

Driving Industry Conversations – Continuous Learning in Heavy Vehicle

This document summarises discussions from Driving Industry Conversations – Continuous Learning in Heavy Vehicle on 03 August 2026. This summary captures the consistent themes raised across these sessions to inform training package reform and broader industry engagement.

Current Qualification is Strong but Needs Modernisation

Participants generally agreed that the existing Heavy Vehicle Mechanical Technology qualification provides a solid foundation for apprentices.

However, several opportunities for improvement were identified:

- Greater emphasis on advanced vehicle electronics and diagnostics.
- More content covering electronic braking systems, stability systems and trailer electronics.
- Increased training in diagnostic processes rather than simple component replacement.
- Additional electives covering:
 - towing and coupling systems
 - advanced transmission diagnostics
 - emerging technologies.

There was broad agreement that technology is evolving faster than training packages.

Diagnostic Skills are Becoming Critical

Participants consistently noted that modern workshops increasingly rely on:

- scan tools
- digital diagnostics
- electronic troubleshooting

rather than traditional mechanical repairs.

Many workplaces now replace components rather than repairing them, particularly within mining operations. While this reflects current industry practice, participants stressed apprentices still need to understand how systems function rather than simply replacing parts.

Numeracy and Foundation Skills Need Greater Support

A recurring concern was declining literacy and numeracy capability among apprentices.

Examples included:

- difficulty with mathematics required for electrical calculations
- limited algebra skills
- challenges interpreting technical information
- poor calculator skills.

Suggestions included introducing:

- a dedicated heavy automotive numeracy unit
- more structured support for foundation skills throughout apprenticeships.

Apprenticeship Barriers

Participants identified several barriers affecting both recruitment and completion.

Workforce shortages

- WA employers struggle to recruit sufficient apprentices.
- Some apprentices enter purely because of attractive wages rather than genuine career interest.

Mining influence

Mining continues to draw apprentices toward Mobile Plant qualifications.

Several participants suggested promoting dual qualifications (Heavy Vehicle + Mobile Plant) as an attractive career pathway that creates more versatile tradespeople.

Limited workplace exposure

Many apprentices only perform a narrow range of tasks at work.

Examples included:

- working repeatedly on one system only
- little exposure to suspension, electronics or other qualification requirements.

This creates challenges when apprentices attend TAFE and are expected to demonstrate competencies they have never encountered in the workplace.

Employers Need Better Understanding of Their Role

A major discussion centred on employer responsibility.

Participants observed that some employers:

- cancel apprentice training blocks
- expect TAFE to teach everything
- fail to provide workplace learning opportunities
- use apprentices as labour rather than learners.

Several speakers emphasised that apprenticeships are a shared responsibility between:

- employer
- apprentice
- training provider.

Greater employer education was recommended.

Changing Learner Characteristics

Participants observed noticeable changes over the past decade.

Common themes included:

- shorter attention spans
- increased distraction from mobile phones
- reduced knowledge retention
- desire for instant results
- impatience to complete qualifications quickly
- unrealistic salary expectations immediately after qualification.

Educators reported spending more time reinforcing basic concepts before progressing to higher-level technical learning.

Competency-Based Training Concerns

Some participants questioned whether competency-based assessment alone adequately prepares apprentices.

Concerns included:

- learners completing units then forgetting content
- insufficient retention of knowledge
- lack of incentive to revisit earlier learning.

Several participants supported introducing some form of capstone assessment that requires apprentices to integrate knowledge accumulated across the qualification.

One TAFE shared that they already use a comprehensive diagnostic unit as an internal capstone-style assessment.

Importance of Ongoing Learning

Participants agreed that completing an apprenticeship is only the beginning of professional development.

There was strong agreement that:

- newly qualified tradespeople still require significant workplace experience
- employers should recognise graduates are competent but not yet highly experienced
- ongoing professional development will become increasingly important as vehicle technology evolves.

Emerging Training Priorities

Participants identified future capability needs including:

- Advanced electronics
- Vehicle communication networks
- Digital diagnostics
- Scan tool proficiency
- EV and hybrid heavy vehicle technologies
- Trailer electronic systems
- Transmission diagnostics
- Towing and coupling systems
- Stronger numeracy support
- Customer communication and business skills
- Integrated diagnostic/problem-solving capability

Overall Conclusions

The consultation found strong support for the current Heavy Vehicle qualification while recognising the need for continuous improvement to keep pace with industry change.

Key recommendations emerging from the discussion include:

- Modernise content to reflect increasingly electronic and digitally connected vehicles.
- Strengthen diagnostic capability across the qualification.
- Improve numeracy and foundation skill support.
- Better educate employers about their responsibilities within apprenticeships.
- Promote broader workplace exposure for apprentices.
- Explore capstone-style assessment to improve knowledge retention.
- Consider dual-qualification pathways, particularly between Heavy Vehicle and Mobile Plant.
- Continue adapting qualifications to emerging technologies including electrification and advanced vehicle systems.

The views, claims, and recommendations in this summary are drawn from what was discussed during the Driving Industry Conversations consultations and do not necessarily reflect the official position of AUSMASA. They are presented to capture industry feedback and inform further discussion, not as AUSMASA policy.