



15 September 2025

Productivity Commission - Five pillars of productivity inquiries
Building a skilled and adaptable workforce - Interim Report
5pillars@pc.gov.au

Dear Sir/Madam,

Re: Interim Report - Inquiry into building a skilled and adaptable workforce.

CSIRO welcomes the opportunity to provide consultation input into Productivity Commission - Five pillars of productivity inquiries, responding to the draft recommendations for the interim report 'Building a skilled and adaptable workforce'. This feedback is provided in addition to earlier contributions from CSIRO towards the - Five pillars of productivity survey questionnaire.

Please note this letter only includes feedback to address recommendations included within the interim report relevant to CSIRO, as reflected below:

Draft recommendation 1.1: Invest in a single national platform for all teachers to access lesson planning materials

CSIRO's [Education & Outreach](#) designs and develops STEM focused, curriculum-aligned, evidence-based [educator resources and professional learning offerings](#), including an [education resource library](#), which could comprise an important contribution to the proposed national platform of lesson planning materials.

[Evaluation evidence](#) and best practice experience of CSIRO's STEM education programs highlight the features of educator resources (for STEM but potentially more broadly) that increase their impact:

- Resources that make real-world connections, for example STEM's role in solving community and global problems, linking industry STEM professionals with teachers ([STEM Professionals in Schools](#) and [STEM Community Partnerships Program](#)), and highlighting STEM role models from underrepresented groups;
- Valuing and embedding Aboriginal and Torres Strait Islander knowledges into the classroom, as exemplified in CSIRO's [Living STEM](#) and [Deadly in Generation STEM](#) programs;
- Resources that support [inquiry-based learning in combination with explicit teaching](#); and
- Interactive, hands-on, and engaging resources

Draft recommendation 1.2: Lead national efforts to ensure equitable access to educational technology (edtech) and artificial intelligence (AI)

CSIRO Education & Outreach has the capability to plan and deliver monitoring, evaluation and learning for new education approaches and has undertaken a process of building the capability of the STEM education ecosystem to generate and use evidence to increase impact. Specifically, the [Capability Enhancer](#) project helps organisations understand what works and improve how they measure impact, which could provide a model for the evaluation and implementation of new edtech and AI.

Furthermore, CSIRO's [STEM-INSIGHTS Network](#) is gaining momentum as a place to share knowledge, test ideas, and co-develop tools that support better STEM education outcomes. The Network could contribute to the establishment of assessment frameworks, stocktakes, and guidelines.

CSIRO, in collaboration with the [Human Technology Institute](#) at the University of Technology Sydney, is developing innovative methods to trial and test new STEM education approaches and programs through Bayesian Causal Inferencing (a method for understanding cause and effect relationships by combining domain knowledge with observed data using Bayesian statistics).

This approach improves on traditional evaluation methods by going beyond “Did the program work?” to “What part of the program worked, for which students, and how confident are we in that conclusion?”. By employing prior knowledge and research, conducting pilot projects, and updating understanding of what works, for whom, and under what conditions, the approach holds substantial promise for conducting trials.

Finally, CSIRO Education & Outreach has substantial experience in delivering inclusive, student-centred educational and related opportunities, such as through the [STEM Together](#) and [Young Indigenous Women's STEM Academy](#) programs. CSIRO is committed to sharing learnings and evidence around successful approaches to designing and delivering approaches with equitable access, including new edtech and AI approaches.

Draft recommendation 2.2: Better target incentives to lift work-related training rates in small and medium enterprises

CSIRO runs programs, supported by state governments, to place students into 200-hour placements with eligible businesses – with a strong focus on SMEs. These programs are providing pathways for businesses to access STEM talent, with over 75% of the projects leading to offers of employment for the student – providing businesses with highly-skilled graduates to enable their growth:

- [Generation STEM Links](#) provides internships to help NSW-based businesses access final year tertiary students on 200-hour placements. The team provide a fully facilitated service including student advertising and interviews to remove barriers for SMEs and regional businesses. The program has facilitated over 200 placements, including 84% with SMEs and 47% in regional businesses.
- [Western Australia Food Industry Education Collaboration](#) (WAFEC) is a new pilot program delivered on behalf of the WA Department of Primary Industries and Regional Development specifically for businesses working in the food and beverage industry utilising the successful Generation STEM Links model (see above).

We would be pleased to provide further detail on the activities referenced in this submission. For more information, please contact governmentengagement@csiro.au.

Yours sincerely



Gail Fulton
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CSIRO