



Advanced  
Manufacturing  
Aotearoa

12<sup>th</sup> September 2024

## **Submission on Vocational Education and Training System Redesign**

*Our submission has utilised the suggested question framework provided Hanga Aro Rau Workforce Development Council - [NZ Industry Training Consultation | Hanga-Aro-Rau](#)*

### **Is industry training important to your business and industry?**

Yes, industry training is crucial for the manufacturing industry. Effective industry training ensures that our workforce is skilled, adaptable, and capable of meeting the evolving demands of our sector.

Organizations like Hanga-Aro-Rau / Workforce Development Councils (WDCs) have played a significant role in holding vocational education and training (VET) providers accountable, leading to increased industry engagement, improved course content, and faster qualification approvals.

### **What do you need from an industry training system to make it better for you?**

To improve the industry training system, we need:

- **Agile Development of 'stackable' qualifications and/or Micro-Credentials:** The development of 'stackable' micro-credentials and Recognition of Prior Learning (RPL) for the trades industry is crucial. Initiatives like the CNC Machining Setter Programmer credential show promise. Micro-credentials in areas like robotic welding, advanced CNC programming, maintenance diagnostics and Industry 4.0 technologies would be game-changers.
- **Pipeline from Schools:** High schools should promote apprenticeships and vocational training. The current funding structures where schools lose funding for students missing year 13 and being ranked on university entrance metrics discourage this.

Schools need to be incentivised to equip all students for a pathway to a meaningful career that fits their skill set, capabilities and passions, and that structure needs to acknowledge our society's need for people in a multitude of roles – not just those requiring tertiary academic training.

Instead by default students are streamed to University, it is only those students perceived as 'not good enough' for University that are made aware of trades apprenticeship pathways.

This means we are not seeing the gifted STEM students we need for highly technical trades such as electrical, fabrication, maintenance and diagnostics engineering and high-precision machining.

- **Standardized Careers Curriculum:** Implementing a standardized careers curriculum in secondary schools would ensure career advisors have up-to-date industry knowledge, particularly in technology. Standards around Continuing Professional Development should be implemented to ensure Careers Advisors keep up with a rapidly changing technological environment. This role is crucial to aid school leavers in identifying suitable and rewarding career paths.

- **Support for Apprentices and SMEs:** More support is needed for apprentices and small to medium-sized enterprises (SMEs). This includes reducing the burden on training advisors, providing suitable online modules, and addressing the high ratio of neurodiverse practical learners.

Pastoral and Cohort Support such as more funding for classroom-style sessions across industries could provide pastoral care, general Q&A, and create support cohorts for apprentices.

- **Agility and Collaboration in ITPs:** Institutes of Technology and Polytechnics (ITPs) need to be more agile and collaborative. Greater collaboration across polytechnics could support learners better, especially in regions with limited resources.
- **Performance-Based Incentives:** Implementing better Key Performance Indicators (KPIs) for ITPs, such as industry satisfaction scores, could align funding with performance and reduce the need for external oversight bodies like HAR.

In lieu of better KPIs being established and Governed, there is an ongoing need for an independent non-training provider intermediary such as HaR to provide a bridge for industry and VET to engage effectively and consistently across the Country.

- **Integration of Apprenticeship and formal Vocational qualifications:** Recognizing apprenticeships as a pathway to higher qualifications would reduce the need for apprentices to start from scratch when pursuing further education. Furthermore RPL of diploma and degree level graduates to fast-track their trades apprenticeship would remove the stigma of a 'trade apprenticeship' being a

backwards step.

Note the German educational model. Anyone who has earned their “Dip Eng (equivalent of a BE) firstly completes a trade qualification, before being eligible to complete their degree. Net result, very good practical and professional engineers.

- **Flexible Vocational Pathways:** Successful models like formal cadetship partnerships between businesses and polytechnics should be encouraged and expanded. From diploma and degree level programmes, to RPL assessments and professional development management programmes. Historical examples, such as Griffin’s Foods management cadetship program, have produced well-rounded and practical managers.
- **Repositioning of ‘Polytechs’ to ‘Trades Universities’:** Adopting the European model of integrating vocational trades institutes into higher education systems, as seen in Switzerland and Germany, could lead to high-value jobs and a strong manufacturing sector.

### **Would a better pipeline of skilled people help your business?**

Absolutely. A better pipeline of skilled people would significantly benefit our businesses. It would ensure a steady supply of qualified workers, reduce the time and resources spent on training, and enhance our competitiveness. High schools should promote apprenticeships and vocational training to address the current shortage of apprentices in industries like high-precision machining.

### **Is training for your staff available/accessible?**

Training for our staff is available but not always accessible. The technical nature of In Work Training (IWT) in manufacturing requires specialized trainers, who are often scarce. Additionally, the quality of training providers varies significantly by region, and online self-directed learning requires management oversight, which can be challenging for SMEs. More accessible training options, such as remote training or sessions at local polytechnics, would be beneficial.

### **What are the biggest challenges in your business in relation to skills?**

The biggest challenges in our businesses related to skills include:

- **Qualifications aren’t keeping pace with industry requirements:** Technologies such as robotics, Ai and data automation rapidly transforming manufacturing and the VET system is not keeping up. Furthermore, new industries are developing such as bio-technology, hydrogen and aerospace - it will not be a lack of science that stops them from growing, it's a lack of access to skilled trades people. A major New Zealand space company has been cited saying that 85% of

their employees could be technical trades trained, instead hi-tech manufacturers are retraining University graduates into traditional trades roles internally themselves.

- **Online learning emphasis for apprenticeships:** Existing training programs are heavily online focused and often not well-suited to the needs of hands-on manufacturing learners. As mentioned previously, more pastoral care and regular in-person learning with a apprentice cohort across industry would benefit learners who become isolated and 'stuck'.
- **Lack of Supervisory Training Capability and Capacity:** Due to the technical nature of the work, there are few people capable of training in these areas, and those with the skills may not be effective trainers.
- **Quality of Training Providers:** There is a lack of quality training providers, particularly for softer skills like leadership and management. Poor experiences with training organizations highlight this issue.
- **Regional Disparities:** Training quality and access vary significantly by region. Online self-directed learning requires management oversight, which can be challenging for SMEs.
- **Employee Buy-In:** Gaining employee buy-in for online training courses is difficult, and employers often have to push for development opportunities.
- **Work-Ready Skills:** There is a need for grounding in basic work-ready skills to help new employees integrate effectively.
- **Recognition of workplace learning:** There is a disconnect between qualifications and actual skill levels. Facilitated RPL assessments could help align qualifications with skills, particularly for highly skilled technical roles.
- **Volunteering and Work Experience:** Current regulations make it difficult to offer unpaid work experience, which could benefit both companies and individuals seeking skills.

### **About the Submitter**

Advanced Manufacturing Aotearoa (AMA)

Our mission is to improve productivity and output in the manufacturing sector. We focus on sharing useful information, promoting collaboration, and taking practical steps to connect stakeholders across the industry. By delivering initiatives that strengthen the sector and support sustainable growth, we aim to drive real progress and innovation that benefits all New Zealanders. We also represent the industry's voice in government discussions, ensuring policies align with sector needs. Through our programmes, we help manufacturing succeed with better efficiency and an empowered workforce.

**Prepared by:**

Submission prepared by Sarah Ramsay on behalf of AMA representing the views of over a dozen members representing their Regional Business Groups and industry sectors across New Zealand.

A handwritten signature in black ink, appearing to be 'S. Ramsay', written over a faint dotted line.

Sarah Ramsay (CMIInstD) - *Chair of the AMA Business Council; Chair of Minister for Manufacturing's Productivity Advisory Committee; Member National Industry Advisory Group for Manufacturing & Logistics; Chair of Southland Otago Regional Engineering Collective; CEO & Co-Owner of United Machinists.*

[sarah@unitedmachinists.co.nz](mailto:sarah@unitedmachinists.co.nz)

+64 21 552 240

