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NSW VET Review

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Master Electricians Australia (MEA) is the trade association representing electrical contractors recognised by industry, government and the community as the electrical industry's leading business partner, knowledge source and advocate. Our website is www.masterelectricians.com.au

MEA are strong advocates for Vocational Educational Training (VET) to be integrated and streamlined into the secondary school curriculum with an equal weighting to Australian Tertiary Admission Rank (ATAR). It is our strong belief this is the most impactful solution to addressing skills shortage and Science, Technology, Engineering and Math (STEM) trade gender diversity issues within Australia.

Throughout this submission, we will highlight the capability VET in Secondary Schools (VETSS) has in cultivating societal and systemic change towards the perception of STEM trade careers and diversity within its skilled pool of labour. We will describe the benefit of the enhanced aptitude and competency screening opportunities VETSS provides, leading to greater commencement and retention in STEM trades.

It will be explained that fostering partnership between TAFE and secondary schools will create an aligned framework, greater network and support opportunities, and an ability to provide access to practical learning. This partnership will create strengthened confidence within the industry regarding the quality of VET.

This submission will also explore the plentiful opportunities qualified VET students can pursue, fostered by a secondary school learning environment to suit their needs and skills. It is believed the changing educational framework should extend to VETSS teachers by removing the requirement to have university qualification in teaching in order to target qualified and experienced tradespeople.

Boosting Student Success

Enhancing Student Outcomes and Experience

Q1. What does success look like for VET students, beyond simply completing their qualification?

Below is a list of what we consider to be success metrics beyond qualifications:

- Overall, quality VET training is likely to generate greater attraction and retention rates. It therefore follows that for individual VETSS students, we can expect to see their skills better matched with the right trade, leading to greater career satisfaction and long-term sustainability to develop their profession.
- Cultural and systemic change towards perception of trade, especially diversity within STEM trades. This will not only enhance the pool of skilled labour available, but also lead to greater attraction and retention of diverse groups.
- There are well established pathways in VET to attain higher qualifications at Diploma and Advanced Diploma level, satisfying pre-requisites and RPL for Tertiary Degree qualifications.
- Entering the workforce well equipped to quickly advance towards a well-paid career.

Q2. What existing initiatives and programs work well or can be enhanced to address barriers to completion?

Throughout many submissions, MEA have strongly advocated that integrating VET training into the secondary school curriculum with an equal weighting to ATAR is one of the key solutions to both gender diversity and skills shortages in STEM trades. The current schooling system moulds students to fit an academic structure, leaving behind those who are unwilling or unable to conform. Providing exposure

and targeted training provides all students equal opportunities for future success by providing a supportive and encouraging environment.

The benefits of VETSS include better equipped personnel entering the workforce, enhanced aptitude and competency screening, heightened attraction and retention and greater diversity in the workplace through early exposure in a supportive environment. MEA sees this as a pivotal tool in supporting societal, structural and systemic change with regards to non-traditional cohorts entering trades.

MEA's position is for Government to prioritise the investment of public funding into a streamlined and integrated VETSS curriculum, with an equal weight to ATAR, to help address diversity in STEM careers, improve completions, and decrease skills shortages. Investing in aptitude and competency at the school level will put many Australians on the first rung of the ladder of success in a rewarding career. All other initiatives and campaigns will potentially be limited in effectiveness and become a less effective use of precious taxpayer money.

Q3. How can VET students be better supported to ensure they gain suitable and rewarding employment?

We believe VETSS is the key to gaining stronger attraction and retention in STEM trades, leading to a more supportive network as these students develop towards their STEM career. Please refer to Q2 for more discussion regarding VETSS.

Ensuring the VETSS curriculum is aligned with TAFE framework will create a cohesive continued learning towards STEM and provide employers with confidence in the VET framework. Maintaining industry engagement to continue developing VET in response to trending demands/issues will support students through to their employment as employers will gain confidence in the skills and competency of newly qualified apprentices.

Expanding Equity and Access

Q4. What existing strategies are working well to support participation, completion and pathways to employment of students from diverse backgrounds? What new strategies could be implemented? MEA regularly makes visits to trade/VET based schools which are designed to educate and upskill year 11-12 students towards STEM trades and other such practical careers. We noticed a stronger engagement from students in these subjects, who are working towards a desired career, than they would have otherwise been while stuck in an ATAR curriculum subject with no desire to pursue what they are learning. There are not many of these schools around and are exclusive towards VET courses. We recommend implementing streamlined and integrated VETSS curriculum courses into all secondary schools where ATAR is currently being taught to ensure access is available to all students regardless of residential location, gender, diversity and personal circumstance. Please refer back to Q2 for further discussion.

We would like to note that MEA advises against setting quotas for gender diversity in trades as the Federal Department of Employment and Workplace Relations is trying to push. While we support initiatives which promote diversity in trades and greater overall apprenticeship participation, we strongly encourage the focus towards achieving this is funnelled into producing a skilled pool of labour increasing the quality of apprentices that employers can select from for quotas to be meaningful.

Q5. How can VET student support services change to increase participation and achieve better outcomes for diverse cohorts?

Please refer to Q2.

[Maximising Student Pathways to Success](#)

Q6. How might careers guidance be enhanced for school students undertaking VETSS and their parents, teachers and influencers?

MEA strongly believe that streamlined VET courses into the secondary school curriculum will significantly foster systemic and societal attitude changes towards STEM trades. Currently the secondary school system gives prioritisation to ATAR subjects, influencing success towards academic careers. This is particularly inhibiting towards gender diversity in STEM trades.

By giving VET and ATAR subjects an equal level of importance in the secondary school curriculum, participation and education towards STEM trades becomes inherently more normalised. A larger cohort of students become exposed to STEM trades regardless of diversity or personal circumstances giving all students an equal opportunity to excel in VET courses. This will inherently filter through to, and alter, parents, teachers and influencers perception of STEM trades as it becomes increasingly mainstream and accessible to all.

Q7. How might industry and education partnerships and workplace learning opportunities improve VETSS students' learning outcomes and post-school pathways planning?

By streamlining secondary school students into VET courses, they will be better equipped and trained to undertake RTO training and qualifications once they have completed school. They will have already undergone aptitude and competency screening to better match their skills with the right trade; better positioning them to 'hit the ground running' for post school qualifications.

It follows we believe partnering RTOs and secondary schools to align their core teaching frameworks will provide the ultimate chance for success in STEM trades.

Q8. What innovations in delivery modes, course design and student support models could drive improved completion and participation rates in A&Ts?

As already discussed throughout this submission, MEA strongly believe enhanced aptitude and competency screening during secondary school education will lead to higher participation and completion rates. This will give students the opportunity to better match their skills and interests in line with the correct trades leading to more sustainable pursuit of their chosen career.

We further recommend equipping secondary schools with practical learning environments. As mentioned under Q2, the current school curriculum gives strong focus to ATAR subjects and is therefore physically equipped for this (i.e. desks and whiteboards). However, with the integration of VET courses, we would expect to see learning environments dedicated to providing practical experiences (for example switchboard training facilities for those wanting to pursue an electrical career).

Q9. How can governments, industry and employers support student success in A&Ts?

Please refer to Q2 & Qs 6-8.

Placing TAFE NSW at the Heart of the System

[Defining the Purpose of TAFE NSW as the Public Provider](#)

Q10. What role should TAFE NSW play in thriving NSW VET system?

TAFE is already the pre-eminent RTO in NSW and should continue pursuing that reputation.

Q11. How should the role of TAFE NSW be defined and communicated to promote its long-term success?

TAFE's brand is already strong in NSW and should continue with its framework to sustain its reputation.

Q12. What needs to be done to position TAFE NSW at the heart of the NSW VET system?

As discussed in Q10 and Q11, TAFE already has a strong reputation for significantly contributing towards core VET courses. Continuing with their current framework will sustain this position.

Scoping the Broader Components of the NSW VET System

Q13. What do you see as the optimal balance between TAFE NSW and for non-TAFE VET providers in meeting the skills needs of NSW?

TAFE is a significant contributor to training large courses and should continue to be so. Private RTOs can be more nimble and agile for niche demand in new and emerging technologies. We therefore see that TAFE should continue facilitating the large core VET courses while RTOs focus on emerging industries.

Q14. How can we ensure that the correct mix of providers is in place to maximise access for all learners and deliver the right skills and qualifications required to drive the NSW economy?

Through VETSS curriculum, all students regardless of diversity and circumstances (e.g. living in a rural or remote area) will have access to educating and training towards STEM trades. The ability for this to enhance aptitude and competency screening will better streamline apprentices towards the best trade for them and ultimately reduce unnecessary pressures on post-secondary school training resources.

Looking towards emerging trends and skill shortages through industry engagement will enable training organisations, such as TAFE, to better equip training resources to maximise access for upcoming trade demands.

Q15. What kind of partnerships between different VET providers are needed to meet student, community and industry needs? Are there any existing successful partnerships, and what can we learn from their success?

We recommend encouraging partnership between the Department of Education and TAFE organisers. Please refer to Q20 for further explanation.

Delivering VET in NSW

Ensuring Funding Models are Appropriate for the Present and future of the NSW VET System

Q16. How can funding arrangements best meet the NSW VET system's goals around skills and equity? MEA strongly encourage the NSW Government to prioritise investing taxpayer money into enhancing the secondary school curriculum to include VET courses with an equal weighting to ATAR. By focusing finances in this area, all students are exposed to, and able participate in, STEM trade education and training. It will further foster societal and cultural change amongst society leading to greater overall diversity in STEM. Engaging with students at this impressionable age will influence normalisation of equitable participation in, and pursuit of, STEM trades.

Q17. How should funding be deployed to support an optimal mix of providers and recognise the different costs of course delivery and student support needs across providers?

Please refer to Q16 and Q23.

Examining Capital Investment Options to Ensure Facilities are Fit for Purpose

Q18. What are the key challenges and opportunities in allocating capital investment to ensure that facilities including physical and digital infrastructure, are fit for purpose?

Government needs to ensure it is consciously investing money into meaningful initiatives, such as secondary school curriculum, and equipping it with sufficient training infrastructure to facilitate meaningful studies (please refer to Q8 for further discussion). It is important to invest into internet infrastructure to provide stable and quality online training access to those living in remote and rural areas, and those impeded by temporary injury unable to attend class physically.

Q19. How can we ensure equity of access to facilities for all VET learners?

Please refer to Q2 & Q23.

Q20. Are there opportunities for industry partnerships in improving access to facilities across the sector?

Yes. Partnership between the Department of Education and TAFE training organisations to ensure curriculums are not only aligned but also provide accessible and continuous support network. It could also foster the opportunity to develop 'VETSS field days' to TAFE facilities for a more practical experience.

Working with leading industry bodies could further invite opportunities for VETSS students to engage with employers improving both network and experience prospects.

Q21. What asset sharing and other facility access opportunities should be considered?

Where our recommendation in Q8 is not considered feasible, we recommend a partnership between TAFE and secondary schools which allow students to have field day visits to TAFE learning facilities to educate and assess practical competency.

Delivering the Skills Needed by NSW to Contribute to Labour Mobility, Industry and the Economy

Q22. How can the NSW VET system adapt to meet current and future skills needs in NSW to address structural and cyclical shortages, and needs for essential occupations?

We heavily encourage Cert IV qualifications to become more mainstream in the Electrical industry and therefore become significantly more integrated within VET courses. MEA have been strong advocates for the integration and implementation of Consumer Energy Resources (CER) in response to State and Federal net zero emission targets. We have stressed the importance of utilising licenced electrical contractors with Cert IV qualifications in the installation and maintenance of privately owned CER assets within residential and commercial buildings. It therefore follows that training a skilled workforce to meet labour demands for electrification will be necessary.

Q23. How can NSW VET adapt to meet skills needs in regional, rural and remote areas?

By introducing VET into the secondary school curriculum, all students will have access to VET courses removing barriers for those living in remote and rural areas. Government funding needs to ensure all schools are equipped with training facilities and teaching staff capable of providing qualified education in VET courses. This will encourage those that would have otherwise not entered VET courses, due to their residential location, to continue pursuing STEM trades beyond school. It could also lead to more small local RTOs appearing as interest in VET becomes more popular.

Regarding RTOs, costs should be equitable to all students. Government should look to subsidise training costs for those living in rural or remote areas to ensure equitable costs State-wide on a per-

student basis. As it will not be feasible to have close access for every rural and remote area, this cost subsidy needs to factor travel and (potentially) accommodation expenses.

We now live in a very technological age, thereby ensuring sufficient infrastructure investment occurs to provide fast and reliable internet access to rural and remote areas will largely assist in non-practical standards. When considering access to practical assessment, there are a few options the government could consider:

- 1) Have TAFE design their testing frameworks to allow training and assessments to be done in 'blocks of time' (e.g. one week a month students need to be on site). That way those living rurally and remotely are not having to travel long distances every day.
- 2) Government could consider investing in a 'caravan' TAFE that travels around remote and rural areas, taking the practical class to these areas. This will vastly improve access to those students and likely improve attraction towards training in TAFE.
- 3) TAFE (and other RTO) accommodation facilities could be established, much like the university halls of residence. This is aligned with our theme of giving VET and ATAR equal weighting.

Q24. How might the NSW VET system best ensure that employers are satisfied with VET?

Industry engagement will foster confidence in the VET process. As a leading industry representative of electricians across Australia, MEA advocates the collective interests of the industry. Our members are employers; utilising membership associations, such as MEA, will ensure employers' needs regarding VET are recognised maintaining overall employer confidence in the training system.

Preparing VET for the Future

Addressing VET Needs for the Future

Q25. How should the NSW VET system position itself to effectively respond to current and future economic, social and environmental challenges?

Please refer to Q22.

Pathways in the Tertiary Sector

Q26. How can students be supported to transition to or from VET and higher education learning to achieve their aspirations?

At MEA, we often visit year 11-12 trade schools to advocate the importance of VET courses and the opportunities VET and STEM can present. Below is a list of careers which we often advertise to the students that they could pursue once qualified in VET:

- Lights and GPOs
- Networking and Data
- Refrigeration
- Motors and Automation
- Renewables – PV, BESS, EVs, HEMS
- Generation and distribution
- Estimation & project management
- Company Owner
- CEO

Designing secondary school and TAFE qualifications to be transferable into other skills/qualifications will open continuous opportunities for students as they progress through their career.

Q27. How might delivery modes and VET offering be adapted to support skills needs and meet the evolving expectations of students and government?

As noted under Q2, the current school curriculum does not support those unwilling or unable to conform to traditional academic teaching styles. With the introduction of VETSS, we would expect to see classes reflect that nature of trades; an environment which sitting at a desk being lectured to all day does not happen. Having a mix of ‘trade days’ and in-class days would be a commendable approach towards teaching this curriculum.

Q28. What role should smaller units of learning play, including both accredited and non-accredited qualifications?

We are strong advocates that the following competencies are essential for STEM trades:

- Math – transposition of equations, algebra and trigonometry
- English comprehension – read and interpret work instructions, legislation, standards and safety instructions.
- Mechanical reasoning – hand tool skills
- Previous work experience – part time job, school-based work experience
- Life Skills – sense of humour, emotional intelligence, sporting affiliation, musical instrument
- Vehicle licence – preferably manual (but not essential).

Building and Maintaining the NSW VET Workforce

Q29. What factors make the NSW VET sector and attractive career opportunity, and how can existing strengths in the workforce retention and recruitment be further developed?

The financial factors of VET are a very appealing and should be emphasised when encouraging students to enter STEM trades. Below is a comparison of electrical apprenticeship cost factors compared to that of university.

	Electrician	University
Cost to learn	Paid to learn while working in chosen career field.	Pay the university to learn and obtain a casual job (often not related to career being pursued) and have to start paid job in career after training is complete.
Debt	No educational debt	Left with HECS debt
Starting Salary	\$76,000 - \$90,000	\$65,000 - \$70,000
Employment rates	>80% employed	>65% employed

Q30. What are the central barriers and opportunities for the NSW VET system attracting the teachers and assessors necessary to provide VET going into the future?

Many STEM tradespeople enjoy giving back to their industry and often look to jobs which are less physically demanding as they get older but still utilise the skills and knowledge they have accumulated throughout their lifetime. As already discussed, VETSS is not streamlined and therefore not currently an incentivising and attractive career option for tradespeople. Furthermore, we note that while many of the ageing trade population would enjoy the opportunity of teaching VET related courses, there is the expectation they obtain university-level qualifications to teach. This within itself will prohibit access

to this core group of potential teachers as they will have no desire to complete a university degree. As we are promoting an additional curriculum to the secondary school framework, we also need to customise its teaching qualifications. Those with the relevant and necessary qualifications with a certain number of years' experience, should be allowed to teach with a bridging course to provide the basic fundamentals of teaching in a school class.

Boosting Confidence in the VET System

Q31. How can the NSW Government improve confidence in VET among students, industry, and the community as a whole?

Through a VETSS and TAFE partnership, the stakeholders will obtain confidence in VET. Having been exposed to, and supported in, STEM trades from a young age the skills and knowledge will become more habitual at the beginning of apprenticeships. There will be a known consistency in frameworks and testings when transitioning from secondary school into TAFE and provides easy stakeholder engagement to address any concerns regarding VET.

Q32. How can students be encouraged to consider VET pathways in their career planning? What is the role of parents and carers, teachers, careers advisers, industry and governments?

Please refer to Q6.

Future Direction

Q33. How can the NSW government improve its approach to engagement and partnerships to support the VET system?

Through streamlined and integrated VET secondary school curriculum and fostering partnerships between TAFE and the Department of Education.

Q34. How can VET students promote the value of VET to others, and how can the system better listen to student voices to deliver better outcomes?

Through VETSS, there will be a cultural change where it is perceived to be more acceptable to work towards a STEM trade career, especially for diverse cohorts. This will inherently promote the value of VET amongst students and lead to greater participation in trades beyond secondary school.

Q35. What is the role of industry in partnering with VET providers and government?

As noted under Q24, we are a member association representing electrical contractors. Associations like us have the opportunity to partner with VET providers and government to represent the collective voice of our members and overall industry. Having member associations communicate concerns gives the industry confidence that VET needs are being monitored and addressed.

Conclusion

MEA strongly advocate for government to prioritise its funding into VETSS to provide a sustainable and meaningful solution to the skills shortage crisis and lack of diversity in STEM trades. By streamlining and integrating VET into the secondary school curriculum, with an equal weighting to ATAR, we can expect to see systemic and societal change to the perception of STEM trade careers and the diversity within its skilled pool of labour. VETSS will expose all students, regardless of diversity and personal circumstance, to STEM trade opportunities. It will allow those who do not wish to pursue ATAR subjects the same opportunities as those developing an academic/office career to begin pursuing the trade jobs at an early school age. It is time to change the narrative and begin emphasising the benefits and inclusiveness of STEM trades. Without cultivating this change at a young impressionable age, we cannot expect to see the skills shortage and diversity issues resolved.

We strongly encourage fostering a partnership between TAFE and the Department of Education to create a natural pathway for students exiting their VETSS studies at the end of year 12 and enrolling in TAFE course. This will allow for frameworks to be aligned, support networks to be developed and industry confidence in a successful and impactful VET training sector of our future labour workforce.

We note that many tradespeople like to move away from the physical demands of their career as they get older or become injured but still pursue a job that allows them to utilise their skills and knowledge while giving back to their industry. This group would be a great option to target for teaching VETSS, however, the current expectation for them to obtain a university teaching degree will be a significant and obvious barrier. We therefore strongly recommend VETSS teaching requirements are different to that of ATAR teachers and allow those with necessary trade requirements and specified number of years' practical experience to teach VETSS.

We look forward to the future of NSW VET and support the ongoing effort to improve VET quality. We are available to partake in any further discussions regarding VETSS future.