# Transcript

**Leading Schools During Times of Disruption:   
Bruce Armstrong**

KIRRILY GEORGE:  
I would like to acknowledge country and acknowledge the Traditional Owners of Country throughout Australia and pay our respects to the ongoing living cultures of First Nations people. Traditional Owners are the first educators of their children and have a long and unbroken history of teaching and learning through sharing connections to land, waterways, skies, language and culture. Through education, we are really in a very privileged position, and we walk towards the creation of an equitable and inclusive community for all of our learners, and we express our commitment to nurturing the continued growth of educational leaders. We feel optimistic about our future and solemn and learning from the lessons of the past. My name is Kirrily George. I am a principal in Residence at the Academy of Teaching and Leadership. Very excited to have you all with us today and to see you all join in what will be a fantastic session with Bruce around leading schools during times of disruption. I am privileged to be able to introduce Bruce today and I have been very fortunate as well over many, many years to have engaged with Bruce.

In fact, not that long into my career, I engaged with Bruce as an assistant principal a presentation at a local event. But Bruce is a highly respected educational leader with over three decades of experience within the public Victorian education system. He commenced as a teacher in secondary classrooms. He progressed to the principal class and significant leadership roles. He has been the Executive Director in the Department of Education and the Deputy Secretary of the Regional Services Group. And close to our hearts here at the Academy, he was the inaugural director of the Bastow Institute, which is now the Victorian Academy of Teaching and Leadership. And he has been very instrumental in spearheading many initiatives that have shaped the lives and careers of thousands of educational leaders and our students. He's a seasoned thought leader, and he's known for his values-driven approach and also known for being a deep learner himself. And that is the core of Bruce's being as that he continues to learn on a day-to-day basis, and he has a deep commitment to empowering leaders, schools and communities to thrive and he has a strong focus on leadership, organizational well-being and navigating change in educational environments.

And as we go through our session today, just a reminder that we have a Slido in the chat and that please engage with that as we go through if questions arise for you. But without waiting any longer, I would love and have very much pleasure in handing over to Bruce to share with you his great insights as they currently stand. Thank you, Bruce.

BRUCE ARMSTRONG:  
Thank you so much, Kirrily. Thank you for your warm introduction and generous introduction. Thank you to all the Academy team that have been working behind the scenes to make this webinar possible and a very warm welcome from me to this webinar after the end of a busy day at school for you to commit to your learning and to being here with me online, I really appreciate it. So the title of the webinar is Leading Schools in Times of Disruption, and I have the privilege of working still with many educational leaders across Australia and I'm very close to working with lots of middle leaders and school principals and leadership teams and networks of principals and it was interesting in having my haircut the other day, the barber said to me, "Has the world gone mad?" Like the world feels very upside down, almost off its axis and we had this long chat as he slowly cut my hair and I think that this Escher Drawing represents some of the disorientation that people generally are feeling, but particularly leaders of organizations and leaders of schools as they respond to policy changes, the increasing body of educational evidence that they're meant to interact with for their learning communities, but also the disorientation about what does it mean to lead well when so much is going on beyond the school gate and children and young people are bringing all of that and our staff that we care for, our teaching staff and educational support staff that we care for.

And so some of the leaders that I work with and coach feel like they're just hanging in there. They're feeling exhausted mentally and physically post the pandemic, feel that they haven't quite got their foothold again and they're just hanging on. And so part of my role as a mentor and a coach and working with principals and leadership teams is to help them get much better strongholds and fixing points and to make sure that they're tethered to each other and tethered well to broader networks in the educational ecosystem so that they can take the long road, the marathon, which is educational leadership, and to make sure that they're kind of fit for mentally, physically, spiritually, emotionally, for the place of leading, which we'll touch on as we move through this webinar. So, I know that for many, their heads feel like this as they drive up into the car park and get ready for another day at work. All of their personal lives that takes in all of the disruption that's going on in the broader society both nationally and internationally, but also trying to get a fixing point.

What's my true north? What's this sense of vision and values that I have for this school community? Is it shared? Is it owned? Is it coming to life within my school community? And so how do I find a fixed point in the storm? And we'll talk about being a calm and non-anxious presence as a leader as we progress through our time together. But I wanted to start off by thanking you. Who am I no longer have any position of authority in the system to thank you for your contribution to public education, but I strongly believe that the work that teachers and school leaders and principals do and system leaders across the state of Victoria and beyond in public education is so vital. It's so vital because one of the great disruptions to our society is increasing polarization and intolerance of people that are different to ourselves. And so public education as Neil Postman said doesn't serve a public. It creates one. Therefore, what type of public do we want to create? And public education welcomes all people regardless of their background, their circumstances, their socio-economic circumstances, their cultural and linguistic background, how long they've been in Australia for or whether they're recent arrivals or have been here for many, many years and indeed, our Aboriginal and Torres Strait Islanders whose culture goes back to 60,000 years that we acknowledge at the beginning of this webinar.

So I want to thank you for creating that public education system that welcomes kids, regardless of their background and circumstances, but is striving for continuous improvement and high quality because there's no use laying out the welcome mat unless when they're received into our school communities and into our classrooms, they have the highest quality of educational provision through high-quality teaching that promotes learning, development and wellbeing. So let's look at some of the markers of this disruption very quickly. We're going to take a kind of a bit of a headline view of what has increasingly become to be called the poly-crisis. And the generally recognized definition of a poly-crisis is the simultaneous occurrence of several catastrophic events. Building on this, most experts agree that it tends to refer specifically not just to a situation where multiple crises are coinciding, but one where the crises become even more dangerous than each disaster emergency on their own. So it applies systems thinking to the interconnected nature of the crises that we're facing.

We're going to have a look at a couple of them, and also increasingly being referred to in the literature more recently as the meta crisis. And that looks more at the emotional and mental and physical reactions, the kind of psychological reactions that people are having to the polycrisis, to the permacrisis, as some are calling it. And that's our kind of emotional felt experience as we receive this information through our social media feeds and what impact it's having on our mental and physical well-being and the social interactions between each other as we face into these crises. And so the World Economic Forum put out this diagram, which I think just at the very nature of its web of relationships between the various nodes of crises in those risk categories, the economic, the environmental, the geopolitical, the societal, the technological. So not only is it a crisis that Russia, as a major power, invades its neighbour the Ukraine some two years ago setting off the kind of crisis in Europe, that it affected then grain and fertilizer prices and the impact on those that needed grain the most in the global South and then in effect disrupted the distribution of that across the globe.

And then the war in the Middle East between Israel and Gaza and the political tensions that that has set off and the volatility in the Middle East, and then the impact that that has across the globe. And so whilst there's one thing that's happening, it has a compounding effect of crises across the globe. So, you know, a drought in China and in the Mississippi River Delta region and flooding in Pakistan pushes up global food prices. So we see these interconnectedness. And we felt that interconnectedness, that web of interconnections, the fragility of many of our systems and processes globally particularly during the pandemic that threw that into relief in a very, very strong way. Anyone remember the rush for toilet paper and the crises in the aisles at Woolies and Coles? It says that, you know, there's not very many days between us and the breakdown of civilization in Western advanced economies in terms of our supply chains, and we're still recovering. Mo Gowdat who is well known for his very strong views and concerns around the development of artificial intelligence because he was an expert that was under the hood.

He was helping create it. He's now the ex-chief business officer from Google X but Google X was the large investment hub for Google's kind of moonshot projects. And so he says this, economic, geopolitical, global warming, climate change, the whole idea of AI, this is a perfect storm. This is the meta crisis, the depth of uncertainty. It has never been more intense. And in fact, he is one of the people who is very, very concerned ethically about where AI is going. He says AI is inevitable. AI is inevitable that it will eventually be more intelligent than humans and that bad things will happen. That's these, kind of three points in summary. And bad things will happen because there will be bad actors that will use AI for bad purposes and because it's so incredibly powerful as part of this crisis that is facing humanity, it's one of the key existential crises that we need to face into ethically, I think, as educators. And then so if we just kind of take a snapshot of global warming and the climate crisis, and this was taken from last year, the hottest recorded temperatures on the planet, and it looks like we're heading that way from the northern summer and into the southern summer as the seasons change.

Our interior temperatures at the moment are causing the wind gusts across Victoria and southeast of Australia are because the centre of the continent is about 12 to 14 degrees warmer than it would be normally at this year. Now, weather is different to climate and you know all of those caveats but the science points to human-induced climate change. And so year on year, the Earth is getting warmer. And even if we weren't so concerned about the climate crisis, which I think is a very significant challenge for humanity, the loss of biodiversity across the planet and the impact that climate change is having on the poorest of the poor in the world, again, should be of concern to us. And I think is a very significant part of this disruptive times that we live in. And common sense says that if we look at what's happening around the planet and particularly the shrinking of the polar ice sheets and glacial retreat and these temperatures that were recorded staggering temperatures last year. So have I got your attention yet?

At the end of a busy day work day, you're at your desk or sitting in your school, have I got your attention because one of the key challenges, one of the most significant challenges to leadership, I think, is the challenge to our attention, our capacity to attend and focus on what really matters. And that is because of the profound changes that have taken place, profound changes that have taken place in the use of digital technologies, particularly the iPhone and Android phones, the launch of the iPhone back in 2007. And James Williams was a Google advertising strategist. He was a senior executive that took off to Oxford to do his PhD and this is what it's called, Stand Out of Our Light. And what he is saying is that there are three types of light, spotlight, starlight and sunlight and we need all   
of these things. We need the starlight to guide ourselves into the future, to think long-term. But if we're distracted in the present, we're not able to attend to the longer-term goals. And he says that's leading to significant challenges in organizations that are focused on the immediate and for people's personal lives because they're so distracted in the present that they're not thinking about the medium in the long term for their lives, and it's robbing us of that epistemic distraction is robbing us of being able to set worthwhile goals for the future, for the things that we really value.

So here's the number of times it's estimated that a person touches their phone each day. That's pretty staggering. And the majority of people, three-quarters of people, sleep next to their phones. And we set off the dopamine hit at the beginning of the day. The alarm goes off when we're checking either during the night our little red messages that are sitting up on the top on the right-hand corner of our apps to be curated and checked. It's staggering to think that we invest that amount of time per day, think about that across a week, across a month, across a term, across a lifetime. And so, you know, the staggering amount of time that teens spend on their phones is really quite extraordinary. And if it's true that our attention is being monetized and we are being distracted, it has a particularly important impact on our levels of cognition because there's lots of talk about at the moment about cognitive load theory, about how much we can take in in short term memory and then how we are able to put that and place that into long term memory for learning and then retrieve it and use it flexibly in new and novel situations.

But if our cognition is impaired and compromised by distraction through our devices, through our apps, through social media, through powerful platforms and algorithms that shape our attention, then we have a serious problem about our capacity to think deeply about complex problems. Now, I wasn't deputy secretary when this was announced back in. I just retired and Minister Merlino announced the ban of mobile phones in Victorian government schools. And so I was able to have an opinion. And at the time when it was announced, I thought it was a really bad idea because I thought these children and young people, they are digital natives, if you want to use that expression, and particularly Generation Alpha from about 2010, there's 14 years of just living with devices. They're kind of saturated with digital devices, online platforms, social media feeds, and we should teach them to use it effectively and well for learning in schools. But I changed my mind, and I changed my mind because I had time to read the research and to look at what the most senior people in these companies like Facebook and Instagram and TikTok and Google and Apple were saying about what it was doing to our attention and what distraction was doing to people and the impact that I believe it has on people's mental health and wellbeing.

And so the first activity that we're going to drop you into your breakout rooms, you'll go in there automatically. And so you don't need to click on anything, don't click on OK or you'll log yourself out of the session. Just go into it. And I want you to think about when was the last time you changed your mind about something really important. I changed my mind about the mobile phone ban. After doing the research and reading myself, I believe it was a good thing because it was sending a message that you're here to learn and that these devices are impairing our cognition because it's distracting us and not allowing us to attend and focus deeply on things that we really value in learning and was and is having a negative and deleterious impact on people's wellbeing. So we're going to drop you into the chat breakout rooms for you to be able to just have a think about and chat together about when was the last time, not that I used to like tofu, but now that I went to a restaurant and had really good toppings on it, I love tofu, but something really substantive that might have shifted your belief about something and it impacted on your values and your perspective.

So over to you. Well, look, I hope that gave you an opportunity just to have a chat about what it takes for us to shift our thinking because it is really important for us to think about well over the things that really matter, we tend to narrow our perspectives and the field of evidence gets narrower and more reinforcing. And that's particularly true as we age as I can say that the opportunity to learn is this kind of green fields of brain plasticity that allows us to develop new neural connections and new synaptic connections and to learn new things but it does require us to think about when our deeply held assumptions and beliefs and values are challenged, how do we wrestle with that? How do we wrestle with these ideas? So mobile phones were one for me, and one of the reasons was the evidence, the overwhelming evidence. And so if you're interested in a book,

BRUCE:  
The Anxious Generation, How the Great Rewiring of Childhood Is Causing an Epidemic of Mental Illness, is a great book to read. If you weren't quite convinced or if you were looking for something that could be really helpful for parents, if you want to communicate on a parent evening or through a newsletter or something, I think his material is very, very helpful. He's a social psychologist and he's a professor of ethical leadership, which I think is a nice framing. And in The Atlantic, he wrote an extended essay where he talked about the terrible costs of a phone based childhood, and he talked about the decades since we've seen the onslaught of social media through the smart phones that is hostile to human development. And he was basically saying since the early 2000, and we'll have a quick look at that, that the rates of depression and anxiety in the United States, which were once fairly stable in the early 2000, rose by more than 50% in many studies from 2010 to 2019. I mean, that's just staggering statistic.

The suicide rate rose 48% for adolescents ages ten to 19, and for girls aged ten to 14, it rose 131%. So, this was some of the evidence that started reshaping my thinking. And I'm just going to show you a couple of quick graphs here, and you'll just get the kind of idea from that quote. From the article, you can see the jump up, the introduction of the iPhone in, I think, it was around June, 2007, you can kind of see this exponential, and particularly for girls. And I think that that has a lot to do with identity formation. And girls are more strongly networked and they tend to be more strongly networked online too, whereas boys tend to be more involved in immersed in gaming, online gaming. Girls tend to be in those social networks regardless of the platform that they're using. And it's interesting that self-reported disabilities of college freshmen, if you look at psychiatric disorders and where that starts to jump up around this kind of acute period around 2015 to 2016, this is self-reported, of course.

And then young people who struggle to find meaning in life, so we've got the early onset of the pandemic. This is during the pandemic period, but it's much higher for girls than it is for boys, but it's still acute. The loss of (INAUDIBLE), meaning the loss of a horizon of hope. And so, these are really critical questions, I think, for us as educational leaders. And he's looked at the literature through research across kind of Western liberal democracies, if you like, Europe, Australia, the UK and Canada and so on. So, he's saying that it's not typical only to the US that it is found broadly. This generation Z are really suffering from anxiety, depression, self-harm and related disorders. And it also showed up in the PISA survey from their report from 2022 in the maths results, 45% of students reported feeling nervous or anxious if their phones were not near them. But these are kind of some staggering statistics. And we can see this from McCrindle research, this helpful poster and template, and you can see that students who are born in 2010, that group are now 14 years old, so they're in lower secondary school, have been completely immersed in the fast changing, rapid production and access to digital technologies of all forms.

And so, Jonathan Haidt, one of his recommendations was no smartphones before high school, no social media before 16. Free phone schools and more independence, free play, and responsibility in the real world, which we will touch on as we get through this webinar. But I think that that's really instructive because as parents are trying to navigate this space, and I think that we do have a responsibility as teachers and school leaders to be thinking about how are we getting this information out, how are we providing parental support and community support and forums for people to explore what it means to be good parents? What does it mean to be supporting schools with these types of approaches? And Andy Crouch wrote a book that was really focused on helping parents. And he was saying that the breakdown of face-to-face context and that it's all gone into immersive online platforms where students and young people, teenagers are able to communicate behind the scenes, if you like, from the privacy of their bedrooms, that it's no longer coming into the living room and around the kitchen table.

And so, children are isolated with their problems, and then other children of the same age are trying to help them with acute problems that their peers may be having, it might be with body image, it might be with eating disorders, it could be with mental health problems. And they're becoming the peer kind of therapists rather than the adults getting involved because it's not in the public domain. It's in these private conversations behind the scenes through social media apps that have been their algorithms towards getting kids attention. So, you know, as Jonathan Haidt said, "Education should not be intended to make people comfortable. It's meant to make them think." And in his book, The Coddling of the American Mind, he was saying that we are setting a generation up for failure because we are bombarding them with information that's affecting their mental health. And we're also coddling them, and we're overprotecting them, which is not allowing them to become mentally or physically resilient.

And another really, critical disrupter that I think is a key one for schools is loneliness in the digital age. And we'll just quickly have an overview of this. So, the world's first Minister for loneliness was appointed in the UK, and then not far behind, in 2021, one in Japan. And many governments now are considering how to tackle the epidemic of loneliness, which affects people's health a bit like the same level as the deleterious impacts of chronic smoking and obesity. They're the kind of life affecting longevity impacts of acute loneliness. And some of the latest stats from Australia, 33% of Australians report feeling lonely, which is defined as the distress someone feels when their social connections don't meet their need for emotional intimacy. That's a third. 15% of Australians report experiencing severe loneliness, a persistent sense of always and often feeling alone. So, you can be with people physically, but feel alone. And the latest data from the HILDA survey said that young people aged 15 to 24 reported being the loneliest cohort in the country, that school aged children.

As of 2022, about one in five or 17% males and one in six, 15% females were experiencing loneliness. I mean, that's extraordinary. And so, this was kind of predicted by Aldous Huxley in his book, The Brave New world. This dystopian future that he wrote about in 1931, republished in 1932. He said, "We failed to take into account man's almost infinite appetite for distraction."He envisioned a dystopia, not of dictatorship, but of distraction, where sex, entertainment and the busyness tear apart the fabric of society. The dictatorship of our day is distraction. I mean, how prescient is that? Staggering, isn't it, that nearly some 90 years ago, 94 years ago, he wrote about that? He said he was concerned about the drowning of truth in a sea of irrelevance. And we only need to look at the kind of misinformation, disinformation and outright lying that has taken place across the globe is truly, truly disturbing. And so, people who are in the know, like Sean Parker, who worked at Facebook as a senior executive, said, "God only knows what it's doing to our children's brains and what it's doing to ours as well."He mentioned that he has become something of a conscientious objector on social media.

And because it consumes so much of our time and attention and causes distraction and provides a positive reward system through dopamine, we are becoming fixated to our devices for pleasure. That tips us over into pain. And so, the reign of plenty has now become the pleasure principle that's now causing acute psychological and psychic pain across our society. And so, Tristan Harris, who has established the Center for Humane Technology, is well worth looking up. Many of you would know from his Netflix, special that was put on the social dilemma, but he's also now one of the people who's pointing to the dangers of artificial intelligence, he says, "All of our minds can be hijacked. Our choices are not as free as we think they are." And if you've ever been down the YouTube algorithm tunnel, you will know that we keep on being fed of more of what we've liked, rather than being open to broader views and other discourses, which can shape our mind, and therefore, our behaviour, and in the long term, our habits and patterns.

So, we're in an arms race for people's attention. And I think that this is really important, going back to James William, he says, "What do you pay when you pay attention? You pay with all the things you could have attended to, but didn't, all the actions you didn't take, all the possible views you could have been, had you attended to those other things. Attention is paid in possible futures forgone." And that is really critical if we think about part of the role as teachers. And in particular, is helping form children and young people for their futures, equipping them today for tomorrow, giving them the knowledge, skills and dispositions that will allow them to thrive into their future. If we are unable and distracted ourselves and not able to attend to what's important, and particularly as educational leaders, as principals, assistant principals, leading teachers and learning specialists, we are charged with a critical role of thinking about, deeply about educational issues, about interacting with educational evidence and thinking about the culture of our school and how to bring about improvement.

If we can't think deeply about the future we're seeking to create and what we want our school to become and what we want children and young people, what we think they need to know and be able to do after being with us for six or seven years, then that distraction is paid with a very high cost. James Williams says, "It is my firm conviction now more than ever, that the degree to which we are able and willing to struggle for ownership of our attention is the degree to which we are free." And he believes it's the defining moral and political struggle of our time. And I tend to agree because, as John Mark Comer says in his book, The Ruthless Elimination of Hurry. He says, "Because what you give your attention to is the person you become. What you give your mind to, will shape the trajectory of your character." So, if we are helping shape children's minds through teaching, and if we're helping form them through their character and through socialization and preparing them for their futures, if we are all distracted and our attention is robbed from us, we are robbing the really important heartbeat of what it means to be a learning community.

So, we are distracted and dangerously tired, and it's affecting people's wellbeing because they're not sleeping well. The light that we get from our devices before we go to sleep is interrupting our sleep patterns. We don't get good rest. We wait during the night, we reach for our digital device to distract us even further in the hope that it will put us back to sleep. And so, we have a load that is breaking our limits. Margin has been lost. And one of the questions, and one of the challenges, I think, of being a leader in a school is how much margin have you created? How much margin have you created so that you can find the space to be quiet and still, and to think strategically, not just operationally, but to think deeply? And so, I've got a little quiz here for you to think about your top three. There'll be a link in the chat when you go out into your breakout, and there are top ten. And I want you to think about what are my top three and do I have hurry sickness? So, things like irritability and hypersensitivity and restlessness, you know, that kind of sense of dis-ease that we have, that we carry around with us.

Are we driven to work? Is there emotional numbness? Are our priorities kind of out of order or we don't care for our bodies? Are there behaviors that we indulge in to escape either excessive drinking or social media or surfing or scrolling endlessly? The slippage of self discipline and social isolation that comes when we're disconnected. Our priorities are not ordered well, and we miss the company of family and friends and others. So, you'll see a Slido link. You can pick your top three and drop them into the Slido. So, click on the link in the chat and Meredith will drop us into our chat rooms now. Thank you. Welcome back. I don't know how you found that thought about your top three. You could rank each of those items from one to ten and give yourself a score out of 100 to find out how hurried you really are. But I think that the key thing there for me is that we live in an environment that pushes us to productivity and to pleasure and to more. And so, it's good to take stock about what the impact is that having on me as a leader, on my physical wellbeing, my emotional wellbeing, my spiritual wellbeing?

Like how am I showing up and what influence am I having on the culture of my school? And we'll touch on that very critically. But what is important is that the children and young people who are coming into your school are dealing with all of these disruptive forces in their lives, and the staff are coming. Because you're coming into an environment where you're wanting them to improve their professional knowledge, their professional practice, and their professional ethics, which means change. But already their quotient of change is largely being eroded. Their emotional well and cognitive load is being under pressure outside of their workplace. And then they come in and we're asking them to continuously improve. And I think it's really important for us to have this wider lens of what's happening in the broader environment. And he says that in order to do anything that matters, we must first be able to give attention to the things that matter. And as an educational leader, you're really wanting them to, your teaching staff and support staff and allied staff to focus on things that really matter, that make the most difference to children in the classrooms.

Doing so has never been easy, but lately it's become harder in new and surprising ways. Now, many of you would be, have been exposed to the work of Daniel Kahneman, an economist who wrote a book called Thinking Fast and Thinking Slow. And he said, "Basically, there are two systems in our brain, one for thinking fast, which is intuitive, reflexive, that's there on and on all the time, helping us to navigate daily life. And it's important, it's kind of in that autonomic nervous system. And in our thinking systems, there are two systems. The other system is one which is much slower, and it's for deliberative thinking about complex problems. Both are needed, both systems are needed, they both interact with each other. But if we don't give ourselves time to think fast and think slow, if we don't slow down our thinking, most of what we need to do for school improvement is solving complex problems collaboratively with our teaching and support staff, so that children's learning and wellbeing will improve.

So, we need to think as leaders, where do we create margin for the slower thinking? For that second system of thinking that's deliberate, that's intentional, that works with evidence and research, that challenges our presuppositions and our world view, that allows us to think slowly enough to change our mind about the things that really matter? And he says this, "Our brains are highly evolved to perform many tasks with great efficiency, but they are often ill suited to accurately carry out other mental tasks. In fact, our thinking is riddled with behavioral fallacies. Consequently, we are at risk of manipulation, not usually of the overt kind, but by nudges and small increments." And what he's saying there is that we bring bias, a whole range of different type of mental models and biases to the problems that we're confronted with, and that's why we need space for slower thinking. So, when do you shut your door? When do you do your deep thinking? Is one of the challenges that I want to put before you.

What are the environments and the settings and the spaces that you're creating to do that deeper thinking about the things that really matter as an educational leader? Because one of the key things that I think that was a key to Steve Jobs success, and certainly the book by Walter Isaacson would point to this, and the team around him would say this, is that people think focus means saying yes to the things you've got to focus on. So, if you think about your strategic plan, your school plan or the annual implementation plan, you're thinking it's about saying yes. What he was saying is that true focus is saying no to the hundred other good ideas that there are, and you have to pick very carefully. That's the true skill of a leader, is knowing the right thing to do at the right time and the right way, and it's knowing that, it's picking from the many valid and worthwhile things that parents, carers, students, staff want to bring before you to host within your school environment. If you want to get improvement, focus is really key.

Ond one of the big challenges, one of the other major disruptors, so we've looked at digital distraction, loneliness, the climate challenge, the other really critical existential big challenge for us as educators is artificial intelligence. And the pace of change, which was signalled in Moore's Law, is that this exponential, many would say, people like Tristan Harris at the Center for Humane Technology would say we're on a double exponential curve. People like Mo Gawdat would say that where things are going to happen at a blindingly fast pace. And you can see that many predict already that we're at large language models, there's a big debate in beyond the hype about whether we have met or exceeded human level intelligence already through artificial intelligence. But many would say that 2025, 26, 27 are going to be really critical periods in which we're seeing this exponential takeoff in the capacity of artificial intelligence. And one of the biggest computers, the fastest computers called Cortex, is being built by Elon Musk and Tesla at the moment in Texas.

That will put huge amount of compute available for artificial intelligence throughout his products and services through full self-driving, and particularly with Optimus, his robot, and the data that they're using for Optimus. Another leading edge supplier of robotics, so its artificial intelligence embedded into robotics, which is going to disrupt work in all sorts of profound and deep ways over the next two to five years is figure two. We don't have time to take you through that, but if you're interested in it, you can drop it into Google or into YouTube, and you can see how advanced. Just the work on robotic hands and fingers for fine motor skill development and the gait and walking of robots has advanced even in the last four months. And not to say the implantation of a chip into the human. This kind of work on the transhuman future and the advances through Neuralink, which is another one of Musk's companies, and what it's already doing for people who have paraplegia and quadriplegia.

Quite profound advances in technology that are giving people hope and are doing many good things. But what does that mean? The brain... Computer interface, what does that actually mean for humanity and our understanding of what it means to be fully human? Big philosophical question. So if you look at the macro scale, it's quite profound, artificial intelligence. But also at the genetic scale, what is profound about the work that Jennifer Doudna is doing through gene editing and what that means for the future of the human race? These are hugely profound ethical questions. And the pressure is on educators to adopt these technologies through AI agents and large language models into their teaching. And I would direct you to the work of Leon Fors if you're interested in a thought leader in education who I think is really wrestling with these questions. Shout out to him. I think he's got some helpful tools and tactics that are available. And through the Department of Education in the US, they've released some insights and recommendations last year that I think are helpful.

If you're looking at the impact of artificial intelligence on the future of teaching and learning. And we have people like Salman Khan, who is probably a techno-optimist, and he set up the Khan Academy, which I think has been particularly helpful to give people, particularly in impoverished circumstances, access to high-quality mathematics education. He is now producing an online AI tutor that can individualise tutoring in a whole range of domains through Khanmingo. Another one worth looking at. And yet behind it all, the people at the very head of all of these organisations, people like Sam Altman and Elon Musk and all the signatories, I think there were 161 plus people that signed the declaration asking for AI labs to slow down, and yet there has been an unrelenting advance through Google and Microsoft's partnership with OpenAI and Elon Musk with Grok and other actors and players in this space, the advance of AI seems to be on an unrelenting trajectory, even though many of them are calling for governmental regulation.

And the EU are now looking at how to regulate artificial intelligence. There's been a recent act, I think, that is about to be passed in California, and governments are struggling to keep up with this profound growth in artificial intelligence. And so it does open for us what does it mean to be human, which I think is a profound philosophical question in our role as educators, but also presses us into to understand all the evidence that is being put out under the Science of Learning banner and the profound nature of how the human brain learns, and what we can learn from all of the different sciences, cognitive psychology, social psychology, cognitive neuroscience, neurobiology, neuroscience itself. And some of these things are a long way off and yet many people purport that it's much closer, the nexus between what we know from research and what can happen in the classroom. But that's often more tenuous. So it's often good to bring some degree of questioning to what the science obs actually mean.

And there are other fields and ways of knowing than scientism, is the knowledge that we get through the belief that many purport that we can only know reality through the sciences, the physical and chemical sciences and biological sciences. That is true that there are sciences that can help us, but there are other fields of knowing through epistemology and ontology and so on. But we need to be curious about how the brain learns and what we can learn from the latest research and how that might be applied in the classroom and in our setting. This is a phenomenal picture. I think it's quite remarkable that this is a picture from a cubic millimetre of the brain from the largest-ever data set of neural connections. That was a joint study between Google and Harvard over a ten year period. And I'll read this just to be accurate. "This is an image of a cubic millimetre of brain tissue. And it may not sound like much. But considering that that tiny square contains 57,000 cells, 230mm of blood vessels, and 150 million synaptic connections, all amounting to about 1,400 terabytes of data.

Harvard and Google researchers have truly done something stupendous." So I think that's just a tiny fraction of our amazing brains. We are truly, fearfully and wonderfully made. We bear the imago Dei, the image of God. And Dr Greg Dunn has done a lot of work on neural art, and I just wanted to show you a small snapshot of his video of the interaction (AUDIO DISTORTS).

DR GREG DUNN:  
(VIDEO PLAYS) So I'm gonna give you a little tour of the brain here. So this is it in animation mode. And these are these neural circuitry modules that we've created to show you what the brain might be doing, for example, in the parietal cortex here, as you're reaching out to grab something where your vision and your sense of space are being integrated. Here we're coming into the somatosensory cortex, where the neurons are communicating to give you a sense of what it feels like to run your hand over your arm or something like this. Here we're getting into the motor cortex. This is right up at the top of your brain right here. This has some of the largest cells in the body. These layer five Betz cells, which are sending motor information down through your spinal cord. Now, we're getting into the frontal eye fields, where you're helping to track your vision to what is relevant in your visual field. And you can see that this is the cortex of the brain. So this is the outer walnut covering that's organised into these neural layers which are sending information up and down.

And as we get closer into the frontal cortex, this is the part of the brain which separates us from other primates. This is what makes us human right here. This is the part of the brain which spins on its own. It's communicating without any sensory input, really. I mean, it integrates it, but it's capable. This is what thinking looks like. This is what making decisions and planning your next move and using logic. This is really the most evolutionarily recent part of our brain. And one thing you might notice relative to the occipital or the rear portions of the brain - so we're right here now, by the way - is that there are a lot more inner neurons. (VIDEO ENDS)

BRUCE:  
I mean, it's truly beautiful. And if you get the opportunity to have a look at that at length. (AUDIO DISTORTS)

KIRRILY GEORGE:  
Bruce, we're not able to hear you now that you've put your Earpods back in. Can you hear us now, Bruce?

BRUCE:  
Yeah, I can hear you. Can you hear me?

KIRRILY GEORGE:  
Yes. Thank you.

BRUCE:  
So, Dr Iain Mcgilchrist is a professor from Oxford. He's a psychiatrist, a neuroscientist, a philosopher, a really a polymath in many ways. And he wrote a book some time ago called 'The Master and His Emissary'. And his most recent work really quite a tour de force is the matter with things our brains, our delusions and the unmaking of the world. It's a really large two-volume set. So I'm not sure that you'll have time to read 1,400 plus pages, but he points to some things that I think are really important. And I'm gonna quickly jump through this and leave it to you to be able to inquire when you have some time. But he asked the question about the two hemispheres of the brain. Why we've got two hemispheres, why the brain is asymmetrical, why is it connected with the corpus callosum at its base, which is basically inhibitory, what are the two different functions of the brain? And he debunks the old science that came out in the 1990s and early 2000 about different work across the hemispheres, which a lot of it was pop psychology.

But he does say that there are two hemispheres, and they have two different ways of attending and understanding the world. And we've been looking at attention. And he said that the division of the brain brings to bear two different types of attention that we bring to the world at the same time. The left hemisphere, which is basically narrow and focused and directed by our needs, which looks at the pecking and gathering, and the other side of the brain, which is the right hemisphere, which is organising and keeping an eye out on the world so that we won't be eaten by a predator while we're pecking to get food or while we're... So it's broad, it's conceptual, it's big, it's integrating. And he's saying that the left hemisphere of the world should be the emissary, not the master. So he goes on to say that what's happened is that we've privileged the left hemisphere's way of looking at the world, which is small, mechanistic, fragmented, and contextualised and marked with an unwarranted optimism that's mixed with paranoia and a feeling of emptiness.

And he says that's because we had dysfunctional focus on the mechanistic, the fragmented, the broken-down way of looking at the world. And he's saying that the functional contribution as a neuropsychologist from the right hemisphere is its capacity to read the human face, the capacity to sustained vigilant attention and the capacity to empathise and that these are so needed in our world today. And so if we are teaching children and young people, our students in our schools, we really need to understand how the brain learns, how these two hemispheres of the brain work together in-house. Since the Enlightenment, we have privileged a particular way of knowing and being in the world, which is fragmented, broken down and privileged the left hemisphere's view of the world, because we have given up the right integrating conceptual framing of the world, that bigger picture. We've lost the discourses around our values and the things that we value. And we've lost the sacred in the divine and the transcendent and our values as a consequence.

And David Bohm, a theoretical physicist of the 20th century said this, "We are all linked in the fabric of unseen connections. This fabric is constantly changing and evolving. This field is directly influenced by our behaviour and understanding of the world."And he was saying that we are constituted as human beings in an interconnected web of relationships. And so important to understand that because the learning sciences are important, they will lead to particular methodologies of teaching. But there are other ways of knowing and being that are so important. And in fact, I wanted to use this as a launch into the last part of our time together. This is Earth rising over the moon that was taken by William Anders in 1968, in the Apollo eight mission. And many believe that it was probably the most important environmental photo that was ever taken because it says that as a single species on this fragile planet. Every person who has been into space sees how fragile the Earth is in its cosmos, and how specifically we are important as a human species on our planet in that interweb of connections, both with each other and with the ecosystem on which we depend.

So what are some of the implications from all of that discourse around these disruptive influences for leadership and teaching? And I wanna put forward three that come from a deep understanding of the need for purpose and meaning. If we have lost the horizon of hope, if children and young people feel that the world is increasingly meaningless, it's come from particular understandings of the world that are driven by particular ideologies and worldviews, Darwinian materialism being one of them. If we take the horizon and collapse it down into only the material, if we only see the world as fragmented, if we only draw on particular types of science and ignore others, then we will rob children of the opportunity to build meaning. Learning communities need to be places that build hope for the future. Not naive optimism and not pessimistic despair, but realistic hope about our place in the cosmos, about our value as human beings, about the intrinsic, inviolable sacred value of every human life, and our sacred charge that we have within our learning communities to unlock their potential, to help them be socialised, to deal with difference and to deal with each other in the interconnected web of relationships.

We need to build places of deep belonging. The attendance crisis won't be built by programs and spreadsheets and checklists. It will be built by places where teachers know their students deeply and well. Not just their name on a roll, but know them as people, as learners. Know something about who they are and where they're from, their family of origin, the things that make them tick that web of relationships and activities that sits beyond the school that is known by at least one adult in the school. Having a meaningful mentor outside of your home, outside of your nuclear family, is such a protective factor in so many ways - the connected curriculum, the place of belonging, of being known, of being missed, of being celebrated. So if we think that purpose and meaning in a place that is becoming largely driven by technology, purpose and meaning is important corrective for that. If we think about loneliness, belonging at a school that is the hub of their communities and building school connectedness, peer connectedness and connectedness to teachers is a critical factor in building a place that's safe to learn.

I will be missed. I'm known. This is who I am. And then connections to the natural world. If we are cut off in industrial societies, and if the fourth Industrial Revolution really takes off, as I think it will in the next few years, and particularly within the lifespan of children that are in our schools today and will come into our schools from kinder in the prep, across their life course, if it's projected that they'll live for 100 years, think about the cycles of change, the rapid cycles of change that are gonna happen when they're very, very young. And so connecting children to the natural world in some way is so important. Both within the school through tree planting and nurturing, through bringing animals in and connecting us to the natural world, and understanding the importance that we have in stewarding the earth and its resources, carefully is so important. And I think that the really big ideas in education about truth, beauty and goodness should animate us as teachers and as school leaders.

Truth really is, as a simple definition, is the mind being in accord with reality? And we should seek to help orient our students to a proper relationship with the truth. And I think that that's really so important that all of our senses should be in good condition, not distracted by technology so that they're functioning in a way that under normal circumstances, we can ask powerful questions. And through study and reflection and experimentation and argument and discussion, and through access to a knowledge-rich curriculum that we can explore the truth in an era of post-truth and misinformation, how important it is to help cultivate within our students the capacity for critical thinking in domains of knowledge. And that's really important, particularly in secondary school, where there are different domains of knowledge how to think historically, how to think geographically, how to think mathematically, how to think scientifically, how to use English language in a whole range of ways that help us to express ourselves and to understand and interpret the world.

Which is why foundational literacy and foundational numeracy in early primary school are the gateway, the foundation skills that give us access to the truth and the body of knowledge and the canon of what's been established across the world, and to be able to critically filter what's coming in from the internet that we're exposed to. I think is really important that we help build these skills in across the domains of knowledge and across the subject areas, across the life course as children progress through our schooling. So important. And then beauty to look at the world and to not lose our capacity for wonder and for awe and for curiosity. If you collapse the horizon from the transcendent and make it into the merely material, we lose this sense of where we are in the cosmos, how important our world is, and all the beauty of richness through creative arts and performing arts and through music and through the sacred and the divine, all of these things are so powerful. And one of the things that's so sad, that education that robs children of the beauty of the world.

Learning should never be boring. It might be hard, it might be rigorous, it might call forth the need for perseverance. But it should never, ever, ever be boring because we live in such a beautiful world. Yes, troubled, broken, full of suffering and discord, sadly and conflict and war that I think is robbing children and young people of that sense of hope for the future. But we should also expose them to the things that are truly beautiful, both in each other and in the things that we can create and the things that have been created that give us a sense of wonder and a sense of the beauty of the world that we're in. And finally, goodness, one of those big virtues to lead a good life. We're helping to form the character of the students that are in our care. We're wanting to build their character for goodness to choose what is right, to live lives of goodness and contribution. You know that critical nexus to find and help each child find their talent, not necessarily their passion because what you're passionate about you might not be talented in, but to find their talent and how does that intersect with the world's need.

And that sweet spot of who I am and the contribution that I can make, and the goodness that we can cultivate in them to explore through activity and through stretching their capacities, both cognitive and physical, mental, emotional. That they can find how they can make a good contribution and become good people and build a civil society that we all want to live in. And so learning communities are places that we need to curate and work together as teachers and school leaders and support staff with parents and carers and broader community and society to... Create places of human flourishing, places that are characterised as communities, that is that they're centred around people and the importance of relationships. And we hear lots of language around control in terms of student behaviour, but they are places primarily of important relationships in the presence of content. We are places where there are deep relationships that we're seeking to form with appropriate boundaries and consequences for misbehaviour that help form good character and they're places of learning and wellbeing and human flourishing.

So what does it mean to create a place that's hospitable? Well I think that one of the big challenges for us is to move from the individualistic culture of Western societies into more understanding of the interconnections that we have with each other, to learn from other societies, East Asian cultures and African cultures and Middle Eastern cultures, but I've just taken a snapshot of something that's well known in the discourses about the philosophy of Ubuntu, which is my sense of self, who I am, is always in a set of interrelationships with other people. As David Bohm, that theoretical physicist, talked about, we are in a web of interconnections both with the planet and its ecosystems, but with each other, importantly, and I am because we are. And so as we head towards the end of this, I think that it's interesting that research also tells us that from one of the, I think it is the longest longitudinal study in history from about the early 1930s I think, and it's just recently been written up in a book called The Good Life Lessons from the World's Longest Scientific Study of Happiness.

And Dr Robert Waldinger, the Clinical Professor of Psychiatry at Harvard Medical School, said that people with better relationships live longer and are happier and healthier. So interpersonal relationships are a key factor not only in our happiness, but also in our physical health and longevity. For anyone, it is critical to have at least one or two trusting and secure relationships in life. How important it is for us to help children to know how to form friendship groups within school with their peers. To be connected to the school, yes, but connected to teachers, yes, that's powerful for belonging, but belonging to a small group of trusted friends. And that's why it's so important to be looking at the literature that informs this nature of belonging. So learning communities that we're seeking to design and architect and build and curate and through our planning, through our strategies, through our actions and activities are really important that we don't lose the human and relational dimension, the dimensions of connection that allow children to learn.

If you are anxious, if you are stressed, you won't learn well. If you are hungry, you won't learn well. Places of engagement and stimulation that lift us up and help us look at our place in the world. Places that help us engage with big ideas that promote deep learning through rich repertoire of pedagogies that we're cultivating in our teachers. There is not one only approach to teaching and for learning, but that broad repertoire that allows a teacher to become an expert in the place of their learners to be able to challenge them and support them and to intervene when they're not making progress. That's sophisticated work. That's why it's collaborative work. That's why it's relational work where we form communities of other professionals to help us know what to do when we don't know what to do or groups of students are not moving as we might have anticipated. The students that are behind the expected level, how do we bring them up? How do we set forth and promote children that are already at the level and extend them?

And I'm gonna read this slide, parts of it, and then we'll jump towards the end of my presentation. But I think that this is really kind of another one of Jonathan Haidt's books called The Coddling of the American Mind. And I think it says something really helpful about the level of challenge and the level of support we need to bring. And then we'll finish up with the leadership frame. It's saying basically that we need to allow children to make mistakes and fail without coddling them. That we need to know how to help them lose well and how to be listened to others and to learn through pain and with compassion. And so I highly recommend his work to you, The Coddling of the American Mind by Jonathan Haidt. And as I close so that there's some time for questions at the end, I just wanted to finish with this frame. If the world around us is full of anxiety and people come with anxiety into our settings as teachers and support staff and students, what does that mean for us? What does that mean for our leadership?

We can get caught up in anxiety and we can become dysregulated ourselves and reactive ourselves as leaders. Just responding to the latest need at our door, our crisis, not having long-term thinking, not shaping our communities over the long term, that kinda three to five-year horizon. If we take all that's swirling around us, how do we have that emotional separation, that level of self-control and self-confidence that's needed, that calm and non-anxious presence? And so, Edwin Friedman, who was a rabbi, wrote this book back in the 90s, A Failure of Nerve, Leadership in the Age of Quick Fix, and I think that was 30 years ago, and he was talking about anxiety and a failure of nerve back then. And we've talked about chronic anxiety in our communities. And I just wanted to proposition this, that if we get caught up in the reactivity of others and what they bring to our door or a parent at the desk that's agitated out at the front reception desk or getting involved with an interaction that's fractious between a student and a teacher or a year-level coordinator trying to mediate that, if we are unable to be a non-anxious presence, we will get caught up in that hurting instinct.

And we see that hurting instinct on social media, particularly in council culture, where people heard and then they blame, and they cancel. And then that reactive cycle leads to quick fix mentality, that quick thinking that Daniel Kahneman talked about, that system one that's intuitive, reflexive, immediate, automatic. And it leads to a lack of well-differentiated leadership. It means that I'm in with the group and not able to separate myself out, differentiate myself sufficiently to be able to look and to listen and to read what's happening, but not be caught up into it, to be an actor on the situation rather than caught up in the situation. I know that as a leader I got caught up in the emotional swirl and through anxiety and stress that if you are carrying a deep well from that checklist before, then your ability to differentiate yourself is diminished. And the other thing that, so being a calm non-anxious presence is really important, how we show up, our emotional contagion, whether we're giving off negative, anxious, stressed emotions, or whether we're able to self-regulate enough to calm our mind and to be fully present to the situation, to be fully present to people but not reactive and then taking the time to think through things in a considered way.

I think the second risk to leadership in an overwhelming environment in disruptive times is the failure of heart. And this failure of heart is illustrated, I think, in the life of Dr Martin Luther King Jr and many of you will be able to recall that from video and from reading transcripts, his remarkable,'I Have a Dream' speech that took place in Washington in the Washington Mall in 1963. Some three years later, he was interviewed by a correspondent of the National Broadcasting Commission, and he said in that interview, my dream has turned into a nightmare. What an staggering thing for him to say, that he would say my dream has turned into a nightmare. So here was a man that was being looked upon to lead the civil rights movement to enfranchise millions of African American and coloured peoples into the full promise of American society to overcome the awful original sin of slavery within American society in the 1960s. Leading that and he said this,"I must confess the dream that I had that day has in many points turned into a nightmare.

Now I am not one to lose hope. I keep on hoping. I still have faith in the future, but I've had to analyse many things over the last few years, and I would say over the last few months. I've gone through a lot of soul searching and agonising moments. I've come to see that we have many more difficulties ahead and some of the old optimism was a little superficial and it must be tempered with a solid realism. And I think that the realistic fact is that we still have a long, long way to go." And so, he was aware that there was a cost in leadership, and I know that there's a lot in the wellbeing literature about how leaders need to attend and care for themselves, and I certainly believe that that is true. But I also believe that if we're involved in leadership in public life and schools, public schools, our public institutions with significant investments of public money, there are places where parents and carers in the community are acutely interested in what we're doing, and so public life invests in our hope in a better future for our communities.

That's what it means to have a vision, mission and values statement. But to be driven by purpose and to be animated by that vision but I think that sometimes we can have a failure of heart, that we can become bitter and cynical and tired from the work that we do with kids and within our classes and with teachers in leadership and so we too can have those moments of soul searching and despair. So how do we replenish and renew ourselves? I think is really important. And so, this is the monument where he was saying that out of the mountain of despair we will hew the mountain of hope. And so, I think that this is this place not pessimistic despair or unrealistic optimism, but that place of hope. And I love this quote because I think as we navigate leadership in schools in times of extraordinary challenge and change and disruption that we need to look to how we exercise power. "Power without love is reckless and abusive and love without power is sentimental and anemic." And so, he said we need to be as harmless as doves and as wise as serpents in our leadership.

And as I close, I think that that quiet place, that margin that creates the right balance between our load and our limits is a place that we need to find that's quiet. And who would have thought that this tiny place, this tiny place changed the world in profound ways. It's the cell that hosted Nelson Mandela when he was incarcerated on Robben Island for 27 years and he went in as a man who wanted to seek the violent overthrow of the apartheid regime and the whites that were suppressing the millions of blacks in that country, 4 million whites and 21 million black people. And he said this, he came out as a beacon of reconciliation and hope. He could have come out angry, bitter, seeking revenge, mobilising people to overthrow with great bloodshed and he said this, "The cell is the ideal place to know yourself. People tend to measure themselves by external accomplishments, but jail allows a person to focus on internal ones such as honesty, sincerity, simplicity, humility, generosity and an absence of variety.

You learn to look into yourself." And in the end through all the disruption, the anxiety and the swirl, we have to find that place of quiet, that place of margin. We have to find ourselves so that we can be more strategic and lead with a sense of hope. So I'll finish with this slide and then hand it over to Kirrily for a couple of questions. "Whatever you want to do, if you want to be great at it," as Maya Angelou said, "You have to love it and be able to make sacrifices for it." And I think that leadership sacrifice is something that's not talked about but when we sacrifice something for goals that are purposeful and hopeful for children and young people, for their futures and for the future of society, the sacrifices we make are being sown into the hope for the future. Thank you.

KIRRILY GEORGE:  
Thank you, Bruce. Always admired Bruce's vast intellect and passion for the work and it does really inspire us to get into the deep thinking that's required for our work. Many of you have put questions in the Slido and I would encourage you if you've still got some questions put them in the chat and we may be able to revisit them later knowing that we've got five minutes. But much of what's coming through, Bruce, is trying to explore that space of if things are busy in schools, if we've got school improvement to achieve and if we're in a fast-paced environment, how do we find time to engage with people on a human level? So that's my question.

BRUCE:  
Yeah, I don't think that there are any simple answers to this, or we wouldn't be gathered here this afternoon kind of exploring it together. But I think that one of the things that I would encourage you to do is to audit your schedule, the weekly, monthly schedule, the term schedule and be thinking about, particularly if you're a principal or assistant principal, but particularly the principal's role, I think is to steer the entire organisation. It's a large organisation, a little rudder steers an ocean-going liner like it's a massive multi-megaton vessel is calibrated by a very small rudder. And so, I think thinking about looking at your diary and thinking about where do I block out time to do that quiet thinking, to calm my mind, to calm my heart and my emotions, to be still, to be mindful and to become present to myself and understand what's happening for me as a leader. It's that kind of really important space but then how do I practically do it? How do I shut the door? How do I let my staff know that regularly I'm gonna be doing some thinking.

And it might seem self-indulgent, but I think that if we're not intentional, we just get gobbled up in the reactive cycle of dealing with ongoing activity within our schools. But thinking about how could I carve out time across a series of weeks, it might be once a fortnight I find 45 minutes or an hour or it could be that I find another school to go to and I sit in their library, or you know how do I find some space and time to do that kind of deeper thinking? Not easy, I don't think it's easy, but I think that it's one of the things that a leader does is the most precious resource that we have as humans is time, the most precious thing we have as a leader is our time and so how do we make it effective? Because as the principal in particular and assistant principal I would say is that you have a role that no one else has in that organisation and so you may have to do something different to everyone else to be able to impact them positively.

KIRRILY GEORGE:  
Thank you, time is precious in our schools, isn't it? And I suppose that's another thought that's coming through in our Slido is how do we drive innovation and change without adding to the disruption that people are experiencing?

BRUCE:  
Yeah well I think that I'd probably go back to that slide about focus. I think it's thinking about what is the need of my community based on quantitative and qualitative data that I think is going to be most impactful for the development growth learning and well-being of children and young people and not crowding the agenda further but thinking about what is the biggest lever that I have and what are the most impactful things? Because the deeper the change the deeper the learning and people need, they need new knowledge, they need scaffolded support, they need training, they need coaching, they need feedback. And so, if you inject too much change into your organisation you will overwhelm it. I could talk to you a little bit about some of the times as a pace setting leader I did that to my team and to my staff. And so I think it's being judicious and I think it's very difficult to stop some things I think that if you're introducing something new is there something that you could stop or change the frequency of?

So for example if you have an annual school production that takes a whole lot of effort for the whole school, it's something that the kids love and the staff love and the parents love, but is that something that we could do every second year? I'm not suggesting that that's the intervention point but I think you have to ask those challenging questions because if you want to bring in something new that requires deeper learning, if you're moving from a particular approach to reading and now you're going to go to 25 minutes a day with synthetic phonics and you're going to do more explicit instruction, that's gonna take learning, some unlearning and relearning for staff. So then how are you gonna create space for that for example? That would be the question that I would be wanting to have that discussion with my leadership team.

KIRRILY GEORGE:  
So Bruce, you're challenging us to take space in our own lives more broadly based on the thinking about how disruption is upsetting our own lives but then also thinking about how we can take space in our school to reduce the disruption more broadly for our staff and reduce that restlessness that you talked about before. Thank you, Bruce. We've hit 5:30 so and that they were the themes of our core questions. But I wanna thank you again from taking sort of something that is talking about you know global economies and then how it impacts on us in our day-to-day lives and then therefore the lives of our students. And a lot of a lot of food for thought that ability to draw large concepts into our day-to-day lives. So do appreciate you for that thinking around that and for always challenging us on that work and do thank all of you who have been with us in the room today. Hopefully you walk away as Amy's indicated with a lot of thinking and a lot of perspective that this has created for you and perhaps the prompt for many conversations in your school about how you can slow things down somewhat to make space in your lives and have that calm and non-anxious presence.

So, thank you all. Please do look out for other thought leadership series that we've got coming up. They will challenge you equally with your thinking and do wish you the best for this evening and the remainder of the term and hope to see you again in some of our future academy programs. Thank you all and thank you Bruce.

BRUCE:  
Thank you everyone, thank you for your time and thank you for the work you do, it's so important never underestimate how powerful and important it is in the lives of children. Thank you.

KIRRILY GEORGE:  
Thanks everyone.

MARK:  
Good luck. Email me. Let me know how you go. Thank you.