

HELPING THEM THINK OUTSIDE OF THE BOX

By Chelsea Channing

Stella Jinman, principal at Cecil Andrews College in Western Australia, has led the school back from the brink of closure, to become an academic centre of excellence.



An important milestone for Cecil Andrews College, a low SES public school, has been its involvement in the P-TECH pilot program. Jinman shares with us this incredible success story, ahead of her appearance at EduTECH, where she will offer further insights from the P-TECH model example.

So Stella, can you tell us a bit about Cecil Andrews College.

We are a lead STEM school, future focused and a beacon of innovation. Students are from diverse backgrounds and of varying abilities. So Cecil Andrews College has gone through a major transformation and rebranding, we are in a low ICSEA (Index of community socio-educational advantage area). We have a very multicultural school with a high number of Aboriginal students, we have refugees, [it's] not just the poverty disadvantage here, there's incarceration and high mental health needs, high levels of unemployment and crime rates in the area.

How long have you been principal there?

I've been here for five years, starting into my sixth year now.

The school was facing closure in 2013, what do you credit as being key to its turnaround?

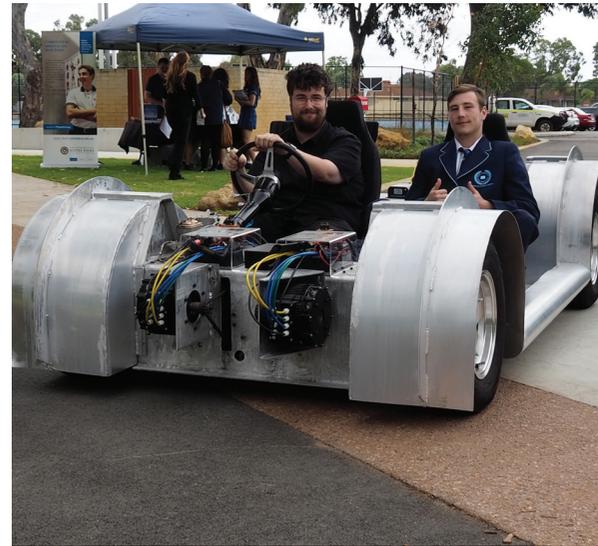
Passion, shared vision, boldness. I think first of all, the data cracked the cement, and then the staff needed a shared vision which everyone was against us initially, got on board as well. The thing is, we didn't do it alone, we formed powerful coalitions. We had collaborations, we had the vision to become a professional learning community, and started to reach out. We partnered up with primary schools, we found who our allies were and we were able to do some very spectacular and exciting programs and shifts for students in the school.

Cecil Andrews College was the first school in WA to become a P-TECH school. Can you tell us about your journey since the pilot began?

Since becoming a P-TECH school, we now have business and industry partnerships. We have South Metro TAFE and Curtin University. With our partnership with Curtin Uni we are working closely with the Learning Futures Network, who form a relationship with progressive schools and we are integrating subjects with deep learning occurring in STEM. So our partners are Austal, Civmec, Thales, Datacom, HP has come from Silicon Valley - split from Hewlett Packard and Deloitte big data and finance.

How have these partnerships changed the teaching and learning environment?

In so many ways. Because these large companies,



they're global, and yet they're local, students can access them. They have a broad range of career options. Like, if you think even about Thales working in submarines ... there are just so many different jobs involved that the students could think of, or even imagine. So they're starting to get to see and talk to, and be at these workplaces and see the reality of what these careers are like. They're starting to map their interests and their passions across to what they could do for a lot of jobs they hadn't even considered previously.

What are the key benefits of the P-TECH model that you have found?

As a P-TECH school our students are more integrated into the world of work, but so are our teachers - creating innovative and relevant curriculum instead of being isolated. What P-TECH does is make it holistic and brings all those people around that table; [it] shows students and staff what it looks like in the workforce ... they're recognising opportunities that they never knew existed, and from Year 9 students are being exposed to possibilities. And it's on a much broader scale that gives teachers and students more connectivity to the relevance of their education for the future. So we've got community engagement, student engagement, staff engagement, and then we've got support, expanded student knowledge, and I think we are learning to be flexible... So we're adapting as a whole school, we're becoming more flexible in our practices, rather than working in isolation. The model offers an opportunity for employers to play an active role in this innovative approach to connecting young people with the skills employers need and skills based programs.

Sounds great, so what kind of opportunities have students been engaged in?

So for instance, the work studies class at the mo-

ment, they're going to go over now to Deloitte and do some work using their brainstorming room. They're opportunities the students wouldn't have had before. The students can see what their capabilities, strengths and interests are, and see the links and join the dots now to careers that they either didn't even know about, or that actually have them motivated... We've got mentors helping the students working side-by-side, shoulder-to-shoulder with them. Some of the students don't necessarily have the role models [at home] because of the level of disadvantage, mental health etc. So they might have thought, 'well, I'm interested in automotive,' and now they can think 'well, I'm actually interested in robotics, which is the future' or they might want to go into engineering... Plus they're soft skills that they're learning with these role models ... giving them the craftsmanship and the skills, so there's that interchange that's really rich. Work-based, integrated, authentic, hands-on, enquiry-based learning - it ticks all of the boxes, for everything that tomorrow's education system should be providing to get these students equipped and ready for the workplace.

Sounds like you've got some really valuable industry partners on board.

With those sorts of partners, like with the defence force, you've got cutting-edge engineering and really sophisticated technology... And I think it's important to know that they're giving us the soft skills as well as the knowledge and the STEM that's required. The soft skills like communication and the problem-solving and working in teams and doing public presentations, they're learning to do it before the game. It's a pre-industry planned pathway with the fully integrated education aligned with it.

Have you witnessed much change in student achievement and/or engagement, since becoming a P-TECH school?

The engagement's outstanding. It's not just the engagement of our students, it's also the engagement of our parents, and the volunteers and community members. Because the previous students and parents are saying 'we never had those opportunities,' and we're seeing jobs across a broad range of industries, the students now are getting hooked ... they're growing in confidence. We're only in the very early stages of our pilot, this is only the beginning of the second year, and, already, students are actually achieving academically as well. We had a student last year who got 93.5 in her ATAR, and her artwork is apparently as good as it gets in any school. Also, the student captain of the robotics Wilder Wolves Team FRC, went from not passing chemistry to being top of the class in tests. The P-TECH Peer Leader [one of two students coming to be interviewed at EduTECH] approached two of the teachers as they were getting out of their cars in the school car park at the beginning of term and asked whether the students doing the four-by-four engineering program could work with the students doing the robotics, so that they can all learn from each other. That's design thinking... They're loving the fact that with those kinds of opportunities, they get to explore and do things and create things and start to find that sense of discovery and curiosity that got stifled out of them by the previous way of teaching. With our literacy and numeracy we've improved from having very low [NAPLAN] results, to being in the top most improved schools in literacy and numeracy from when they initially came in... Cecil Andrews College today is an academic centre of excellence, whereas it was once a failing school.

Your school has also built a STEM centre with \$5m in state funding, when was this set up?

That happened at the beginning of last year. There's a lot of innovation in that building, because it's a learning centre, it's been designed

and built around students' learning, rather than a remodelled classroom or anything like that. And so it has very flexible spaces. It has lots of technology throughout, it has a lecture theatre, it's got a chemistry lab, mechatronics, the engineering area, and it all interacts and opens up. It's very, very flexible and fluid. It's a hub of life and energy. It's got nice soft comfortable furnishings, it's very contemporary, the students have a planning area. We've got our HP Sprouts in there, so we've got a student who was completely turned off his education, who is now being inspired by the engineer to explore how all this equipment, like their laser-cutters and so on, work, so he can teach other staff and students how to use it all.

Without giving away too much, what can delegates expect at your EduTECH presentation?

They can expect that I'm going to challenge them to think differently about evolving education. They're not only going to be willing, but they're going to be compelled to collaborate, imagine and invent innovative ways to implement education that is student-centred and skill-based, that will actually prepare students to engage, flourish and [ensure] the future prosperity of Australia. They're going to go out and create industry-supported pathways that are going to project young people into the future no matter what those jobs look like. But there will be education without frontiers and there will be a paradigm shift, and that's required if we're going to have interdisciplinary teams, industry context and real-world solutions to problems.

We've got 40 per cent disengagement across the whole of Australia and here at Cecil Andrews College it probably would be a lot greater because of the community we're positioned in, and yet we've got them so interested and having goals and aspirations, and some of them way outside what they would have ever dreamed of.

