, and also a great refresher course for teachers that are already familiar with the ActivPanel whenever they may need it.

As well as providing direct support for teachers, this update means less teaching downtime for training sessions, and also frees up time and resources for the IT department which can better be used elsewhere.

ActivPanel hardware

To complement the software update, Promethean has also introduced additional hardware to the ActivPanel package. The ActivPanel is now supplied as standard with a single USB-C cable which provides power, data and video transfer to and from the ActivPanel.

The USB-C cable can also be used to quickly and safely charge peripheral devices straight from the interactive display, making it easier to keep classroom devices powered up and ready to use. More than ever, the ActivPanel acts as the connected hub of the modern classroom.

Radix partnership

Promethean's partnership with Radix has expanded the remote device management and security necessary for remote and hybrid learning. When bringing learners into the classroom remotely, teachers can rest assured that the connection is secure and consistent – so that they can focus entirely on teaching the class.

With this set of product updates and innovations, Promethean is improving teachers' experiences with the ActivPanel while supporting schools with tools for greater flexibility and functionality. ▲



To learn more about getting started with the ActivPanel Elements Series, book your tailored demonstration today. Visit us at: www.prometheanworld.com/au/how-to-buy/request-a-demo/



Breathing easier in the classroom

Image courtesy of BenQ

By Heather Barker Vermeer
Industry Reporter

Keeping classrooms well ventilated by opening the windows can be one way to improve air quality in classrooms, but not always.

In winter, this can reduce air temperature, bring in moisture and pollutants, especially if the classroom is adjacent to a busy road. Researcher suggestions to improve indoor air quality in schools include opening windows, installing automatic windows in new buildings and footpaths at entrances to classrooms (or recommending entrants remove shoes). Ensuring non-toxic cleaning products and routines are used and installing smooth flooring to remove the build-up of dirt in crevices were also recommendations.

Planting trees next to classrooms, where possible, to absorb pollution and improve air quality has also been suggested by academic researchers. Research Fellow in the Department of Public Health at Otago University, Dr Julie Bennett, has also recommended new schools be built away from main roads.

School News interviewed education industry expert, Martin Moelle, Managing Director of BenQ Australia, about key air quality concerns for schools

here in Australia, and what tech solutions might be out there.

Q: In your experience, what technologies and systems help promote leaner and healthier air flow?

A: My experience is limited to CO² technologies in particular, so I'll speak mainly to this. Government and organisations around the world are starting to wake up and take notice of the importance of indoor air quality. The technology to measure and implement changes has always been there but it's the awareness that is growing rapidly. Most concerning though is that there aren't too many standards to which the education industry is held here in Australia. There are standards in place overseas, in New Zealand for instance, which focuses on the indoor air quality specific to CO² concentration. From our understanding and capacity, awareness and regulation is the key to a healthy change.



Q: What are the recommended safe levels of CO², etc., in the classroom and how can this be measured?

A: There is a general recommendation of a 'normal' CO² concentration level between 300 – 500 ppm. However, this isn't specific to the classroom environment, at least in Australia anyway. The recommendation of normal concentration of CO² in the classroom needs to be dealt with very differently. Children and young adults are more sensitive to their surroundings while developing through an important stage of their lives and thus more susceptible to the negative effects of poor air quality. Research has shown that children's bodies find it harder to process CO² than adults and they tackle higher volumes based on their body size and weight. This is why classrooms need to be more closely regulated and the education sector needs have their own recommendations. There are many ways to measure air quality

in the classroom ranging from measurements of gas like CO² and not forgetting particulate matter as well. Inbuilt CO² sensors can help give teachers peace of mind.

Q: Can ventilation systems adequately improve air quality to protect students against the transmission of airborne diseases?

A: I can't comment on this in-depth but there are ventilation systems that have been used for quite some time in industries such as aviation, specifically on planes. The key is to reduce the risk of exposure to airborne contaminants, whether they be viruses or particulates and gases like CO². There will always be some risk, but mitigation should be the goal in the classroom.

Q: What can you reveal about different design options that might offer schools strength, safety, and comfort year-round?

A: Strength and safety first come from knowledge and understanding. There most certainly needs to be more regulation and guidelines put in place for the education industry here in Australia if there is to be a dramatic shift in health and safety for our students. There are some very basic ways of monitoring air quality in learning spaces and once a school knows that air quality is poor in the classroom, something can be done to change it. It can even be something as simple as opening a window or taking a class outside for a break. ■



A clever cost-saving solution for a tired school area

Early in 2020 TEB Contractors were engaged by the Spotless Group to give an existing weathered asphalt area at a Primary School in South Australia a much-needed facelift.

These sort of facility or surface upgrades are certainly not uncommon, however, what sets this project apart from others is the integral role that TEB played in developing an innovative solution to deliver on the school's brief.

The school required an area that was suitable for multiple sports, various age groups and Holiday / After school care programs. The existing area was very old, tired and had extensive cracking, which is a major problem and generally results in a total reconstruction. However, TEB recommended



the installation of APT's Laykold Masters Float system, which prevented the need for an expensive and lengthy reconstruction. Laykold's global dominance has sky-rocketed since becoming the official court surface of the US Open in 2020.

APT's Laykold Masters Float system features multiple layers including a shock absorption pad which was very appealing to the school as it minimised the risk of injury particularly in the older children who take their sport more seriously. The system also comes in a large range of colours

which addressed the school's desire for a bright and fun space that appealed to all ages.

TEB created several CAD design options with varying colours and layouts, before the school settled on one which catered for netball, basketball, volleyball and handball, plus included new sporting accessories.

As one of APT's expert installation partners, TEB used their extensive Laykold product knowledge to present an innovative solution to the school's continual cracking problem, whilst also delivering on their need for an appealing, multi-sport area. The students and staff at the Primary School were absolutely delighted with the transformation. ▲

To request a copy of the APT Schools Brochure please contact APT on 1800 652 548 or info@aptasiapacific.com.au





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Drinking water for your students

By Heather Barker Vermeer
Industry Reporter

Drinking fountains – they’re far from a modern phenomenon. The Ancient Greeks created fountains as one of the fundamentals of urban life, with people filing jugs from the free-flowing waters incorporated into ornament fountains.

It was in the 19th century that the idea of a purpose-built public drinking fountains, however, was born. In 1859, amid an outbreak of cholera in England, a group of wealthy Londoners formed a group called the Metropolitan Drinking Fountain Association. They set about constructing public drinking fountains in the city using private funds to give people an alternative to the germ-ridden river water supplied to homes from The River Thames. It was filtered and it was free, and, unsurprisingly, proved incredibly popular.

Making sure free, filtered drinking water remains a popular, available commodity is one of the many roles of schools in the 21st century. Encouraging students to stay hydrated can help instil lifelong habits with untold benefits. You are what you eat – and drink. The human body is made up of up to 60 percent water, with the brain and heart both composed of approximately 73 percent water and the lungs, about 83, percent according to H.H. Mitchell in the *Journal of Biological Chemistry* 158.

Drinking water is essential for our health, yet many people still choose not to. Making it available and accessible is only the start; educating children on the importance of drinking it is key too. As a rough guide, it is believed adults should aim for 1.5–2 litres (6–8 cups) of fluid each day and children 1–1.5 litres (4–6 cups). By modelling healthy water



Images courtesy of Urban+

consumption, adults can make a real difference not only to a child's capacity to learn in the classroom and beyond, but to a child's lifelong health and wellbeing.

Industry voices: what are some water solutions for schools to watch?

Claire Allan, owner and General Manager at Urban+, revealed that she has seen a big shift in school buying behaviour when it comes to drinking water.

"During the early stages of the pandemic many state health authorities gave clear instructions to turn off bubblers

where hygiene or the potential of cross contamination of the virus could happen. This meant that schools had to find other ways to ensure that children remain hydrated. Removing the old-style drinking bubbler and replacing it with a bottle filler is one practical solution we saw emerging. A bottle filler not only reduces excess water waste but also the risk of passing on the virus.

"We have also seen an increasing focus on sustainability and conservation in our schools, and the importance of student comfort to promote optimal learning. Ten to fifteen years ago there were very few classrooms that had air conditioners in them and now we see students and teachers feeling bereft if there is no air conditioning available. We see this emerging comfort trend in provision of drinking water also, where there is now an increased demand in accessible filtered chilled water for students to drink.

"Another major trend is the continuing need to reduce single-use plastics, and specifically single use plastic bottles. Reducing the use of single use plastics

is vitally important to our local environment and our planet but there must be a suitable alternative provided. Installing bottle fillers that provide clean, fresh, filtered, and chilled water is a practical and environmentally sustainable solution.

"Another important point to note for schools, is that the water solutions provided will to some degree depend on accessibility. Children of primary school age need to be able to reach and operate fountains and or bubblers. Being able to have fountains or bottle refills of varying heights enable solutions to be tailored to the school age demographic. Simple operation is also important for smaller hands."

Cleaning, servicing and ongoing maintenance

Claire continued: "What a lot of schools may not fully appreciate is the ongoing cost of fresh water implementation. Not only is there the initial cost of product purchase and installation but there is the ongoing cost of service and maintenance. Continual breakdown or replacement costs of poorly designed and cheaply manufactured products do nothing to promote sustainability and can be very costly over the years to the school budget and the environment.

"Some questions that a school may want to consider asking, is whether the product is Australia-made, what the back-up service and maintenance plan is, whether parts are readily available, what the warranty period is, whether the company promotes sustainability and has a lifetime guarantee, and whether there are leasing options available to reduce capital costs.

"A final important question schools should ask when deciding on a drinking solution, is how might the manufacturer be changing their operations to reduce their impact on the environment?" ■



Top 3 things to consider before purchasing a new school drinking fountain

With over 20 years' experience supplying drinking fountains and bottle refill stations to schools, councils and commercial business, Urban+ Fountains & Furniture know a thing or two about what to consider before purchasing a new one.

Below they outline their top 3 tips to ensure you find the best solution.

1. Do you need to buy brand new?

Did you know, some businesses such as Urban+ can actually refurbish your existing fountain for a fraction of the cost of buying a new one.

Restoring fountains not only has a cost benefit but it is also more environmentally friendly.



Another alternative to buying new is to consider leasing a new fountain instead.

By leasing the fountain, you no longer have to worry about servicing or maintaining the asset.

It can also save your school money in the long run.



2. Where should your new fountain go?

Where you install your new fountain is very important as there are a number of cost saving considerations to think about. A couple of key things to remember is that installing it close to existing plumbing, undercover and away from trees

can cut down on installation and maintenance costs considerably.

3. What functionality and finish do you need?

When thinking about what functionality you need, first consider who will be using the fountain. Does it need to be disabled accessible or a certain height? Do you require a bottle filler or maintenance tap? Or even a specific colour so it fits in with your school aesthetic?

When you deal with a local manufacturer such as Urban+ you will have the flexibility to customise the fountain to your unique needs without compromising on quality or service. ▲

If you are still not sure about which option is best, contact the friendly team at Urban+ on 07 3382 7372 or via email at: office@urbanff.com.au.

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A sign of the times

By Heather Barker Vermeer
Industry Reporter

In the digital age, schools appear behind the times if they don't keep up with the play and embrace digital technology – and not just in the classroom.

Schools must consider how they position themselves to their wider community and there is no more public facing, physical mechanism than the school sign. If it is not digital, is your school showing itself to be an up-to-date, tech-friendly hub of innovation? Probably not.

As well as removing the temptation of lettering rearranging pranksters, digital signage has many benefits. Sharing school event information and community notices such as open days, parent interviews, and term dates has never been easier than flashing it from the front gates on a digital signage, especially if the school sits on a main road and more so if that road is susceptible to traffic queues.

School successes and individual achievements can be broadcast in LED light to passers-by, doing much to enhance the school's reputation and demonstrate a culture of value and of celebrating success. Digital signage can play a key role in building a school's branding and identity.

Industry insights

According to Customized LED's Dan Dean, "when they first look into digital signage screens, many schools start with DIY solutions that use a regular PC and web browser".

"These solutions include a USB drive and TV digital signage solutions. While these solutions do work, managing DIY digital signage solutions are time-consuming and inefficient. A more effective solution would provide both the hardware, software and installation of a robust digital



Images courtesy of Customized Signs

Choosing the right pixel pitch for your digital display should be the first step when deciding on a new outdoor digital screen.



signage system to meet Australian conditions. Schools should be able to schedule content in advance, monitor the display status of their digital signs, and keep their digital signs update to date with the latest firmware all from a simple cloud portal.

"One of the interesting new projects I worked on was an

inquiry from St Paul's School, which had an older digital sign that was no longer working and would not display content. The school could not find a specialist repairer and many local sign companies tried selling a replacement sign instead of quoting a simple repair. Additionally, their previous sign had to be controlled with a dedicated

laptop that was in close proximity to their existing digital display.

"Choosing the right pixel pitch for your digital display should be the first step when deciding on a new outdoor digital screen. This is to ensure your viewers have the best viewing experience based on your screen and viewing distance, for your Outdoor LED Sign. LED Display Pixel, also referred to as "PH" or "P" is the length between two pixels within the Digital Signage Display. Another terminology for Pixel Pitch but not used in the digital signage industry is screen resolution. For example, the P5 module has a pixel pitch that is 5mm apart and contains 40,000 pixels per square meter. The smaller the "P" value, the higher the pixel density and the closer the screen can be viewed.

Dan's top tips for schools looking to upgrade:

- Screen management: To manage the digital signage product it should be from the cloud and supports quick screen configuration, real-time control, playback management and cloud server binding.
- Solution editing: This will allow you to quickly design various playlists which will be sent to the digital sign for playback.
- System settings: This will include things like time display settings, brightness settings, restarting signs and help documentation.
- Media library: Allows you to browse the multimedia files on your mobile phone or web browser and quickly and easily change content.
- Checking the status of screens anywhere and anytime.
- Monitoring working status of sending card, receiving



Images courtesy of Customized Signs

card, monitoring card and multi-function card operation.

- Detecting temperature, humidity, smoke around the cabinets.
- Monitoring power voltage of cabinets, fan speed, LED point status, and ribbon cable status.

Writing the right message

Words cannot only inform but uplift and entertain. A humorous

headteacher might use the school's signage to spread a few extra smiles around the neighbourhood – everyone likes to laugh, right?

Spreading good cheer, especially around Christmas time with a season's greetings wish, sprinkles goodwill around the school's reputation. Or your school could provide a handy community service by displaying the current time, temperature or even a thought-provoking quote or fact of the day!

Messages that move – literally – attract and engage more than static signs.



Messages that move – literally – attract and engage more than static signs. Adding tech to your notices allows you to share multiple messages at once. It also removes the need for the school caretaker, receptionist, or teachers to trail outdoors in all weathers to insert letters into a grid. Ease tends to please staff and touch button will trump manual task completion every time.

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The tech in the market allows for signage and visual opportunity beyond simple orange lights on a black boarding, however, with single colour illumination being just one option.

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Getting to grips with outdoor furniture options

By Heather Barker Vermeer
Industry Reporter

In Australasia, the outdoors is more accessible to more people, more of the year round, than in many countries.

The benefits of spending time outdoors are well-known for physical and mental wellbeing and we all know that heading outside the classroom whenever possible makes sense. Providing attractive, practical places to congregate, sit, eat and 'hang out' is bound to encourage more of this, so schools are wise to plan their outdoor places to promote maximum use.

Furniture has moved on from the simple wooden bench. Even the 'Buddy Bench', previously extolled for its inclusive, relationship-building benefits, is being overtaken by less overt, more face-to-face interaction-friendly options.

Providing more inclusive options is key. Outdoor settings that encourage children to gather in a group and experience eye contact with each other is likely to promote conversation and inclusion. Directly facing other people can sometimes seem formal and may be daunting to some, so a staggered seating arrangement that introduces different heights and distances between seats can provide more options for students to choose how close they wish to be to others, or at what height level they want to be.



Image courtesy of Area Safe Group

In the 2020s, sustainability and use of natural surroundings in outdoor furniture is widely admired. Using the reduce, reuse, recycle mindset, schools can create seating out of unwanted old furniture, crates or tree trunks, for example. Revitalising your outdoor spaces may provide the perfect premise for a class project. Children generally love being involved in design, or redesign, and a school-wide competition or learning experience could be made of a repurposing project.

Consideration should be given to portability of furniture or whether outdoor furniture needs to be static and secured. Having dual

or multi-purpose furniture adds value and will increase use, so thought must be given to the wider picture of dining, encouraging conversation, seated games, and outdoor learning in the mix.

Creating a comfortable space is ideal – physically, as well as socially. And while beanbags may work for summer seating and have many plus points, they're not great for dining or using on wet ground in winter. Likewise, hot weather will also have its drawbacks – you don't want seating that is exposed and unshaded or have seating material liable to reach volcanic temperatures in the summer heat.

Be creative but think safety first!

Gus White, National Sales Manager at Felton Industries, told us that "outdoor classrooms are becoming increasingly popular with schools wanting to create additional learning spaces".

"Some become a feature of regular timetables while others form a bonus offering to students who enjoy getting outside for learning. Other trends we have noted include the continuing demand for aluminium bench seating as an absolute staple across all schools, while variations exist between high schools and primary schools for other ranges of outdoor furniture.



Image courtesy of Area Safe Group



Image courtesy of Felton Industries

The former will often opt for larger outdoor settings such as Jumbo Park Settings which have seating on every side seating between 12 and 14 students, more outdoor shelters, and grandstand seating. Two-sided park settings are a favourite amongst primary schools, as is coloured outdoor furniture.

"During breaktimes, outdoor table settings of any kind form a focal point for students to meet, eat, drink and relax. As students face each other while sitting, they promote interaction and encourage connection. In addition to table settings, buddy benches can be found throughout primary school playgrounds in Australia as a place to go and meet new friends, especially during breaktimes which for some children can be a lonely time.

"For permanent bench seating there are in-ground or above ground bench seats which offer safe, sturdy seating options. For outdoor spaces that are smaller or multi-purpose more flexible seating is often required with free standing stackable bench seating. All bench seating comes with a choice of coloured safety end caps to ensure no sharp edges.



Image courtesy of Felton Industries

"Aluminium is a very popular material for outdoor furniture in schools as it is strong so can easily cope with the high usage demands of a busy school environment. Being lightweight makes it versatile across different outdoor areas whether as free-standing bench seats or as portable grandstands. Aluminium is also very durable, so it won't rust, warp or deteriorate outside over time making it an ideal choice to meet high safety standards."

According to Craig Light from Area Safe Group, "There has been an underlying tendency to spend the least amount possible on basic bench seating for minimum humanitarian standards. This hasn't always resulted in the best fit-for-purpose outcome for students. However, government schools are catching up fast and

even leaping ahead of private schools in many cases, installing seating that is not only functional but looks great and coordinates well with the architecture of adjacent buildings! Part of this trend towards designer furniture includes early planning for how the furniture is to be used, plus a genuine desire for Australia-made which has better quality, shorter lead times and similar initial investment than imported furniture.

"The promotion of improved mental health and wellbeing coupled with the realisation that flexible and outdoor learning environments assist with improved learning abilities has led to a growing trend for social furniture. Social furniture is furniture that facilitates group environments. This includes 360° circular, 180° semi-circular, zigzag, angular

bench seating and four-sided round or square picnic settings, which all help bring students together during breaks. If there is no group furniture provided, schools find that students end up sitting in a circle on the ground facing each other, rather than sitting on a single straight bench.

Outlining some popular trends, he added: "Bright coloured furniture can lift the general mood of otherwise bland locations: There is a fairly even mix of thought, with some schools choosing to coordinate the colours on outdoor furniture to match the architectural palette of adjacent buildings and those that opt for bold primary colours for a more playful lively mood.

"While many schools invest heavily in shade structures, these are predominantly permanent structures with the disadvantage of blocking out sunshine during winter months. Individual shade umbrellas and covered picnic settings are becoming increasingly sought after for their flexibility. These have the flexibility to allow full natural sunshine in winter but also block out the heat during summer." ■

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Born to run, or to play?

By Heather Barker Vermeer
Industry Reporter

The challenges of 2020 taught us many things, one being a reminder of the importance of play.

As the world has spent varying amounts of time locked up at home this past year, playgrounds haven't been enjoyed nearly as much as usual. In places where people are free play to again, that has made them more appealing than ever. Outdoor play for fitness and fun is a right some people now no longer take for granted. So, what's new in playgrounds in this new normal?

Hygiene has understandably become a main concern, and this is the case for new playground design too. Hand sanitisers are here to stay. And they're becoming commonplace as permanent fixtures in areas that typically involve high levels of 'hand traffic'. Few places in our communities involve more repeated exposure to hand-born germs than playgrounds!

Planners and designers are promoting playground upgrades that incorporate a wider range of equipment that can be used for fun and fitness for a wider range of people. Playgrounds that encourage adults to engage in exercise, with or without kids, are becoming more plentiful, and for good reason. The benefits of exercise to wellbeing are well-known and for a school, anything that promotes healthy,



Image courtesy of Austek Play

happy staff by encouraging them to engage in a few exercise reps – and maybe have a little fun – is to be welcomed.

Another driver of design is nature. Our need to be in natural surroundings has been amplified of late and creating play spaces that reflect this is increasingly important. Design that includes bike tracks, adventure paths and other journey-based elements are popular, with nature trails and paths providing opportunities to explore. Unstructured play in green spaces, away from screens, is as perennial as the grass and play spaces that allow

for this are simple but effective.

Accessibility is a major consideration, with inclusion now required to be an integral part of any design. Equipment that appeals and can be easily used by children who experience physical and intellectual disabilities can include ground level roundabouts, swings with side access and lift mechanisms for slides. Mixed materials can create a tactile, stimulating experience and colour choice can make a big impact.

Sustainability in planning is also a given in 2021, with an eco-friendly outcome and process being essential. Features made from recycled / sustainably sourced materials are coveted and, of course, the inclusion of recycling waste bins is a winner. Compost bins can also be merged into playground design, or fruit trees and veg patches for a 'garden to table' element to the space.

Weaving culture into design is a way to honour the traditions and beliefs of your community and its past. Themes relating to the area's past or its wildlife habitat, for example, can add educational benefits

and provide opportunities to incorporate informative displays into the design too.

Creating a place of play for all is key and schools can add great value by paying heed to the cultural, intellectual, and emotional needs of playground users, as well as just the physical.

Industry playground design perspectives

"Right now, both rope play and nature play have become quite popular," Austek Play's Managing Director Glenn Williams told School News. "As the built environment increases, it is becoming more and more important for us to offer opportunities for children to reconnect with nature. Rope play presents users with the opportunity to test and develop their gross and fine motor skills while also learning the crucial skill of risk management."

He explained that "a well-designed play space offers opportunities to play in a variety of ways. It's always important to consider the characteristics of the planned site and the users of the space to implement the best potential solution. ►



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◀ Some schools are fortunate enough to have various categories of play already well catered for, so it is important to understand what they will require in each instance. The best playgrounds are those which are designed based upon the input from the teacher, parent, and student bodies.

"First and foremost, the equipment needs to comply with Australian Safety standards. The play space also needs to be age-appropriate, offering a varying degree of difficulty and challenge as the children's gross motor skills, fine motor skills and risk assessment skills improve through play. The obvious elements, such as access to various elements and the suitability of play activities, are important. Ideally, the equipment will challenge the users, but not beyond their capabilities. Aesthetic differences can also affect the user's enthusiasm in playing on the selected equipment. The first step would be to contact a reputable commercial playground equipment supplier or an independent playground inspection company and carry out a comprehensive inspection of the current playground equipment. Following this inspection, the school can make an informed decision on the best way forward."

Alternately, a_space representative Dean Joel argued that teachers and parents do take playground design very seriously as part of a learning



Image courtesy of a_space

environment. He said: "I find that, in many schools, they are passionate about providing great play spaces to help children learn, socialise and develop. The positive byproduct of effective design is enhanced physical activity. I feel that with the disturbing decline in physical activity across our community, playgrounds in schools need to encourage and promote opportunities for children to build their strength and fitness."

"To promote increased physical activity, designs have moved toward the creation of circuits

that have a clear path with a mix of challenging obstacles," Joel revealed. "These circuits can emulate a child's fascination with television shows like Ninja Warrior where participants strive to complete the range of activities in the playground effectively. Once they have mastered the activities, it becomes about navigating the circuit as quickly as possible."

"Another growing design trend is the adoption of innovative play nets that provide less prescribed paths of play and instead promote experimentation and creativity of movement. Larger net structures house horizontal cargo nets at different heights that also serve as great places to hangout and socialise."

"The installation process varies among providers in the industry," Joel confirmed. "To work closely with schools and develop tailored designs, you have to consider the area available, the age of students, any special needs requirements, colour preferences and budget."

For Joel, "Size and budget variants are infinite with smaller playgrounds starting at around \$15,000 going up to mega playgrounds of more than \$150,000. The process of installation and associated site works can range from a day to a month. The typical budget for a school playground is around

\$30,000 to \$60,000, but some school spend over \$100,000. In selecting a company to deliver projects, it's always valuable to look at their past school projects and speak with those schools to ascertain their level of satisfaction."

Joel elaborated on different playground designs for different age groups: "Activity panels and sensory items combined with lower climbing, scaling and sliding items are valuable for the development of younger children. For older children between 7 and 12, climbing, scaling and sliding remain key elements but at greater heights to build challenge and excitement."

WillPlay general manager, Nathan Lee reminded us that schools are "getting a bit more adventurous with their play equipment designs" and are increasingly interested in "fitness style play". At the same time, he said that "playground surfaces are often determined by budget and what is available in the local area for future top-ups and maintenance".

He said: "Rubber and organic surfaces all have their own advantages, and in many cases the surface can become another play element. All ability access may lend itself more to rubber and synthetic surfaces and should be considered in any new play area design. Upgrades around existing equipment ▶



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◀ can include the addition of sensory items, activity panels and elements, such as climbing blocks, balance beams and even natural elements like timber steppers. The new equipment must be placed so that they do not impede on the fall zones of the existing equipment and should allow a natural flow from and to the new elements. It is often more cost effective to replace rather than repair older equipment to ensure compliance with the current Australian standards."

Structures that challenge climbers help develop many different skills. Indeed, Nathan said: "Core strength is the foundation for everything from fine motor skills to posture. Climbing and hanging elements such as monkey bars help improve the core strength that many children are losing from a more sedentary lifestyle, and this is an important element in setting children up for their future physical health. Studies have also linked increases in core strength to increased

educational outcomes.

"Through good planning and the use of 'zoning' children can move through different elements allowing different styles of play. Sensory elements can be suitable for all abilities and encourage inclusive play and social interaction. The use of natural elements like sandstone blocks and timber steppers that double as sitting areas in the design can create a quieter reflective play area, for use by individuals or in groups."

Furthermore: "Most playground equipment is designed to limit user access through certain design elements and heights of activities. Children play differently as they age and develop. Younger kids are more likely to engage in imaginative play, where older kids are after climbing and something that is more social. Older primary kids sometimes like a place to chill or hang, usually at the top of a climb or similar challenging element to get there." ■



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"This created the difficultness of only being able to complete small areas at a time, so it did not spoil. In addition to this, our product is porous, but we still had to had correct fall to all drains because

the cement in the base material reduced its permeability. There were many large, interesting shapes involved that were uniform to other materials on the ground, so if these were not marked correctly it would be seen from the floors above looking down."

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