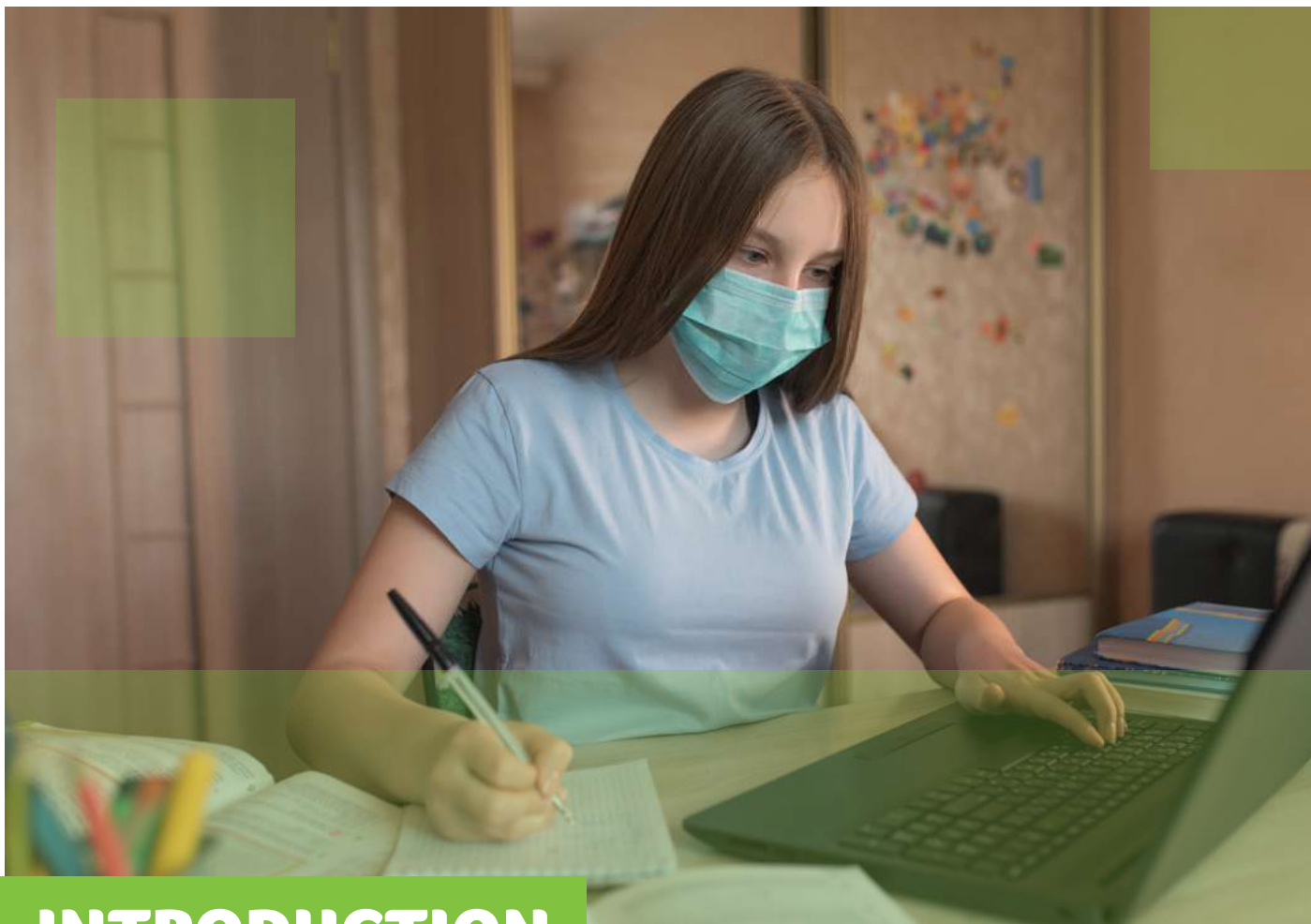# MOVING FORWARD WITH TECHNOLOGY IN 2021

acer

Windows 10

INTRODUCTION

The level of disruption that the pandemic has caused for Australian schools in 2020 has been profound. Yet, despite the challenges wreaked by COVID-19, the resilience and agility of Australian educators in their efforts to support student learning should be celebrated. Moreover, the wisdom gleaned from this unparalleled experience will prove invaluable to future generations of teachers and students alike.

At the core of the remote-led learning experience is technology – a key differentiating factor between education in this century compared with the last. This whitepaper focusses on the key learnings of the pandemic in the context of technology and online learning and discusses how schools can better prepare their resources for 2021 and beyond.

A DISRUPTIVE YEAR

According to UNESCO, over 87% of the world's student population – the equivalent of 1.5 billion students in 165 countries – were affected by school closures in 2020[1]. While the extent and period of closures varied significantly between Australian jurisdictions, schools have not experienced such uniform disruption since World War II[2].

Comparisons can be drawn between the nationwide lockdown triggered by the Spanish Flu in 1919 and COVID-19 in terms of the impact made on the education sector. Just over a century ago, schools across the country closed their doors as the deadly virus spread. It infected 40% of Australia's population and claimed 13,000 lives[3]. However, the key difference between the 1919 and 2020 classroom is the technology that has made online schooling a reality.

THE DIGITAL CLASSROOM

The rapid onset of the pandemic at the close of term one in 2020 meant that educators needed to adapt quickly to the digital classroom. Many teachers upskilled swiftly and successfully to adjust to the increased use of technology. While some evidence suggests educators lacked confidence in their ability to acclimate their teaching methods to a digital environment[4], other research found online teaching was just as effective as classroom-based teaching when there was access to the right tools and resources[5].

In fact, the Hon. James Merlino, Minister for Education of Victoria – the state which experienced the longest period of school closures during 2020 – pointed out that while remote learning presented challenges, there had also been significant benefits. This was particularly evident among high-ability students who worked best at their own pace, as well as students who had previously been disengaged or distracted in the classroom. The Minister recommended that schools take stock of the benefits and make permanent changes to their programmes as a result of the remote learning experience[6].

Furthermore, the results of a survey performed and published by The Educator in Q3 of 2020, showed an overwhelming majority of educators believed that online learning could improve educational delivery[7].

THE IMPORTANCE OF PLANNING

Perhaps the most salient lesson for the education sector post-COVID-19 is the importance of planning for technology resources such as computing hardware. Mr Rod Bassi, Oceanic Sales Director for Acer Computer Australia, explains that pre-COVID-19 schools were delaying their purchasing decisions to later in the year as supply of computing devices had generally been an action that vendors simply made happen.

"The national key learning is that planning shouldn't be given a commodity treatment for 2021 and beyond, it should be given significantly more consideration," says Rod. "If purchasing is left too late and takes a backseat to other priorities, vendors and suppliers will not have the same pre-COVID-19 commodity supply and it will take some time for the industry to bounce back to normal order."

To expound on his point, Rod said the pandemic was a reminder to Australians that our geographic isolation had an impact on our ability to import electronic products, especially when demand had increased so significantly in the middle of COVID-19.

"COVID-19 taught us all that Australia, geographically, is at the bottom of the globe and it takes time for products to get to Australia – particularly electronics – which mid-pandemic brought many challenges to the fore," he notes. "The challenge of getting product into the country, and then the compounded challenge of domestic redistribution meant that in some periods there were supply constraints experienced."

"Acer is uniquely positioned as the only global vendor who runs an Australian assembly plant," continued Rod. "The impact of this was realised during the height of COVID-19 in that we were able to scale up faster and to a larger supply degree than our immediate competitors. This gave Acer an incredible opportunity to cater to our existing clients and also new ones who came on board."

Rod's statement is supported by facts. Remote-led schooling and working from home sent demand for PCs in Australia soaring, with IDC reporting a market growth of 35.2% in Q2 of 2020[8]. Moreover, Gartner revealed a worldwide PC shipment decline due to the pandemic's disruptions on supply and demand in Q1 of 2020[9].

NATIVE AVAILABILITY AND AGILITY

The fact that Acer Computer Australia assembles computers in-country is a key advantage over other hardware vendors, particularly for the education sector, as it translates to better supply and support with Acer product. Nonetheless, that doesn't mean Acer has been impervious to the problems brought about by the pandemic.

"We're not immune to the challenges, but the fact that we do assemble locally puts us on a stronger footing, and many of the schools we partner with got to experience the positive effects of that in 2020," Rod explains. Acer will always be there to try and save the day but there's only so much we can do in a crisis situation."

Importantly, Rod acknowledges that Acer "practises what we preach" in terms of planning to cope with future challenges and local demand. He cited potential issues with air freight due to flight restrictions and union strikes that could stall processing at the docks.

"While we may be saying to our clients that they need to plan better and plan earlier, it's important to recognise that the same advice applies to us – perhaps even more so," Rod notes. "Just because we were in a position where we could supply and offer our value-added services to the education sector in 2020, doesn't mean we will be in the same position moving forward unless we double our efforts."

VIRTUALLY TECH SAVVY

Challenges aside, Rod praised the efforts of educators in their ability to transition from classroom-based teaching to online learning between the end of term one and term two. He credited their improved use of technology as a clear illustration of how the pandemic had been the catalyst for positive change.

"The most obvious example of educators learning to use technology better was the fact that they were forced without option to engage with their classroom virtually. If you consider that at the eye of the storm in term one it was chaos," he recalls. "But to the great credit of educators it was evident that between terms there a lot of deep, practical thinking about how to restructure and move to a learning from home environment."

While Rod said it might seem trivial, the improved use of technology on hand and adaptation to remote-led learning was hugely significant – mainly because it proved that educators were capable.

"Prior to COVID-19, teachers were looking at using technology in this way but in a pre-pandemic world they were almost dragging their feet on it. Then there was no choice, because it was either use and go online, or fail to teach at all," he says. "It was impressive to see educators as a cohort around our nation dig their heels in and collectively refuse to fail. Instead, they made their way through an extremely challenging time, and thankfully we have come through to the other side. We know now that if needs be, it can be done again."

CONTEMPORARY COMPUTING NEEDS

According to Rod, one of the fundamental attributes of the Acer Computer Australia product range is that they are designed with education in mind. Which means the products are renowned for their usability, longevity and lightweight nature.

"The product usability of our educational laptop range comes from the fact that we build from the ground up for this sector, rather than designing generic, all-purpose laptops," Rod explains. "Instead, we tailor products unique to the education sector, because it is a prevalent segment for us – it comprises 29% of our business."

Notably, students require mobility in the modern age, so desktops are largely on the way out and laptops have to be made to withstand the punitive environment and treatment they get at school.

"I think it's safe to say that there is no harsher environment than a school environment and the users within these environments!" he jests. "Joking aside, we put an incredible amount of research and development (R&D) into building these to withstand the education sector, because if they can last within this segment, they'll be suitable to other segments such as government and corporate enterprise too."

For this reason, most of the Acer for education laptop range is built and tested to military-grade specification.

"We put a lot of investment into military spec testing and passing of product, not for the entire range, but for most of our range. While it costs more to do that at the beginning of the device lifecycle, it's important, because the devices last longer," he explains. "We'd rather make this investment upfront than cut corners to try and save costs."

Perhaps more importantly, the laptops have to be capable of all-day computing and be lightweight enough for students to carry them the entire day, from classroom to classroom and outside of school hours.

"They need incredible battery life and Acer have been breaking a lot of ground in battery technology in recent years. The batteries can last almost a full day – not a school day – but we're talking around 18 hours in the day," Rod enthuses. "At the same time, they need to be manageable in terms of weight. Weight is the hardest trade off in terms of strength and rigidity of product. While we can make a laptop to weigh 500g it's not going to last very long! After much R&D we've hit the sweet spot with our 1.2 to 1.5 kilo weight range which allows us to achieve lightness without compromising on the rigour required for these products to survive."

Acer also works with its partners to ensure the laptops are priced to suit school budgets and can last the time period allocated to them.

"We work with Microsoft and Intel to set standards for mainstream solutions and make these as economically viable as possible," Rod explains. "Honestly, the technology that both Microsoft and Intel are delivering at present is making the machines run incredibly efficiently for a three-year period, provided the students look after their device."

THE SECURITY ISSUE

While cybersecurity and keeping students safe has always been a priority for the education sector, Rod cautions that schools need to ramp their efforts up in the wake of the pandemic. A part of the solution, he says, is that educators can reach out to those with subject matter expertise.

"Setting the right frameworks and making sure there are executable actions within a school environment, as well as checks and balances, is important. However, you can have the best standard operating procedure for security but if you don't follow it, there will be no value in it," he expands. "I believe schools should try to reach out to subject matter expertise for a check up. While Acer is not an expert in security, we do have access to an industry that has that skillset and we're proactively trying to enable relationships so we can facilitate discussions and solutions for schools."

Rod also cited the Microsoft Intune for Education as a solution that could benefit schools using the Acer educational range of Windows 10 laptops, such as the Travelmate B3, Spin 3 and Spin 5 laptops.

Microsoft Intune is a cloud-based service that focuses on mobile device management and application management. It has been lauded for its simple setup and quick deployment of apps to students and teachers, enabling an efficient and safe classroom experience. Rod points out that Microsoft are heavily invested in the security aspect, and that this may be an ideal solution for some Australian schools.

"Microsoft has invested heavily into the security of Intune, and by schools applying this to their Standard Operating Environment, they should be able to achieve many of the security aspects that reduce their exposure to risk," he concludes.

IN SUMMARY

The year 2020 will be remembered for many years to come, but moving forward into 2021, the education sector in Australia is undoubtedly prepared for a more technology-immersed learning experience. It's also been a reminder to schools that planning is essential when it comes to hardware purchasing and management in order to meet student requirements, as well as provide longevity, usability and security in the schooling environment.

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