



Name: AusIMM (Australasian Institute of Mining and Metallurgy)

Submission date: 4/06/2025

Improve school student outcomes with the best available tools and resources

What (if anything) needs to be done to improve the use of edtech tools (including GenAI) in schools?

The participant did not respond to this question.

What more (if anything) needs to be done to improve awareness and access to high quality lesson planning and curriculum materials in schools?

The participant did not respond to this question.

Is there anything more you would like to say about edtech, GenAI or lesson planning and curriculum materials?

The participant did not respond to this question.

Which of the following best describes you?

The participant did not respond to this question.

Are you currently using any edtech tools (including learning games and GenAI) to support teaching and learning in the classroom?

The participant did not respond to this question.

If yes, what has been your experience with using these tools?

The participant did not respond to this question.

Are there things you would like to do with GenAI or edtech tools that you can't do currently? What's stopping you from doing these things?

The participant did not respond to this question.

If no, can you tell us why you are not using any edtech tools?

The participant did not respond to this question.

Do you access lesson planning and curriculum materials online?

The participant did not respond to this question.

If yes, what has been your experience with using these tools?

The participant did not respond to this question.

If no, can you tell us why you are not using online lesson planning and curriculum materials?

The participant did not respond to this question.

Support the workforce through a flexible post-secondary education and training sector

Credit transfer and recognition of prior learning

In your experience, how well does the credit transfer and recognition of prior learning system operate in Australia? Does it adequately support students to move between courses or have their work experience recognised as part of a qualification? Are there ways it could be improved?

There is an important role for professional associations to play in improving course recognition across the Australian economy.

The same is true in respect of professional recognition more broadly. Well-designed and integrated frameworks can enhance intra- and inter-sector mobility, and will provide employers and industry with assurance regarding the skills and technical competencies of Australian workers.

We provide further context in our initial written submission, focusing on three key areas.

1. The resources sector is expanding and diversifying professional pathways

The resources sector faces acute shortages of qualified professionals across critical technical areas including mining engineering, geoscience, metallurgy and advanced material processing. These are the skills on which our sector will rely as we seek to move up the value chain, especially as part of a Future Made in Australia industrial agenda.

Workforce utilisation is consistently above 99% across the industry, with professionals accounting for approximately 17% of the current workforce and 22% of demand growth. At the same time, enrolment in mining-related Science, Technology, Engineering and Mathematic degrees is dropping by as much as 4.5% per annum, and completion rates are below 50%.

AusIMM is playing a key role in the resources sector's response to this challenge, delivering scholarships, continuous professional development, industry-based learning programs, courses and conferences for professionals working across all facets of industry.

These are core elements of our Future Talent Strategy, which includes consultation via an active Professional Pathways Whitepaper process on opportunities to deliver flexible and diversified tertiary education pathways. Our unique position within the resources ecosystem has allowed us to convene a breadth of industry and government stakeholders as part of this consultation. In May 2025, AusIMM hosted a Professional Pathways Policy Forum with mining discipline leads from Australian universities, state and federal government agencies, industry representatives and our peak body colleagues to:

- Identify current pathways for Australian students to pursue professional careers in the sector, including via traditional university and vocational programs as well as emerging

initiatives including Vocational Degrees and Associate Degree Pathways.

- Define opportunities to expand and diversify these pathways.
- Allocate responsibility for priority actions to meet short-term skills gaps and develop pathways to equip students with skills and knowledge for the future resources sector.

Participants our May 2025 Policy Forum identified the following priorities - inter alia – to reinforce and develop new pathways into the resources workforce:

- Expanding Associate and Vocational Degrees to pull people from technical and trade occupations into engineering, geoscience and advanced processing professions.
- Expanding industry-based postgraduate programs (especially research) to develop niche skills and knowledge (especially in areas such as advanced processing).
- Delivering professional development (microcredentials, graduate certificates and diplomas) to lift mobility across the energy, resources and manufacturing value chain.
- Providing stable course funding across commodity cycles for niche mining degrees.
- Supporting students to study regionally, particularly as low-enrolment high-criticality degrees struggle to remain viable under current university business models.
- Enhancing future talent and workforce forecasting.
- Establishing a sector-wide ‘governing body’ with authority to progress these and other matters with input from industry, government, and academia.

We look forward to sharing outcomes from the Whitepaper consultation with the Productivity Commission, including in response to the Commission’s Interim Reports.

2. Professional recognition and mobility are key productivity drivers

The resources sector will undergo significant structural adjustment over coming years, as trade relationships reroute, critical minerals production increases, and Australian industry looks to expand capacity across minerals processing and advanced manufacturing.

These changes will have an uneven impact on job requirements across the sector, and workers will need to be able to move between disciplines (and across sectors). A combination of commodity and discipline specific knowledge will be required alongside a range of ‘portable’ skillsets in areas such as artificial intelligence.

Efficient mechanisms to recognise and provide assurance of these skillsets will be essential to ensure the resources sector maintains access to an appropriately qualified professional workforce. This is especially important given Australia’s position as a global leader in the resources sector is, uniquely, based on our capability as much as our mineral deposits.

Recognition frameworks administered by professional bodies such as AusIMM are an

important mechanism to recognise professional status, providing assurance to industry and ease of mobility for people working across diverse companies, regions and even industries.

AusIMM see several areas where existing professional recognition frameworks can be improved. In the context of the Productivity Commission's inquiry, we emphasise:

- The need to collect high-quality data on occupational mobility, both at the intra- and inter-sector levels. AusIMM is currently investigating sources and mechanisms to build this dataset as part of our Future Talent Strategy.
- The opportunity to harmonise qualification and competency requirements for statutory officeholders under state-based mining and health and safety laws.
- The opportunity to harmonise professional recognition frameworks across industries.
- The imperative to ensure migrants can use their skills as soon as possible after entering Australia, with research showing migrants continue to work in jobs below their skills levels. Priorities here include better access to English-language skills training, job and sector-matching programs and streamlined qualification recognition.

Reforms in these areas are important counterparts to the avenues flagged in the Productivity Commission's consultation material, particularly regarding the recognition.

3. Professional development will deliver a workforce that can adapt and move across the value chain

AusIMM strongly supports the Commission's focus on developing structural, non-formal work-related training to enable ongoing skills development. As we note above, structural changes to our sector in coming years means continuing professional development is critical in a continually evolving economy.

Providing continuous professional development, fostering professional communities and supporting lifeline learning is core business for AusIMM as the resources sector's peak professional body. We are the largest provider of technical conferences and leadership events in the Asia Pacific region, and our courses are experiencing growing demand in Spanish-language markets as well as more established markets such as China and Indonesia.

With this, we emphasise again that Australia's mining expertise – reflected in the strength of our Mining, Engineering, Technology and Services (METS) – is as significant for Australia as the economic value of our mineral resources.

Which of the following best describes you? Please select all that apply.

The participant did not respond to this question.

In the past 3 years, have you applied for credit recognition or recognition of prior learning (RPL)?

The participant did not respond to this question.

If yes, what was your experience in applying for credit recognition or RPL like?

The participant did not respond to this question.

If no, can you elaborate on why you didn't apply?

The participant did not respond to this question.

Work related training

What are the main reasons individuals and/or businesses do or do not participate in work-related training?

The participant did not respond to this question.

What role, if any, should businesses be playing to address any barriers and better support the offer of work-related training to employees?

The participant did not respond to this question.

What, if anything, could government do to address barriers and better support the offer of work-related training to employees?

The participant did not respond to this question.

Which of the following best describes you? Please select all that apply.

The participant did not respond to this question.

For business owners, managers and sole traders, how many employees do you have?

The participant did not respond to this question.

For employees/individuals, have you participated in any work-related training in the last 12 months that did not relate to general compliance (such as WHS)?

The participant did not respond to this question.

If yes, can you elaborate on the reasons for the training and any benefits you received from doing it?

The participant did not respond to this question.

If no, can you elaborate on any challenges or barriers you faced in attempting to undertake work-related training?

The participant did not respond to this question.

For business owners, managers or sole traders, have you provided or supported your employees to participate in work-related training in the past 12 months?

The participant did not respond to this question.

If yes, can you elaborate on the reasons for the training and any benefits you or your employees received from doing it?

The participant did not respond to this question.

Can you describe whether you accessed any government assistance, what type, and the amount received? If you didn't access any financial assistance, please tell us the reasons why.

The participant did not respond to this question.

If no, can you elaborate on any challenges or barriers you faced in attempting to provide or support your employees to undertake work-related training, such as the time or cost, availability of relevant or high-quality courses, and level of interest from your employees?

The participant did not respond to this question.

Balance service availability and quality through fit-for-purpose occupational entry regulations

What are the effects of occupational entry regulations? Please describe your experience and name the specific occupations you are referring to.

The participant did not respond to this question.

Do you believe current occupational entry regulations are proportionate to the level of risk associated with different professions? Why or why not? If not, do you have any suggested improvements to regulations to better reflect risks? Please name the specific occupations you are referring to.

The participant did not respond to this question.

Which of the following best describes your connection to occupational entry regulations? Please select all that apply.

The participant did not respond to this question.

Which state or territory are you predominantly based in?

The participant did not respond to this question.

Cover sheet: Supporting document #1



4 June 2025

Danielle Wood
Chair of the Productivity Commission

Dear Danielle and colleagues

Re: Building a skilled and adaptable workforce for the resources sector

I write to introduce the Australasian Institute of Mining and Metallurgy (AusIMM) and provide a response to the Commission's 5 Pillars Inquiry. We focus on the 'Building a skilled and adaptable workforce' pillar, noting our comments are relevant to the 'Harnessing data and digital tech' and 'Investing in cheaper, cleaner energy and the net zero transformation' pillars.

AusIMM is the peak body for professionals working in the resources sector, representing 15,000 professionals in 110 countries. Our professional community is active across all facets of the sector, working in industry, government and academia, and in disciplines ranging from engineering and geoscience to environmental management, social performance and finance.

As the Trusted Voice in resources, we convene stakeholders and undertake research to shape policy that advances resources professionals interests and contributes to sound, evidence-based dialogue regarding the sector. Established in 1893 and operating under Royal Charter, our mission is to ensure mining delivers enduring benefits to the broader community.

Our key messages to the Productivity Commission at this stage of the 5 Pillars Inquiry are that:

1. The resources sector is expanding and diversifying professional pathways

The resources sector faces acute shortages of qualified professionals across critical technical areas including mining engineering, geoscience, metallurgy and advanced material processing. These are the skills on which our sector will rely as we seek to move up the value chain, especially as part of a Future Made in Australia industrial agenda.¹

Workforce utilisation is consistently above 99% across the industry, with professionals accounting for approximately 17% of the current workforce and 22% of demand growth. At the same time, enrolment in mining-related Science, Technology, Engineering and Mathematic degrees is dropping by as much as 4.5% per annum, and completion rates are below 50%.²

¹ Deloitte Access Economics, 2025, 'Economic contribution of the Mining and METS sector 2024' commissioned by AusIMM, Austmine, and the Minerals Council of Australia. Enclosed with submission.

² Commonwealth Government, 2023, 'Higher Education Student Statistics', Department of Education; 2021, 'National Resources Sector Workforce Strategy', Department of Resources and 2010, 'Resourcing the Future', National Resources Sector Employment Taskforce;

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These are core elements of our Future Talent Strategy, which includes consultation via an active Professional Pathways Whitepaper process on opportunities to deliver flexible and diversified tertiary education pathways. Our unique position within the resources ecosystem has allowed us to convene a breadth of industry and government stakeholders as part of this consultation. In May 2025, AusIMM hosted a Professional Pathways Policy Forum with mining discipline leads from Australian universities, state and federal government agencies, industry representatives and our peak body colleagues to:

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- Define opportunities to expand and diversify these pathways.
- Allocate responsibility for priority actions to meet short-term skills gaps and develop pathways to equip students with skills and knowledge for the future resources sector.

Participants our May 2025 Policy Forum identified the following priorities - *inter alia* – to reinforce and develop new pathways into the resources workforce:

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- Providing stable course funding across commodity cycles for niche mining degrees.
- Supporting students to study regionally, particularly as low-enrolment high-criticality degrees struggle to remain viable under current university business models.
- Enhancing future talent and workforce forecasting.
- Establishing a sector-wide 'governing body' with authority to progress these and other matters with input from industry, government, and academia.

We look forward to sharing outcomes from the Whitepaper consultation with the Productivity Commission, including in response to the Commission's Interim Reports.

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3. Professional development will deliver a workforce that can adapt and move across the value chain

AusIMM strongly supports the Commission's focus on developing structural, non-formal work-related training to enable ongoing skills development. As we note above, structural

³ AusIMM, 2021, '[Resources Education Collaboration Summit Report](#)'; 2021, '[A Critical Moment Report](#)'. See also productivity Commission, 2024, '[Talent in Transit](#)'.



changes to our sector in coming years means continuing professional development is critical in a continually evolving economy.

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AusIMM will look forward to sharing further insights on these and other areas throughout the Commission's continuing Inquiry, including as we progress our Professional Pathways Whitepaper consultation.

In the interim, I would encourage you to reach out to Harry Turner, our Senior Manager for Government Relations, at hturner@ausimm.com to discuss this submission and our broader activities further.

Yours sincerely

A handwritten signature in black ink, appearing to read "Stephen D.", written over a light blue horizontal line.

Stephen Durkin

CEO, AusIMM