# TRANSCRIPT

# LEGISLATIVE ASSEMBLY ECONOMY AND INFRASTRUCTURE COMMITTEE

## Inquiry into Student Pathways to In-demand Industries

Melbourne—Wednesday 26 November 2025

### MEMBERS

Alison Marchant—Chair

Kim O'Keeffe—Deputy Chair

Roma Britnell

Anthony Cianflone

John Mullahy

Nicole Werner

Dylan Wight

**WITNESSES** *(via videoconference)*

Dilan Jayasekara, Branch Executive Committee Member, and

Manjusha Bhakta, Chair, Data and AI Special Interest Group, Australian Computer Society.

**The CHAIR**: Welcome to the public hearing for the Legislative Assembly Economy and Infrastructure Committee's Inquiry into Student Pathways to In-demand Industries.

All evidence given today is being recorded by Hansard and broadcast live on the Parliament's website.

While all evidence taken by the Committee is protected by parliamentary privilege. Comments repeated outside of the hearing, including on social media, may not be protected by this privilege. Witnesses will be provided with a proof version of the transcript to check.

Thank you, Dilan and Manjusha, for joining us today and answering some questions. You are providing, I suppose, some conversation today with some new things that we have not really discussed much on this Committee in the past, so this will be really interesting. Maybe you would like to just talk a little bit about what you do or your role, and then we can jump into some questions.

**Dilan JAYASEKARA**: Perfect. Thank you, Chair, and thank you, Committee, for the opportunity today. My name is Dilan. I work as a data consultant at a leading accounting firm in Melbourne. One of the roles that I do outside of that is Executive Committee Member of the ACS, the Australian Computer Society, and I am the chair of the ESG special interest group there as well. I have worked a lot with the AI space recently especially and tried to get more graduates into the AI space, which is pretty much something that this hearing is all about. I just wanted to join in and provide my thoughts on that. I will pass it onto you, Manjusha.

**Manjusha BHAKTA**: Thanks, Dilan. Hi, it is nice to meet you. Just about me, I had a data practice for one of the Australian consulting firms. I have nearly 20 years experience in data analytics and the AI field. From the Australian Computer Society, I am also an Executive Committee Member, and I am on the IT governance Committee for ACS. I also chair the Data and AI Special Interest Group for ACS Victoria, so of course my whole career is mostly in data analytics and AI.

**The CHAIR**: Perfect. Thank you. We did hear an earlier witness this morning talking about the next generation of students coming through, and they are a very different cohort. I have got teenagers, but they live in a different world. Obviously the online world is very important to them. Thank you so much for your time. I will jump straight into some questions, and I might head to Kim O'Keeffe, our Deputy Chair.

**Kim O'KEEFFE**: Good morning. Just excuse my voice; I have got a little bit of laryngitis, but I am not sick. Thank you so much for being here. My question is: how can the Victorian government ensure secondary school students receive the most up-to-date information about the digital labour market?

**Dilan JAYASEKARA**: I will go first. Thanks for the question. The challenge with the digital labour market is that it changes every few months, not every few years, and sometimes every few weeks as well. As part of the work that we are doing with Standards Australia, by the time that we draft and put to public feedback and finalise the standards, the standards are already outdated so we need to start the process again. The traditional carrier model where we publish labour market guides every couple of years or every year does not work any more with AI because of the rapid pace that it is growing. A practical approach is for Victoria to partner with organisations such as ACS and also AIA—the Analytics Institute of Australia—and also NAIC, the National Artificial Intelligence Centre, and major tech employees to pretty much create a real-time digital labour market dashboard, so something that is refreshed perhaps quarterly or monthly and shows emerging roles in AI, what those are and how it is growing and changing between cybersecurity, data engineering, cloud, robotics and digital health—that is also an important domain these days.

One of the latest stats from the ACS Australia's AI opportunity report is that AI alone could add $142 billion a year to the economy by 2030, and demands will be highest in data, AI, cyber and also digital infrastructure to run all of that. When students and career advisers can see that data in real time through all the dashboards and those outcomes, they can make better decisions about the subjects and the pathways. I guess the short answer is yes, and we need to give schools the same labour market visibility that the industry already has, because industry always has the latest updates and they already always engage actively with the community—they are very dynamic—so we need to make sure that the schools are also dynamic and not static and let that inform pathways from year 9, year 8 onwards is my thought. I will pass it on to you, Manjusha, for any comments.

**Manjusha BHAKTA**: Yes. Thanks, Dilan. I think Dilan has covered most of the points I had in mind as well. I just want to add one more thing: when it comes to new technologies such as AI, people are very confused about, 'What should I know, what should I be aware of?' So for me, I always look at it as in three tiers: people who just want to have a universal literacy level for not all students but focusing on how to use it responsibly or how to use it safely. That awareness is required for everyone, because everyone is exposed to it. The second level would be more of an applied level where students are maybe going for a science field or going for a businesses or arts or design and how AI or new technology like these technologies are going to change it, so that awareness and how to use it in their fields. And then third would be technical streams, where people are actually going to use it as digital technology for coding or machine learning, those kinds of things. So that awareness that 'where I fit 'and 'what kind of awareness I need to have' is very crucial, otherwise people are very confused that, 'Okay, what should I actually know about digital literacy?' So that is very important for me.

**The CHAIR**: Thanks, Kim. John, I will go to you next.

**John MULLAHY**: Thanks, Chair. We have had some submissions to the Inquiry that Victorian secondary schools did not adequately equip students with digital literacy skills. We have also got the federal government banning social media for under-16s coming up very shortly. Do you agree that students do not have these digital literacy skills, and if so, what can be done to increase secondary school students' digital literacy?

**Dilan JAYASEKARA**: I definitely think that we have space to grow in terms of digital literacy skills, and that is why we suggest that we should embed the AI in curriculum from at least year 9 onwards. Students should learn not just the technical aspect, as Manjusha mentioned earlier—there are two or three main pillars of this data, technical aspects of the machine learning, the natural language models and all the coding side of it, but then there is also the ethical AI, the usage of AI, what are the AI guardrails and things like that. So we need to embed that full picture into the curriculum, and then we need to put that exposure into students from year 9 onwards, and then by the time they get to year 12 we need to have perhaps those AI hackathons or some sort of promotional campaigns or perhaps state-funded campaigns showcasing graduates or the entrepreneurial skills that the students develop over time and then giving them that platform is something that we have to do.

Also in terms of the literacy, another aspect of that is we need to work on upskilling the teachers as well, making those courses available in terms of perhaps micro-credentials; they are short but high-quality content. Micro-credentials should be launched, and then in that way the teachers can get the latest up-to-date information, and also the students can follow a pathway. So I think, yes, the short answer is there is definitely space for us to go in terms of the digital literacy and there are a few areas when you are talking about AI. I will pass it on to you, Manjusha, if there are any additional comments.

**Manjusha BHAKTA**: I think, Dilan, you have covered everything. I would just go back to what Alison commented about her teenage kids, who are getting exposure, but are they getting the right exposure is the question and whether schools can play that role to actually put those guardrails up about what they are getting exposed to, what they are learning and how it is going to be used in the future for whatever career pathways they choose. Channelling those efforts in the right way is something that as teachers we can enable, and as parents we can guide them. That is what I would add.

**John MULLAHY**: Just a quick follow-up. Many of my primary schools do programming and robotics from prep onward. Do you really think year 9 would be the earliest that we should start educating AI to students?

**Dilan JAYASEKARA**: I would say as early as possible. There is a cousin toddler of mine who has already started to look about robotics and then all the humanoid robots and things like that. There is that exposure already there, so we just have to make sure that we frame it in a way that this is the way. We need to build a small pathway. Like, if a kid is into robotics or robots, then starting from grade 5 we need to make coding and all of this AI fun, pretty much. If we can make that fun, then they would just—I remember when I first started doing coding like 10 or 15 years ago, the first time you created a calculator by yourself, the happiness was over the moon, pretty much. If you can create that sentiment for year 5 students, they would know that 'This is what I can build, and I can build things.' If we can put that emotion to them, then that would slowly build up. Then from year 8 and year 9, towards that, that would be the formal sort of curriculum where they would definitely now say, 'All right, now the real deal starts. Now, how does this actually govern, and then, after four years, when I graduate from school, this is the industrial pathway, this is the training area that the state or the country is demanding.' That structure should start from, I would say, as early as possible.

**Manjusha BHAKTA**: Yes, I would agree. John, I would definitely say that, as you said, we can start as early as grade 3 for awareness, ethics and safety guardrails that they want to have. We can start with how to use it responsibly, how critical thinking works in this domain and understanding a bit of the biases that models can have, basic data literacy and hands-on tools. Those definitely we can start. As I mentioned before, they already have this exposure through the social media and all that. Channelling them right from primary school is definitely important, and as Dilan said, when they are in secondary school, there can be more education which is more technical, where they can do things themselves. But before that, that awareness and ethics we definitely have to start at the primary school.

**John MULLAHY**: Thank you.

**The CHAIR**: Thanks, John. Nicole.

**Nicole WERNER**: Thank you for that. I agree. I think there is already that work being done and that we could do more there. I think, particularly with wanting to support girls and women into AI, in those early stages, if we were to implement it or there was more opportunity in primary school as well as in high school, what in your view would help aid that? Again, it might be a bit of a social stigma, that perhaps boys are more into Lego and robotics and that kind of coding, which might be a bit of a cultural thing or it might be a stigma thing, but how can we bridge that gap so there is more enthusiasm and, I do not know, bridge that gap for young women and even girls in primary school?

**Manjusha BHAKTA**: Yes. Maybe I will start on this, because this is something very close to my heart. Nicole, you are right. Many times it happens that girls especially are a little away from technology. But I think showing them those role models that are already doing those things, women who are already successful or entering those fields, should give that exposure to them, looking at somebody else who is doing it, and 'Why can't I even try for that?' With those kind of things, that exposure is required. Getting women who are already successful or who are younger who have entered that field and connecting to them is quite important so that they have role models. Many times we get bombarded with so much social media, fashion and beauty. All that is something everyone easily sees, but those kinds of things where technology is at the forefront are not as visible as other things are. So making them more visible is very important. There are organisations, like I know one of them is STEM Sisters, who are particularly pushing people or girls into technology. Those kinds of things also need to be more at the forefront for girls and women entering the technology field. That is what I would think. Dilan, do you want to add?

**Dilan JAYASEKARA**: Yes, I mean you have pretty much covered that perfectly well, Manjusha. I think it is that lack of visible role models in advanced tech that is the main barrier. Students rarely see women leading in AI roles, or there are women who are actually very successful in this area, but there is limited exposure to what that career looks like, and then what their challenges were when they first started. Because most of them did not study AI when they were in school or they did not do an AI-related bachelor's degree, but they are now currently in AI. So just to understand that career progression—how did you study accounting and how are you now a CEO of this organisation, overseeing all the data governance and AI? So that sort of exposure—we need to get that awareness. That is key.

**The CHAIR**: Thank you. Dylan.

**Dylan WIGHT**: Thank you, Chair. And thank you, guys, for coming to give evidence today and for your individual submissions as well. The Victorian government's submission highlights some secondary school programs and subjects that have different offerings around building AI skills. How adequate do you think these sort of programs within secondary schools in particular are, and how adequate do you think the offering around the building of skills in AI is within the secondary sector?

**Dilan JAYASEKARA**: I would say that they provide a solid base, but perhaps they are not designed for the AI-driven world students are stepping into. AI has fundamentally changed the skill profile required in every profession, I would say, from agritech and law to health care to trades, to all of that. Some of the improvements that would make these subjects future-ready are that we need to include the AI fundamentals as well into these existing courses and existing programs, things like the technical sides of it, like machine learning, basic data types, model bias and how AI systems make decisions. Students do not need to become data scientists of course, but they do need to understand how the technology stack behind the AI works. Second is applied AI

projects, for example, students using AI tools for coding, design, writing, or perhaps data analysis so this mirrors future workplace expectations. Another thing that I could add is we need to make sure that the curriculums are aligned with global and Australian standards. There are ISO and also Standards Australia standards that are already published, with AI management systems and such, and with ethical AI guidelines. I feel like embedding that would be a good step in the right direction. Manjusha?

**Manjusha BHAKTA**: Yes, that is a very valid question, I think. I did participate in the VCE planning day a couple of years back and I gave some presentations for data analytics and AI, and a lot of things were a bit new to the teachers as well. But what I saw in those teachers was that they really had that passion to get that knowledge and pass it on to their students and see how they could make a difference. That was very positive, that teachers are very much passionate about ensuring that their students get what they want. Maybe it is for us to ensure that they are equipped to do that. So they need this practical, ongoing professional development, as Dilan was mentioning, with micro-credentials, AI literacy, data ethics as well as cyber security, that is quite important and is now also being changed by AI. So all that support, if we can provide those teachers and have that flexibility where they can embed those learnings in the curriculum, is I think very important. As Dilan said, there is a good foundation being done but maybe we do have some improvement areas that we can enhance further so that it becomes more appropriate for the AI challenges that we are facing today.

**The CHAIR**: Thank you. I am going to try and squeeze in one because I think it is a really important topic we have not heard a lot about. Anthony, I will let you have the last question.

**Anthony CIANFLONE**: Thank you, Chair. And thank you so much for appearing. I wanted to ask around school-based apprenticeships and traineeships. How can the Victorian government better incentivise the tech industry to offer students more apprenticeships and traineeships with industry?

**Dilan JAYASEKARA**: I think I briefly touched on this earlier regarding that there are, for example, hackathons or short internships and mentoring, school visits. Structured workplace learning programs are something that we could start with. We need to do that brand awareness of AI starting from the school level. To scale this, Victoria could establish perhaps a statewide AI and digital industry placement program for years 9, 10 or 12. Perhaps it could be just a week or two weeks placement in data teams, AI labs, digital units in government or just mirroring or just shadowing to see what this industry actually is doing. Also there is always the possibility to do small incentive grants for tech companies to host students, especially SMEs, who often want to help out. I just want to add that one of the latest reports from ACS says that by 2030 over 40 per cent of professional work hours will involve direct interaction with AI tools. That means exposure to real workplaces is not really optional now; it is something that we need to do as part of the workforce readiness from student to grad to workplace, pretty much, for emerging professionals. The opportunity here is a partnership mode where industry does not shoulder the burden alone, I would say, and the schools do not have to reinvent the wheel. I think that adaptation is the key.

**Manjusha BHAKTA**: I think Dilan has covered most of the points already. As he said, industry projects and work related to the integration of learning in internships are quite essential. Just to add that last time I did a migrant partner program I approached the industries, and what I saw was that there is a lot of enthusiasm to actually help students and migrant communities. If we approach the right people in industry, we can get a lot of support, and we can design a program where the internship or early learning can be embedded into the secondary school curriculum as well.

**The CHAIR**: Thank you very much. Well, it has been a really interesting conversation today, and thanks for giving us a little insight into a different type of industry that we know is our future. Thank you very much for your time today.

**Witnesses withdrew.**