

# Victorian Engineering Senate Conference

28-30 August 2024

*Chisholm*

TAFE VICTORIA

## Wominjeka, Welcome to Chisholm

Chisholm acknowledges the Bunurong people of the Kulin Nation as the Traditional Custodians of the Country on which our campuses are located.

We recognise their continuing connection to land and waters and thank them for protecting the Country and its ecosystems that we enjoy today.

We pay our respects to Elders, past and present, and extend that respect to all First Nations people.

Chisholm is committed to supporting and empowering our Aboriginal and Torres Strait Islander workforce, students and their communities by providing quality teaching and learning opportunities.





Victorian Engineering Senate

# Matthew Baker

Manager – Engineering, Chisholm





Victorian Engineering Senate

# Conor Mullan

Chief of Education, Chisholm





Victorian Engineering Senate

# Chris Ingham

Deputy CEO, Training and Skills, Victorian Registration & Qualifications Authority (VRQA)



# Victorian Engineering Senate

VRQA

28 August 2024

Chris Ingham

Deputy CEO, Training and Skills

VRQA



Victorian Registration &  
Qualifications Authority

# We seek to eliminate or minimise harm, and the risk of harm, to apprentices and trainees.

## What harms?

Harms are identified in the November 2022 [Ministerial Statement of Expectations](#) for the VRQA, and through the VRQA's detailed understanding of the sector.

### Injury or death

Some apprentices and trainees work in occupations and industries where there is risk of injury or death, such as construction and manufacturing. If they are poorly supervised, this increases the risk. We go to workplaces to make sure that employers are meeting their obligation to provide proper supervision by a suitably qualified or experienced person.

### Poor quality workplace experiences

Too many apprentices and trainees 'drop out' – they don't get qualified because of negative experiences in the workplace. This harms their future career prospects. We target those employers who have consistently poor outcomes (such as low levels of completion, high cancellations, dissatisfaction and safety concerns).

### Exploitation and mistreatment

The scope of our responsibility is limited to training contract compliance, but we know that other government agencies hold important information about employers that exploit or mistreat apprentices and trainees. For example, when they are not paid properly, forced to work in unsafe conditions, or bullied. All government regulators that come into contact with apprentices and trainees share information. If we receive information from one of our co-regulators that an employer exploits or mistreats their apprentices and trainees, we will cancel their approval to employ apprentices and trainees in Victoria.

### Insufficient learning and progress

The career prospects of apprentices and trainees are harmed when they are denied opportunities to learn the skills and competencies set out in their training plan, or to be released from the workplace to attend their registered training organisation. We monitor training plans. We look for training plans that are not maintained to record progress (or where there isn't one at all), to make sure apprentices and trainees are progressing as they should.

## Powers of the VRQA

### Sanctions

The [VRQA Regulatory Approach Statement 2022](#) explains that our starting point is to seek compliance through education and support. However, where necessary, we will use our full range of regulatory powers and tools to secure compliance.

Our main sanctions are the power to cancel:

- an employer's approval to employ apprentices and trainees in Victoria
- training contracts.

### Authorised Officers

We have a team of Authorised Officers that visit workplaces to check compliance. They are deployed

- in response to problems, when apprentices, trainees or other parties notify us of possible non-compliance
- through an annual planned work schedule of visits to workplaces where there is the highest risk of harm.

Any apprentice or trainee with concerns can contact us on:

- [vrqa.apprenticeships@education.vic.gov.au](mailto:vrqa.apprenticeships@education.vic.gov.au)
- 1300 722 603

### Informing the public

Each year we conduct regulatory campaigns and publish enforcement and compliance priorities centred around minimising the harms to apprentices and trainees identified in this document.

This notifies the public of where we plan to deploy Authorised Officers in the field, including

- industry/industries (for example, automotive, electrical)
- qualifications (for example, Certificate III in Hairdressing).

We will publish the results of our regulatory campaigns.

## Our priorities for the regulation of apprenticeships and traineeships in 2024



### Women building and construction apprentices

The traditionally male-dominated industry is seeing growth in female participation. We'll check that women apprentices are given skilled work and quality training.



### Labour hire organisations (LHOs)

Apprentices and trainees employed by LHOs are at greater risk of exploitation and mistreatment. Our Authorised Officers will visit these workplaces.



### Employer training plan compliance

A campaign to ensure apprentices and trainees learn the skills and competencies set out in their training plan and are released from the workplace to attend their registered training organisation.



### Ban on engineered stone

From 1 July 2024, the use, manufacturing, supply, processing and installation of engineered stone will be banned in Australia. We'll go into Victorian workplaces to ensure apprentices are not exposed to silica dust from engineered stone.

# 2023-24 summary

## **SANCTIONS**

- 27 employer approvals were revoked, up from 24 in 2022–23 and 14 in 2021–22
- 92 delegate-ordered cancellations of training contracts

## **FOCUS ON INFORMATION SHARING**

- Of the 27 employer approvals, there were 7 cases that came to the VRQA's attention through information sharing (4 from co-regulators and 3 from unions).
- To assist co-regulators, each month the VRQA provided comprehensive data reports to Energy Safe Victoria (ESV) and the Victorian Building Authority (VBA). The reports contained information on all registered apprenticeship and traineeship training contracts in building and construction, plumbing, electrical and associated trades. The information helps ESV and the VBA to communicate with employers and their apprentices and trainees about safety, registration and licensing requirements.



# Recent focus: dodgy existing worker traineeships

## Protecting the quality of the traineeship system

We stopped registration of 281 non-compliant trainee contracts.

**Published:** Friday 9 August 2024 at 3:49 pm



In July, the VRQA investigated and stopped registration of 281 non-compliant trainee contracts.

### Share this page

[f Facebook](#)

[X \(formerly Twitter\)](#)

[in LinkedIn](#)

# Completed Campaign - BuildUP

## Campaign REPORT



SpeakUP

BuildUP

The women apprentices in construction campaign



Covered all women apprentices and trainees in civil construction in Victoria,

Spoke to 60 women about their experiences. Authorised Officer visits to workplaces, phone interviews, and BuildUP hotline.

## KEY FINDINGS

**The good news is that we found high levels of employer compliance.**

Mostly, we found suitable training plans in place, proper supervision, women provided access to the same tools and equipment as their male colleagues, and trained and assigned work across the depth and breadth of civil construction qualifications (Certificate III or IV in Civil Construction). Many women civil construction apprentices and trainees were very positive about their experience in the workplace.

**The bad news is that we found a culture of silence when women apprentices and trainees are mistreated by employers.**

Every apprentice and trainee that reported negative experiences did not want the VRQA to take action, due to fear of workplace reprisal or concern of being labelled a 'troublemaker' in the industry.

For the same reasons, callers to the BuildUP hotline who reported serious employer non-compliance chose to remain anonymous.

Other campaign findings include:

- 15% said they are not supervised at all and/or couldn't name their supervisor(s)
- some said they were supervised by other apprentices, which is not safe or compliant
- 3 reported current bullying through homophobic comments, rumours and ridicule.

We are following up with 2 employers regarding allegations of breaches to training contracts.

### Supervision guidance

Apprenticeships Victoria has guidance and fact sheets on supervising apprentices and trainees.



BuildUP



# Next Campaign - Labour Hire

## Statement of Expectations

- *The VRQA to 'review its practice related to labour hire arrangements, and publish a policy on its future approach' (SOE 7f).*

## Rationale

- The *Education and Training Reform Act 2006* provides insufficient powers for the VRQA to have oversight of host employers. Apprentices and trainees employed through labour hire arrangements are at greater risk of exploitation and poor training progress because a) host employers are not subject to the VRQA employer approval process, training contract or the training plan, which means b) these apprentices and trainees are largely 'invisible' to the VRQA.

## Non-GTO labour hire

- There were **2,003\*** Apprentices and Trainees (A/T) with Active/Active Recommended training contracts employed by non-GTO labour hire (LH) employers:
  - 1,020 apprentices
  - 983 trainees.
- Analysis of the qualifications/employers/workplaces of these A/T is in the following slides, including that:
  - Most Apprentices in this cohort are training to qualify as electrotechnology electricians (31% | n=315)
  - Most Trainees in this cohort are pursuing qualifications in supply chain operations (32% | n=319).

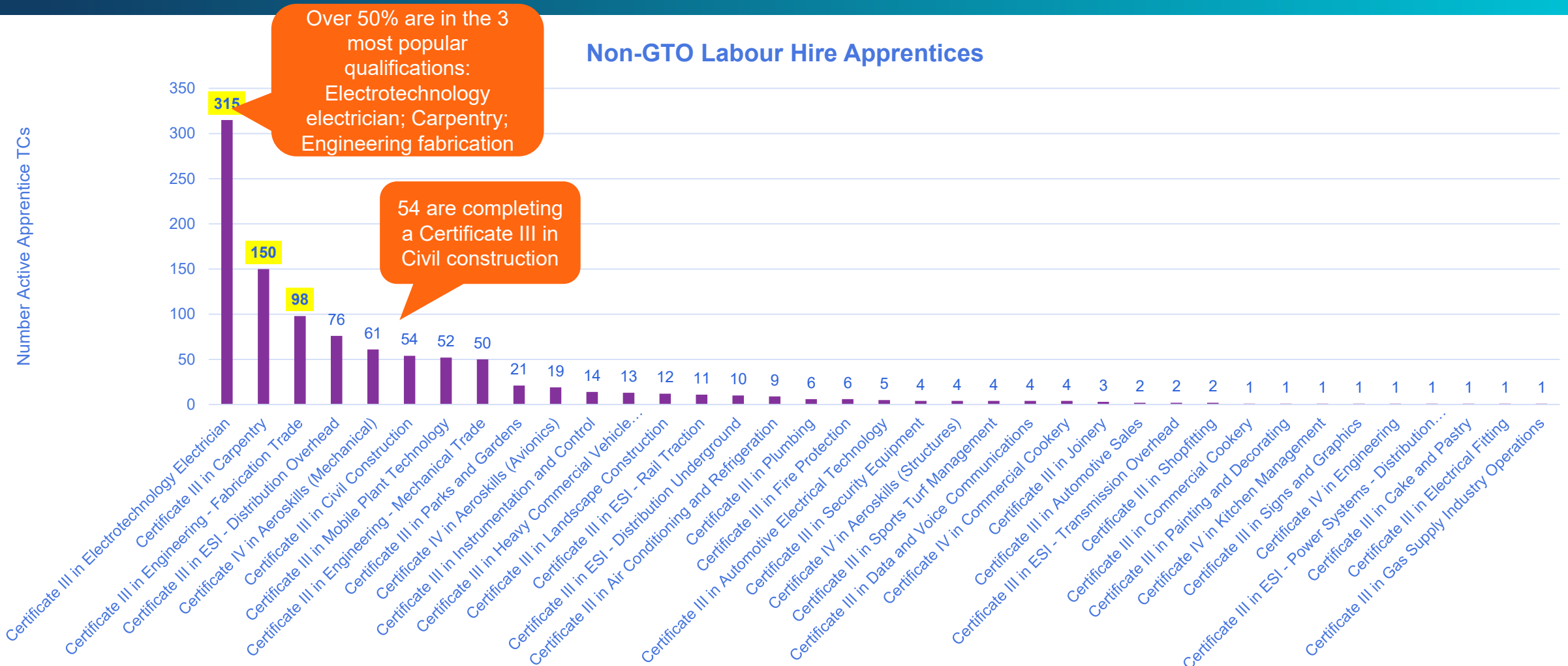
## 2024 Labour Hire campaign

**VRQA will undertake a joint campaign with the Labour Hire Authority, focused on a selection of building and construction qualifications. This will target those working with the highest risk of breaches of workplace health and**

\*Data based on a point in time extraction from Epsilon (May 2024)

# Number of Apprentice training contracts/qualification\*

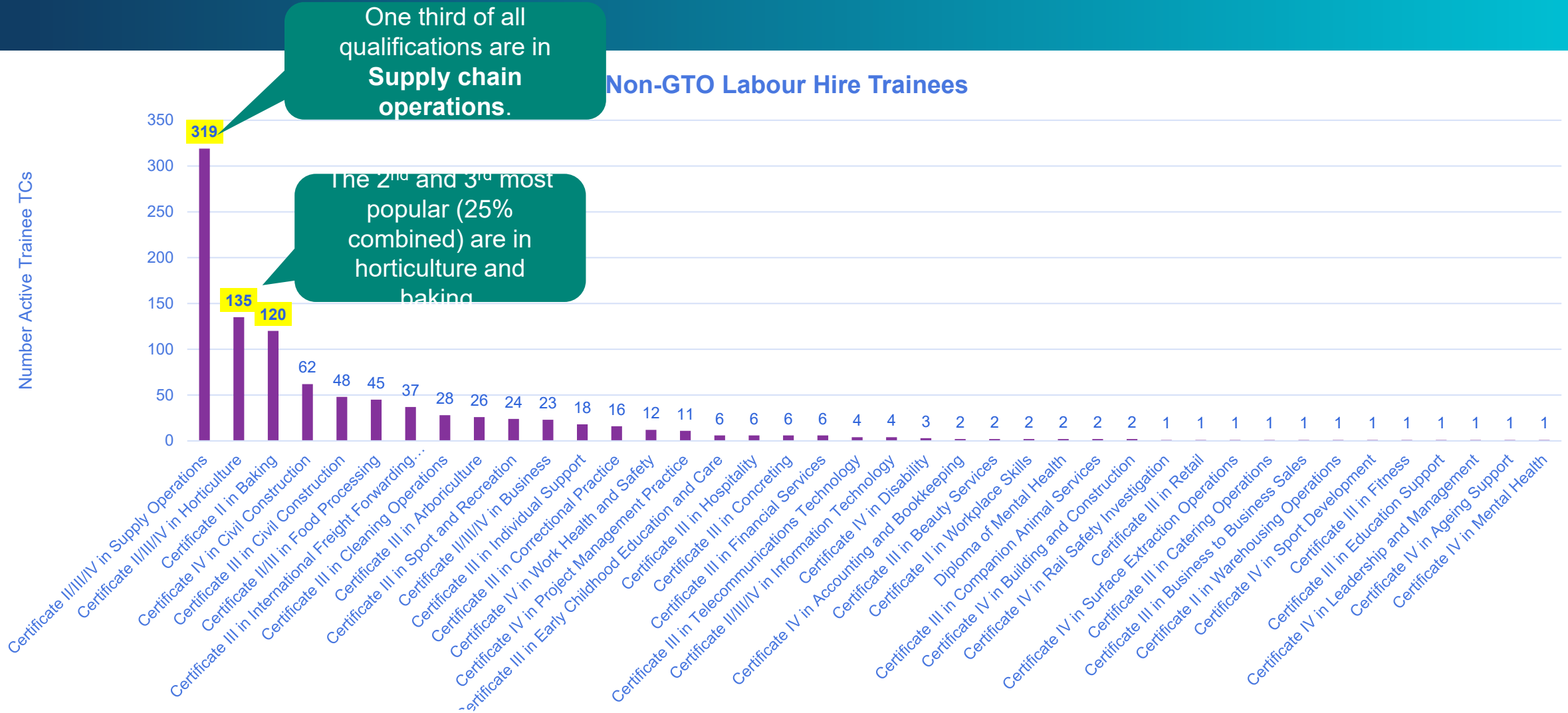
## Non-GTO Labour Hire Apprentices



\*some grouped together (e.g. Cert III/IV)

# Number of Trainee training contracts per qualification

## Non-GTO Labour Hire Trainees



\*some grouped together (e.g. Cert II/III)



Victorian Engineering Senate

# Craig Robinson

CEO, Victorian Skills Authority





**Victorian  
Skills Authority**

# Presentation to Engineering Senate

› 29 August 2024



Jobs, Skills,  
Industry  
and Regions



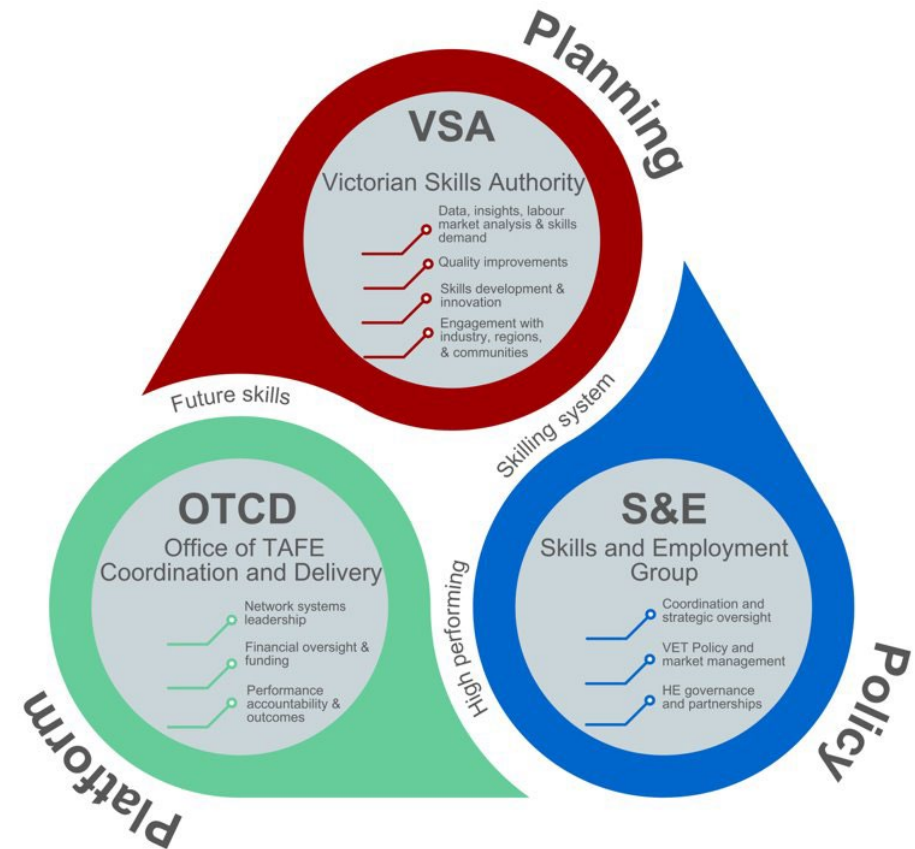
# Overview

- Skills Planning in Victoria
- Demand for engineering skills
- IAGs and CMMs and qualification change
- National Qualification Reform



# Victoria's skills system architecture

- Alignment of skills and training to deliver skills-focused responses to industry needs
- Ensuring access to quality pre-accredited and accredited education, training and skills.



# Overview of Victorian Skills Plan for 2023 into 2024



## What is the Victorian Skills Plan?

Provides an evidence-based roadmap for the transformation of our post-secondary skills system to:

- meet immediate and future skills demand
- support a thriving local economy
- increase prosperity



## What does the Skills Plan achieve?

Helps to improve Victoria's training and skills system by:

- outlining actions and recommendations to make it more responsive to current and future skills needs
- facilitating greater collaboration among government, employers, unions, education and training providers, schools, learners and communities



## Key outputs

- Victorian Skills Plan main report
- State of the Victorian Labour Market Report
- Employment Forecast Dashboard
- Implementation Update

# The Victorian Skills Plan covers 4 broad priorities



## Recognising the diversity of Victoria's employment needs

- Illustrates current and projected state of Victorian labour market
- Useful to a range of stakeholders for analysis and planning



## Promoting post-secondary education skills & career pathways

- Building a post-secondary system that meets the motivations and aspirations of learners



## Lifting participation in education and training

- Access to learning for work and life is critical, particularly for First Nations peoples and Victorians with disability



## Delivering the right skills for the jobs of today and tomorrow

- Local and global factors demand workers gain skills to allow flexibility across occupations and industries
- Skills system needs to be innovative, responsive, and with strong links to industry to achieve this

# Over the next 3 years, Victoria's employment needs will be diverse across industries, occupation and regions

**352,000**

new workers expected to enter the Victorian economy between 2023 and 2026



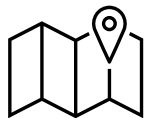
**64%**

of these new workers will need higher-order skills



**277,000**

of these new workers expected in metropolitan Melbourne



**75,000**

of these new workers expected in regional Victoria

## The top industries expecting new workers:



**83,300**

health care and social assistance



**46,400**

education and training



**35,000**

professional, scientific and technical services



**32,300**

accommodation and food services

## Occupations in demand:



**17,600**

ageing and disability carers



**10,200**

registered nurses



**6,400**

software and applications programmers



**5,700**

university lecturers and tutors



**5,300**

primary school teachers



**4,900**

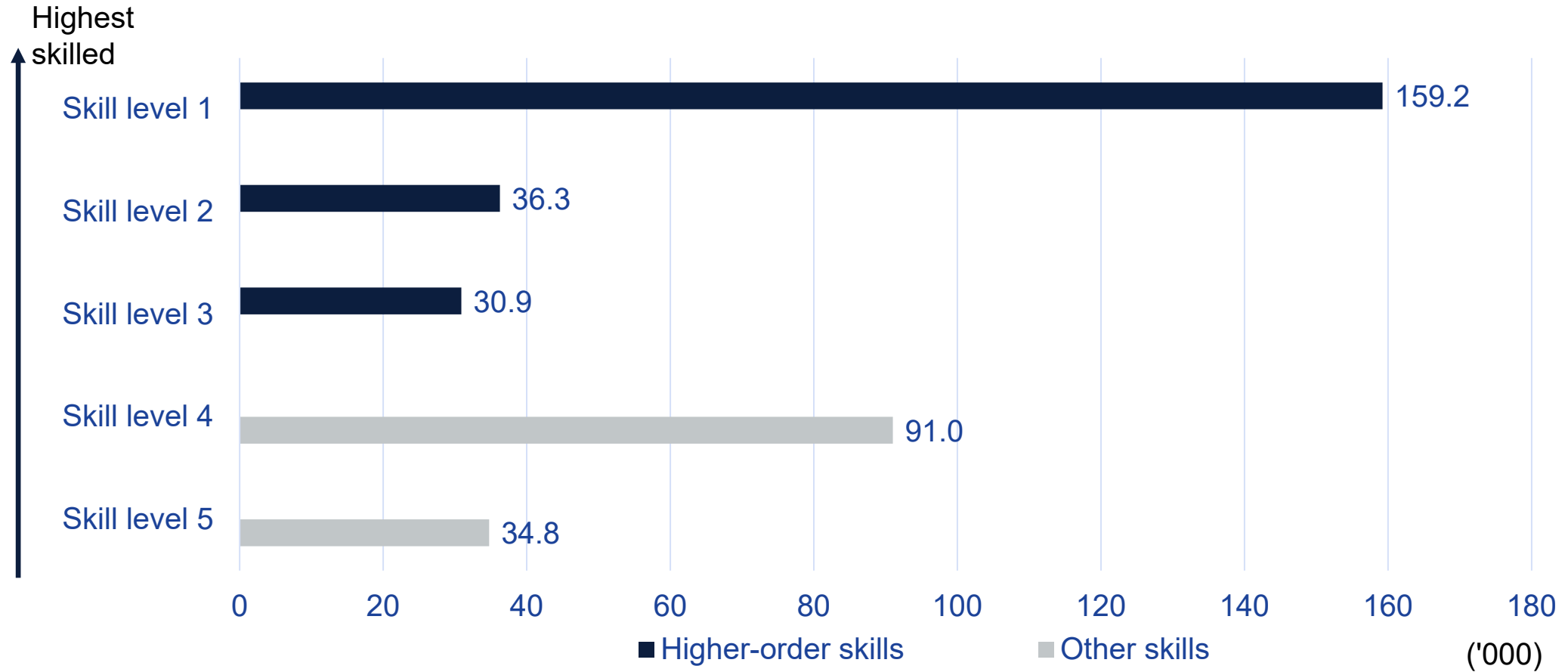
secondary school teachers



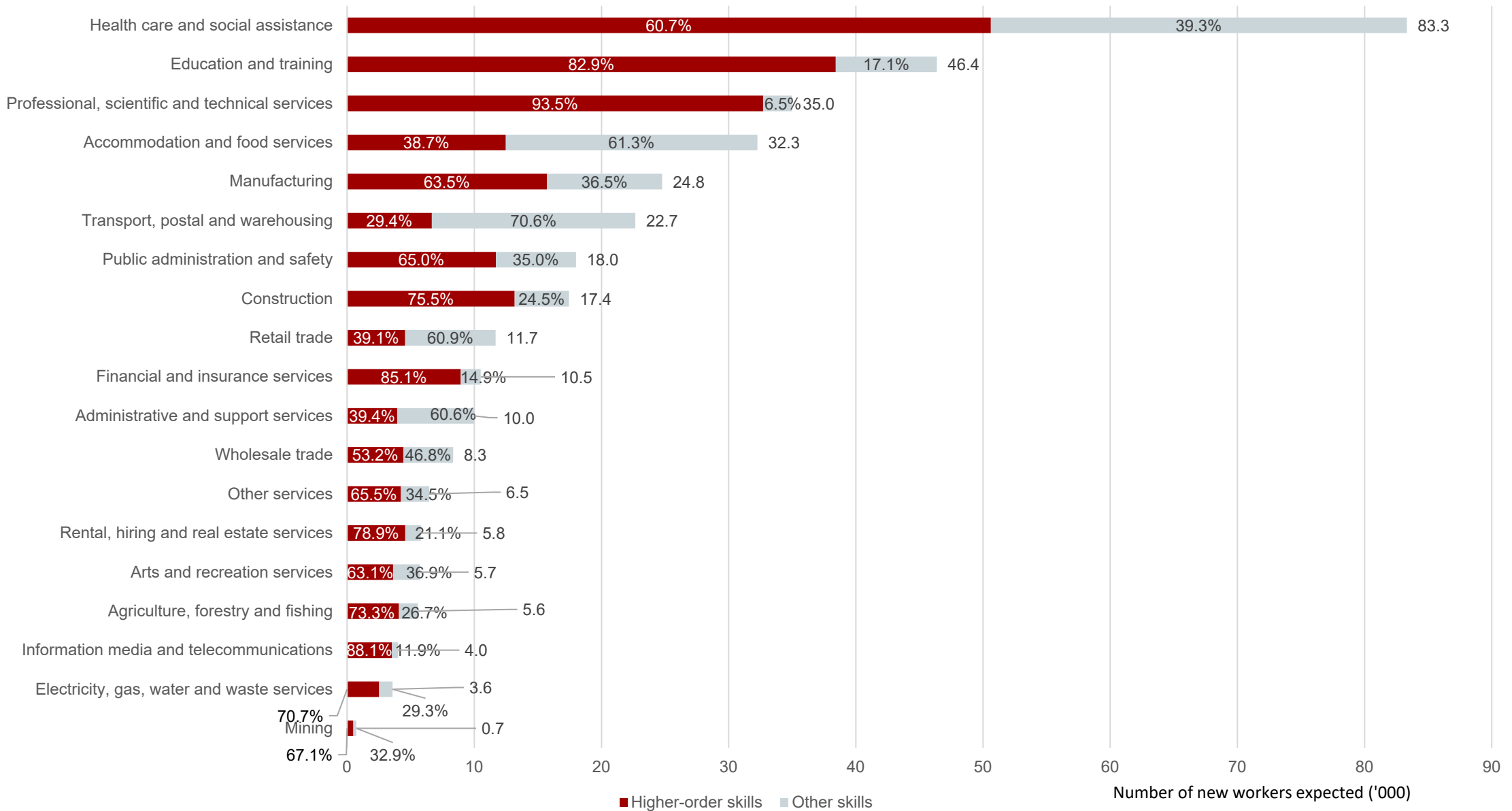
**4,600**

accountants

# A changing economy requires more workers with higher-order skills



# Most new workers will require higher-order skills across all industries





|         |                                |                          |   |                                      |                                |   |
|---------|--------------------------------|--------------------------|---|--------------------------------------|--------------------------------|---|
| Welcome | <b>Select occupation</b> ⓘ     | <b>Employment 2023</b> ⓘ | <b>Employment growth rate (%) 2023-2026</b> ⓘ | <b>Employment growth 2023-2026</b> ⓘ | <b>Retirements 2023-2026</b> ⓘ | <b>Total new workers expected by 2026</b> ⓘ |
|         | Metal Fitters and Machinists ▾ | 21,335                   | 0.4%  | 235                                  | 1,545                          | 1,780                                       |

Workforce Summary

**Occupation**

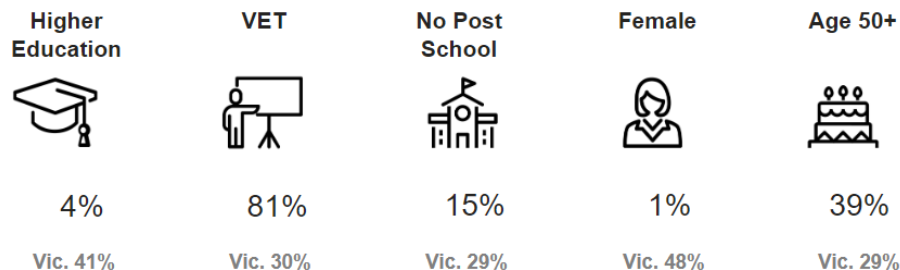
Industry

Region

Data Explorer

Data Notes

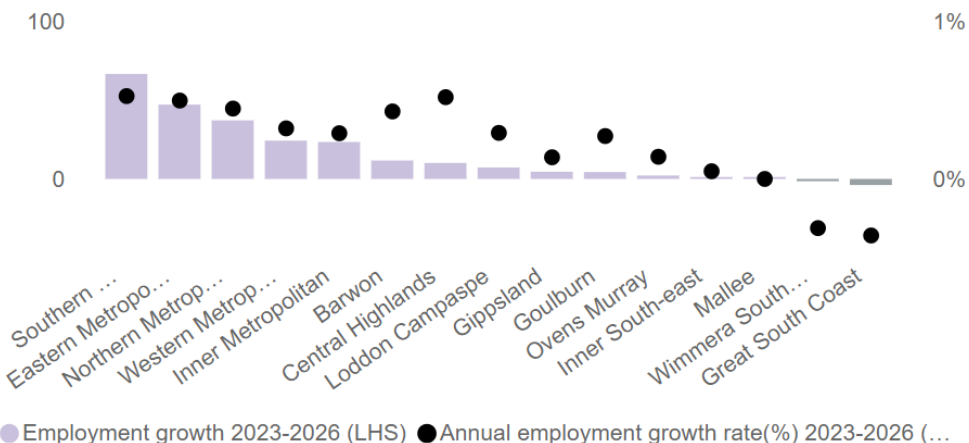
### Profile of Metal Fitters and Machinists



### Top 5 employing industries for Metal Fitters and Machinists in 2026 (Employment growth 2023-2026)



### Employment growth and Annual employment growth rate, region



### Key Vocational Education and Training courses aligned to Metal Fitters and Machinists

Click on the course code or name to open the Victorian Skills Gateway, which provides more information. For higher education pathways [click here](#)

| course_code              | Course name   | Enro |
|--------------------------|---|------|
| <a href="#">22478VIC</a> | <a href="#">Diploma of Engineering Technology</a>   |      |
| <a href="#">22479VIC</a> | <a href="#">Advanced Diploma of Engineering Technology</a>  |      |
| <a href="#">AUM30218</a> | <a href="#">Certificate III in Automotive Manufacturing Technical Operations - Bus, Truck and Trailer</a> |      |
| <a href="#">AUR40216</a> | <a href="#">Certificate IV in Automotive Mechanical Diagnosis</a>   |      |
| <a href="#">AUR40820</a> | <a href="#">Certificate IV in Automotive Mechanical Overhauling</a>                                       |      |
| <a href="#">CPC30120</a> | <a href="#">Certificate III in Shopfitting</a>  |      |
| <a href="#">MEM30219</a> | <a href="#">Certificate III in Engineering - Mechanical Trade</a>   |      |
| <a href="#">MEM30422</a> | <a href="#">Certificate III in Engineering - Electrical/Electronic Trade</a>                              |      |
| <a href="#">MEM31322</a> | <a href="#">Certificate III in Refrigeration and Air Conditioning</a>                                     |      |

The table above only shows courses that are on the January 2024 Training Needs List

# Qualification Development in Australia



# Jobs and Skills Councils

|   |  |   |   |   |
|---|--|---|---|---|
|  <p>Aged &amp; Disability,<br/>Children's Education &amp;<br/>Care, Health, Human<br/>Services, Sport &amp;<br/>Recreation</p>  |  <p>Agribusiness, Fibre,<br/>Furnishing, Food<br/>Animal and<br/>Environment Care</p>  |  <p>Arts, Personal Services,<br/>Retail, Tourism and<br/>Hospitality</p>  |  <p>Building,<br/>Construction,<br/>Property and Water</p>  |  <p>Energy, Gas and<br/>Renewables</p>  |
|  <p>Finance, Business<br/>and Technology</p>    |  <p>Manufacturing</p>    |  <p>Mining and<br/>Automotive</p>                                       |  <p>Public Safety and<br/>Government</p>                  |  <p>Transport and<br/>Logistics</p>   |

[Jobs and Skills Councils \(JSCs\)](#) have been established to provide industry with a stronger, more strategic voice in ensuring Australia's Vocational Education and Training (VET) sector delivers stronger outcomes for learners and employers.

# JSCs have new roles

## Workforce Planning

- intelligence-gathering for strategic priorities and will be a critical focus to guide strategic planning.

## Training Product Development

- JSCs develop training products in line with standards set by Skills Ministers to improve the quality, speed to market and responsiveness of training products.

## Implementation, Promotion and Monitoring

- partnering with training providers and organisations to align workforce planning objectives and national training products with career advice and 'on the ground' training delivery.

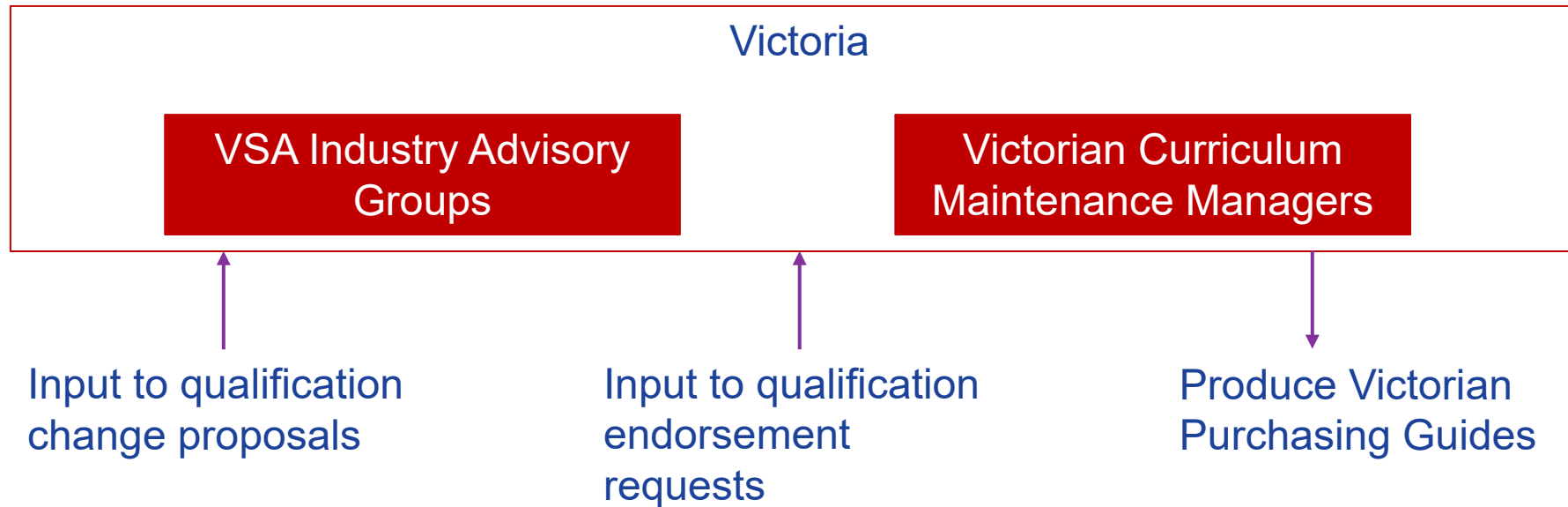
## Industry Stewardship

- a source of intelligence on workforce issues affecting their industries and provide advice on national training system policies.

# Qualification Development in Australia – the role of JSCs and VSA

**Training Package Operating Framework**

Empowers State and Territory **Senior Responsible Officers** to guide renewal and new qualifications processes



# Qualification Reform in Australia

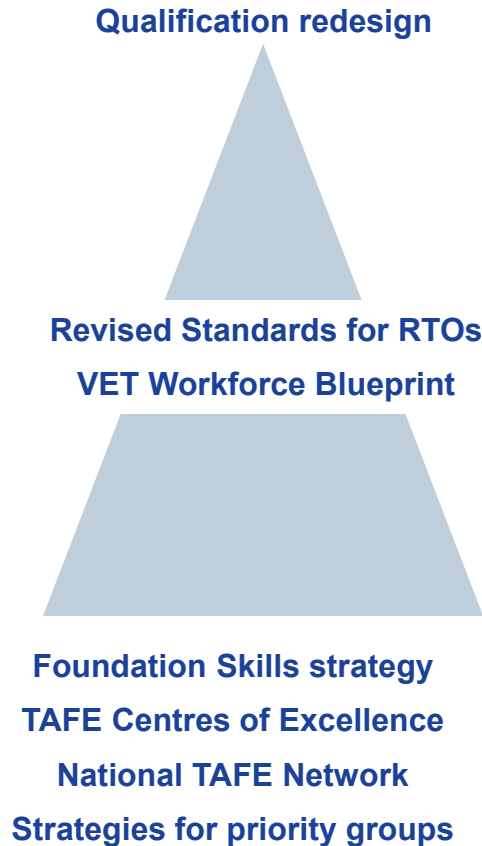
# Planning for redundancy



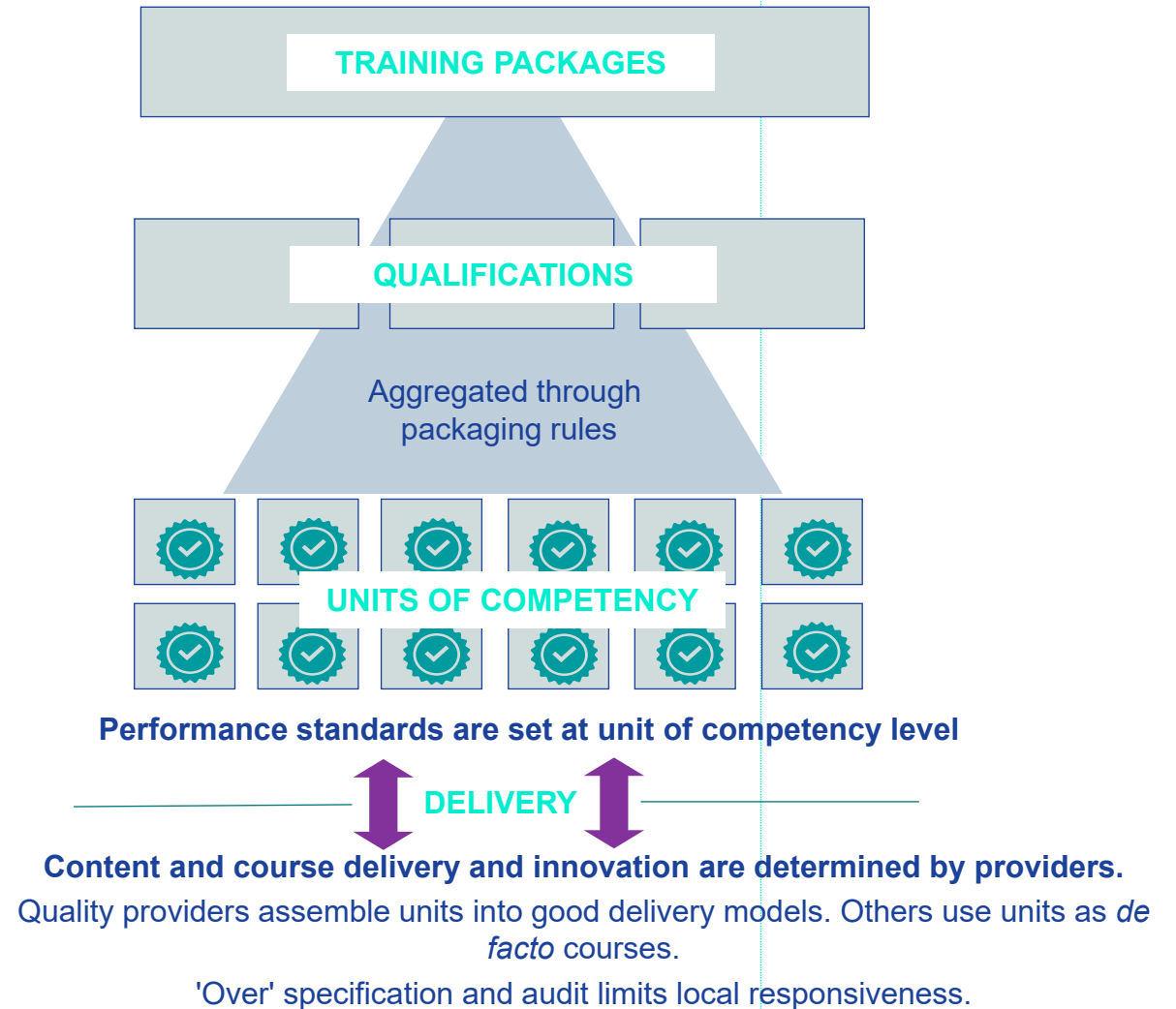
*building extras into VET for the future*

# The qualifications system is integral to the national agenda for VET reform

## NATIONAL PRIORITIES



## QUALIFICATIONS SYSTEM STRUCTURE



# No longer One size fits all

---

## Flexibility will improve outdated one-size-fits-all system

BRENDAN O'CONNOR

### Changing how qualifications are developed

Find a job you love, and you'll never work a day in your life is an oft-mentioned adage.

Some people are lucky to settle on a rewarding career early, but for others finding a career path that fits might take more time, and more trial and error.

And yet we have a "one-size-fits-all" approach that doesn't provide the flexibility industry needs to grow and take advantage of emerging markets.

That's why the Albanese government wants to make sure the qualifications Australians train hard for are going to lead to well-paid, secure jobs, and be as useful as possible if they transition to a different job.

At the moment, the VET qualification system can be a labyrinth to navigate.

There are around 1200 qualifi-

ding mechanics and auto technicians aren't forced to specialise too soon, giving them and their employers broader skills and more options.

Another project is looking at training across sectors including hospitality, tourism, hair and beauty, and retail to identify how common skills across service industries could be aligned.

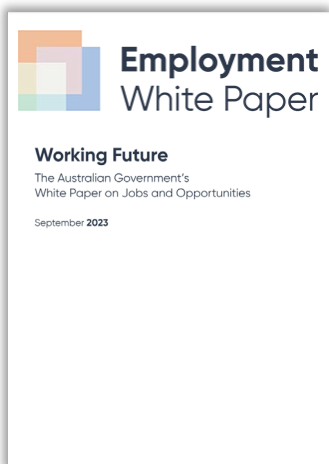
This would recognise and value what workers already know, and not force them to slide down the snake to start up a new ladder from the bottom.



O'Connor

'Our reforms will mean industries can quickly scale

# The national reform agenda places new expectations on the VET system



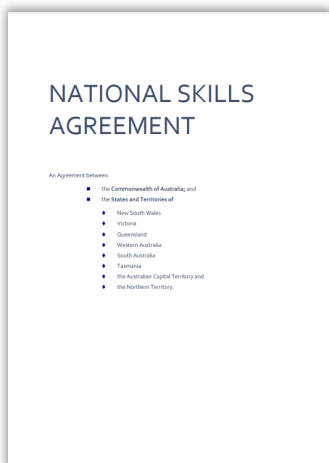
## EMPLOYMENT WHITE PAPER

- Sets ambition for sustained inclusive full employment and jobs that are secure and
- Recognises the need to train workers for a knowledge
- Emphasises the importance of economic development
- *Positions VET as a productivity and growth*



## AUSTRALIAN UNIVERSITIES ACCORD

- Sets a new, ambitious tertiary attainment and participation target to drive effort towards a better-connected tertiary education system to meet skills needs
- Reflects community sentiment about the need to elevate the value and standing of VET qualifications
- Supports implementation of new AQF for a “comprehensive system of modular, stackable and transferable qualifications”



## NATIONAL SKILLS AGREEMENT

- Outlines social skills alongside economic
- Priority sectors
  - Clean energy
  - Sovereign capabilities
  - Care and support services
  - Digital and technology capability
- *Positions qualification design within a ambitious reform agenda for VET system*

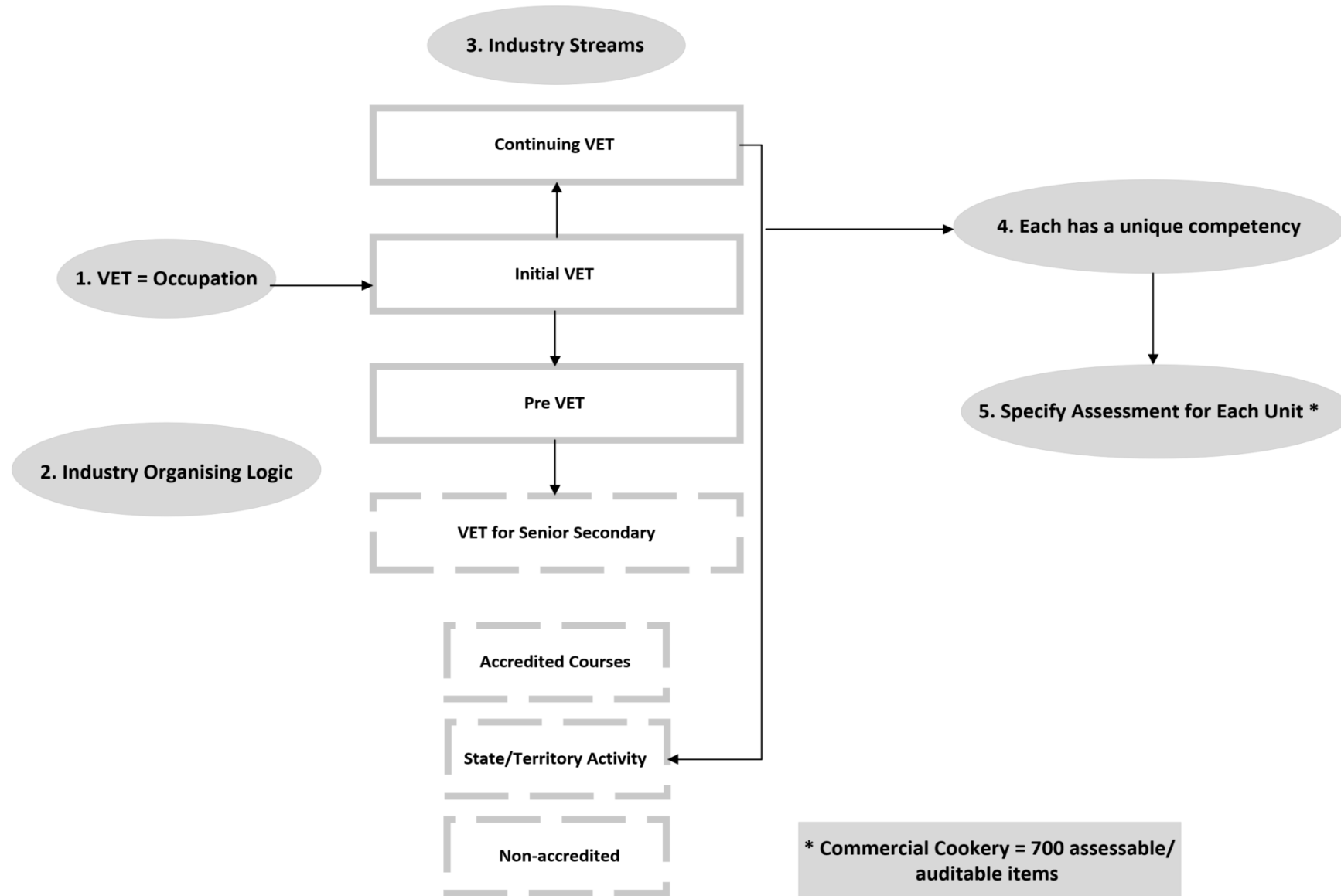


## AUSTRALIAN QUALIFICATIONS FRAMEWORK (AQF) REVIEW

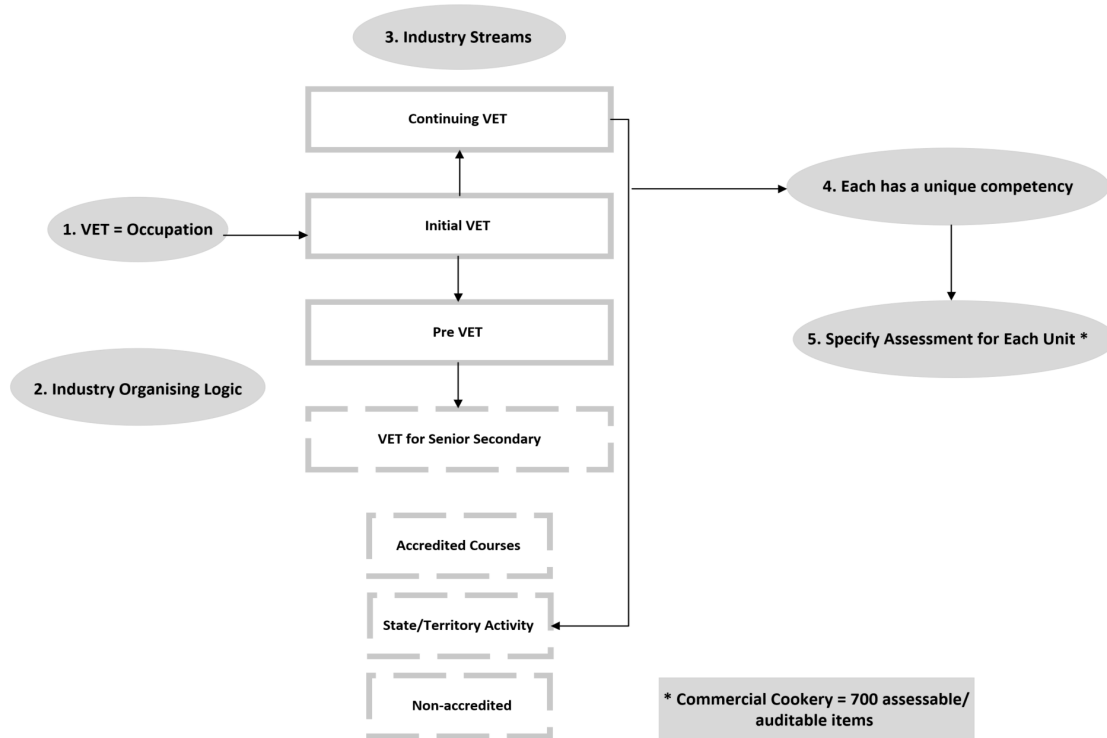
- Sets out an ambitious vision for a tertiary qualifications system that is fit-for-purpose for a modern economy
- Proposes an alternative to the current hierarchy of knowledge and skills
- Recognises the need for higher order VET qualifications



# How we got here: The explosion in 5 easy steps



# Yet the trend is to convergence and transferability



## New trends (although not absolutes)

- We are increasingly a knowledge and service-based economy
- Digitisation and automation is changing production and service processes, away from craft and process assurance
- Participants in VET have more choices to meet their ambitions.

## We need to contemplate new approaches

- Reduce the range of narrow choices
- Consider the value judgements of potential participants
- Discern learning and understanding

# Qualifications Reform Design Principles

High-performing, easy to navigate, and meets the needs of employers and learners now and into the future

Supports innovation and excellence in training delivery and assessment

Supports safety and quality in training outcomes

Delivers an adaptable skilled workforce resilient to structural changes

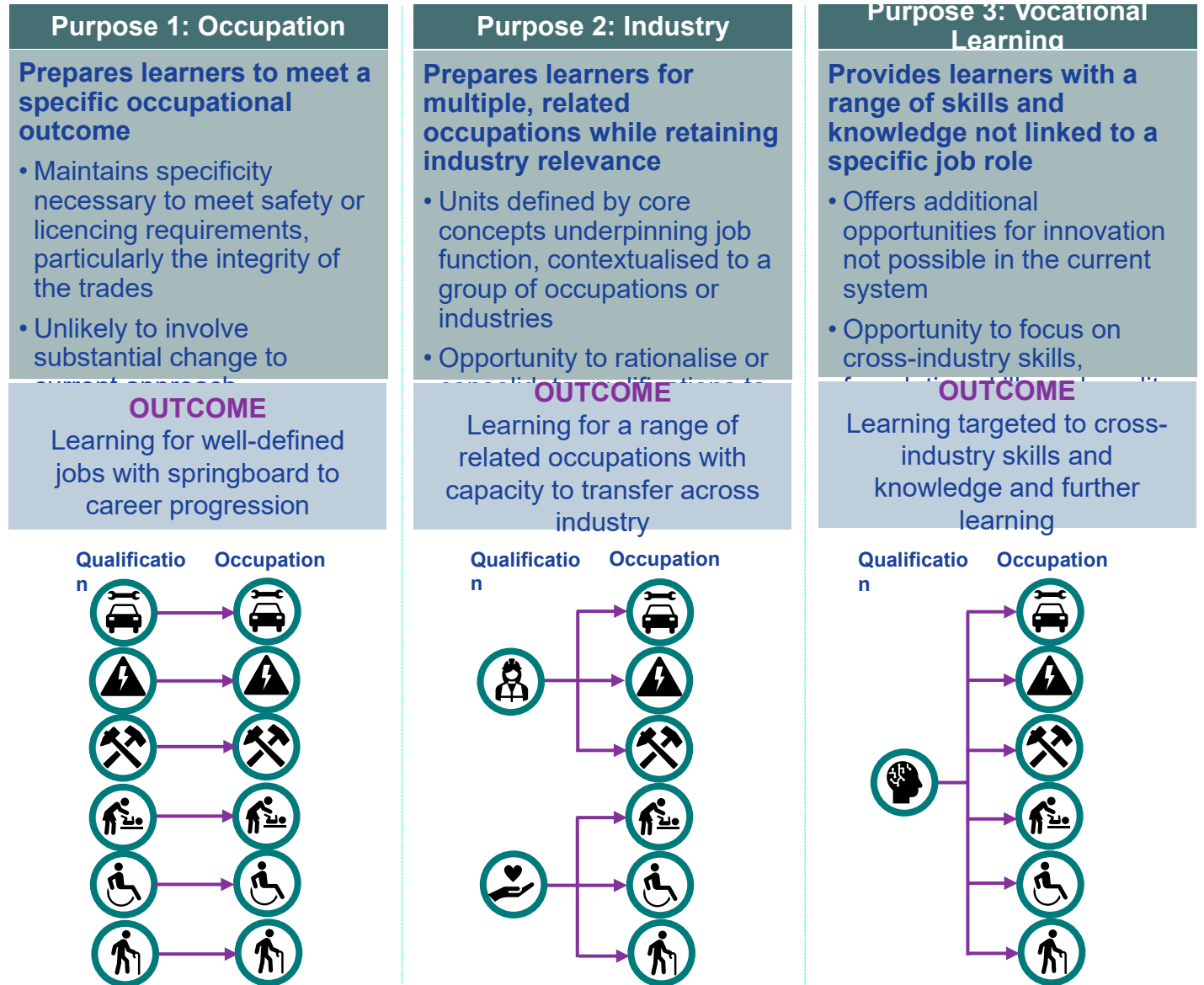
Supports more employers to use nationally recognised training

# Proposed new purpose-driven qualifications system focused on outcomes

The proposed new system allows for different models based on the purpose of the qualification










## Benefits of the proposed system

- **Retain what is working well** where qualifications have clear links to labour market outcomes (Purpose 1)
- **Generate new models** for use across industries, giving graduates a base of transferable knowledge and skills
- **Bring more students into VET** by delivering knowledge, skills and core capabilities they need for life and work, and building confidence in the future that VET offers
- **Encourages industry** to think about new ways to design and organise qualifications that are not directly linked to specific occupations and deliver broader capabilities
- **Enable quality delivery** by reducing overspecification, leading to better learning experiences and outcomes and leveraging the capability of quality VET providers



# Applying Purpose 2 – Conceptualisation of industry skills needs

The structure of qualifications demonstrates how the current system logic has broken down, resulting in fragmentation, duplication and inconsistency

| Qualifications proposed for consolidation (Purpose 2)   | UNITS | CORE | ELECTIVE |
|---|-------|------|----------|
|  Cert II in Automotive Underbody Technology                      | 38    | 4    | 34       |
|  Cert II in Automotive Cylinder Head Reconditioning              | 18    | 7    | 11       |
|  Cert II in Automotive Tyre Servicing Technology                 | 40    | 4    | 36       |
|  Cert II in Motor Sport Technology                               | 58    | 7    | 51       |
|  Cert II in Automotive Steering and Suspension System Technology | 24    | 7    | 17       |
|  Cert II in Outdoor Power Equipment Technology                  | 23    | 8    | 15       |
|  Cert II in Bicycle Mechanical Technology                      | → 50  | 8    | 42       |
|  Cert II in Automotive Electrical Technology                   | 49    | 10   | 39       |
|  Cert II in Automotive Servicing Technology                    | 49    | 13   | 36       |

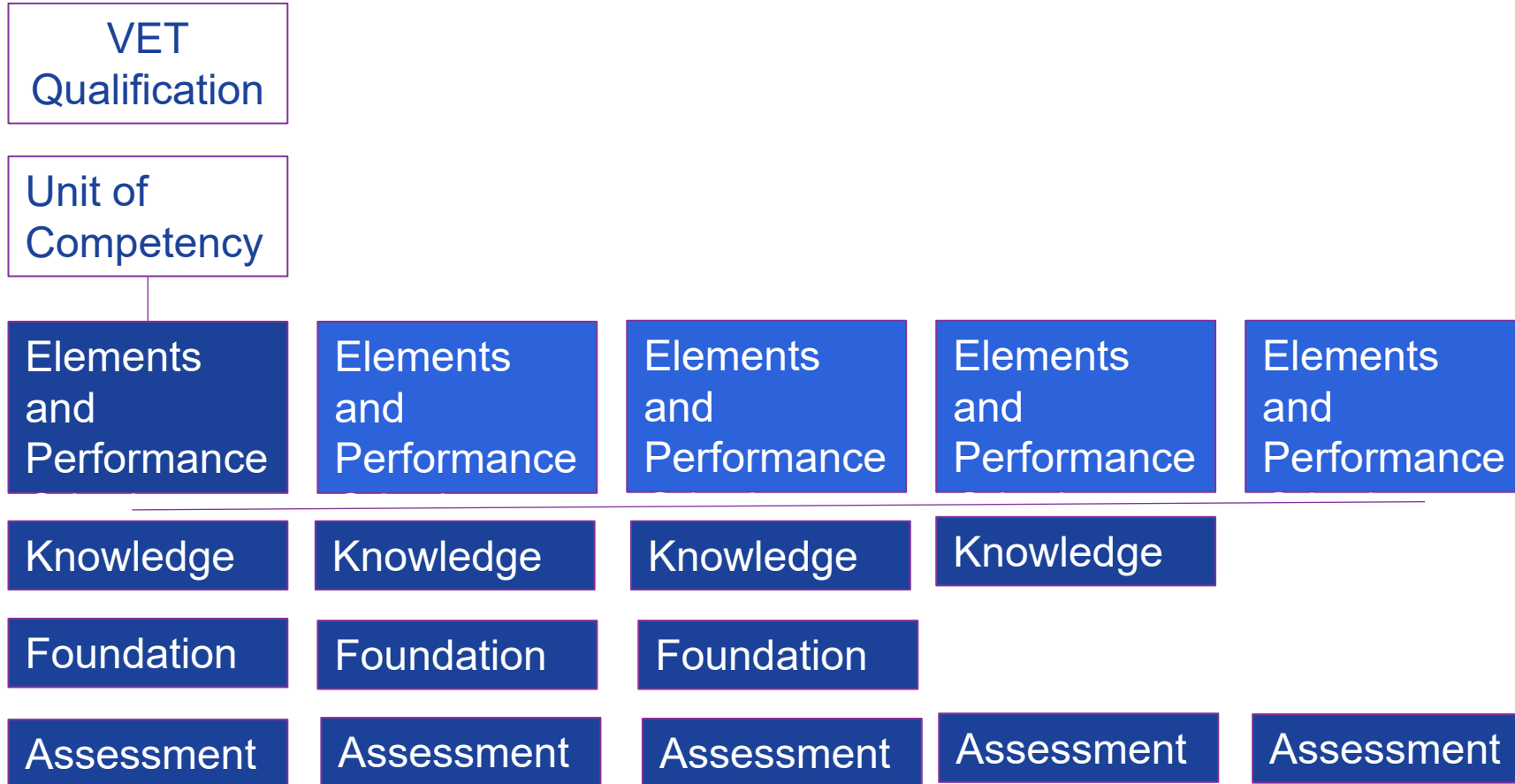
349

| Technical skills   | Working safely   | Working with others  | Foundation skills  |
|--|--|--|--|
| <p>All nine quals contain unique core units with specific technical skills.</p> <p>One qual has only one unique core unit. All its other six core units are duplicated in other quals.</p> | <p>All nine quals contain: <b>Follow safe working practices in an automotive workplace.</b></p> <p>One qual also contains two similar 'working safely' electives from other training packages.</p> | <p>Seven quals contain: <b>Communicate effectively in an automotive workplace</b> (as elective).</p> <p>Two quals also contain another similar elective: <b>Communicate business information in an automotive workplace.</b></p> | <p>Seven quals contain: <b>Use numbers in an automotive workplace</b> (either core or elective).</p> <p>Two quals do not contain specific numeracy units.</p> <p>Units draw on a mix of frameworks: <i>Core Skills for Work / Employability Skills</i></p> |
| <p><b>Developing a Purpose 2 qualification would begin with identifying the core skills and knowledge needed across the Automotive industry</b></p>  |  |  |  |

# Questions

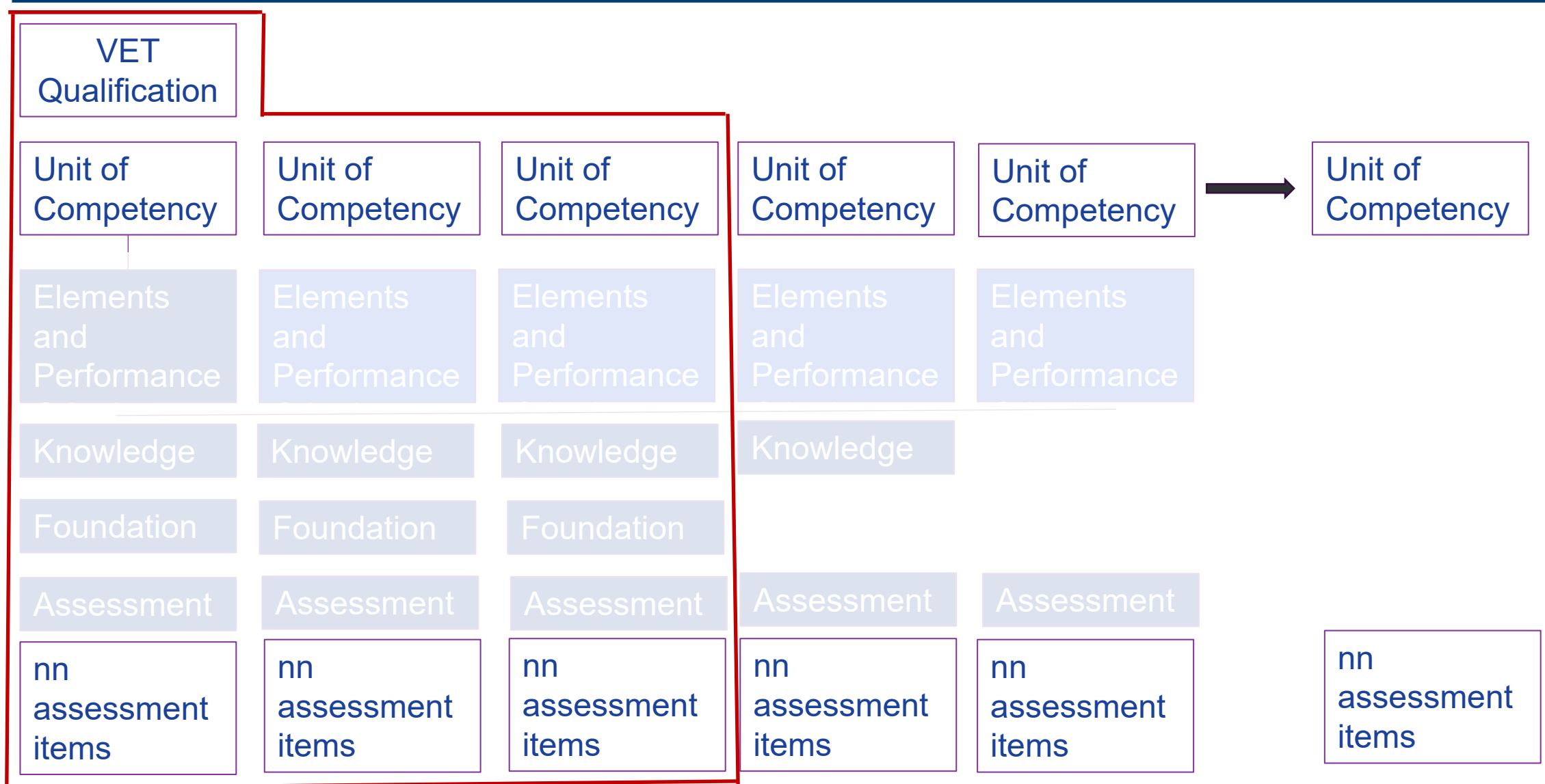
# VET Qualifications are bogged down in task specification

---



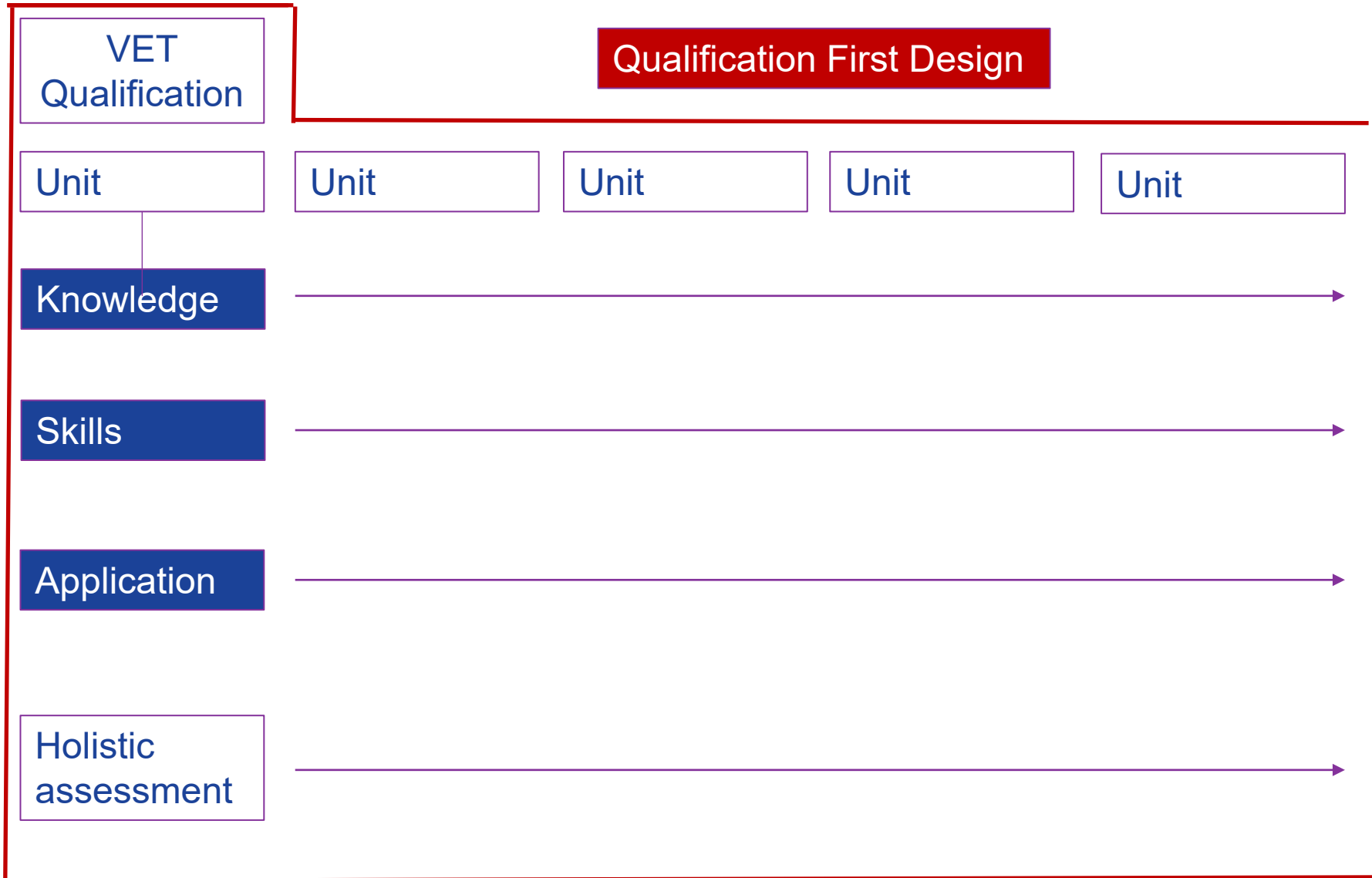
100s of assessment items per unit

# Many units of competency are not used





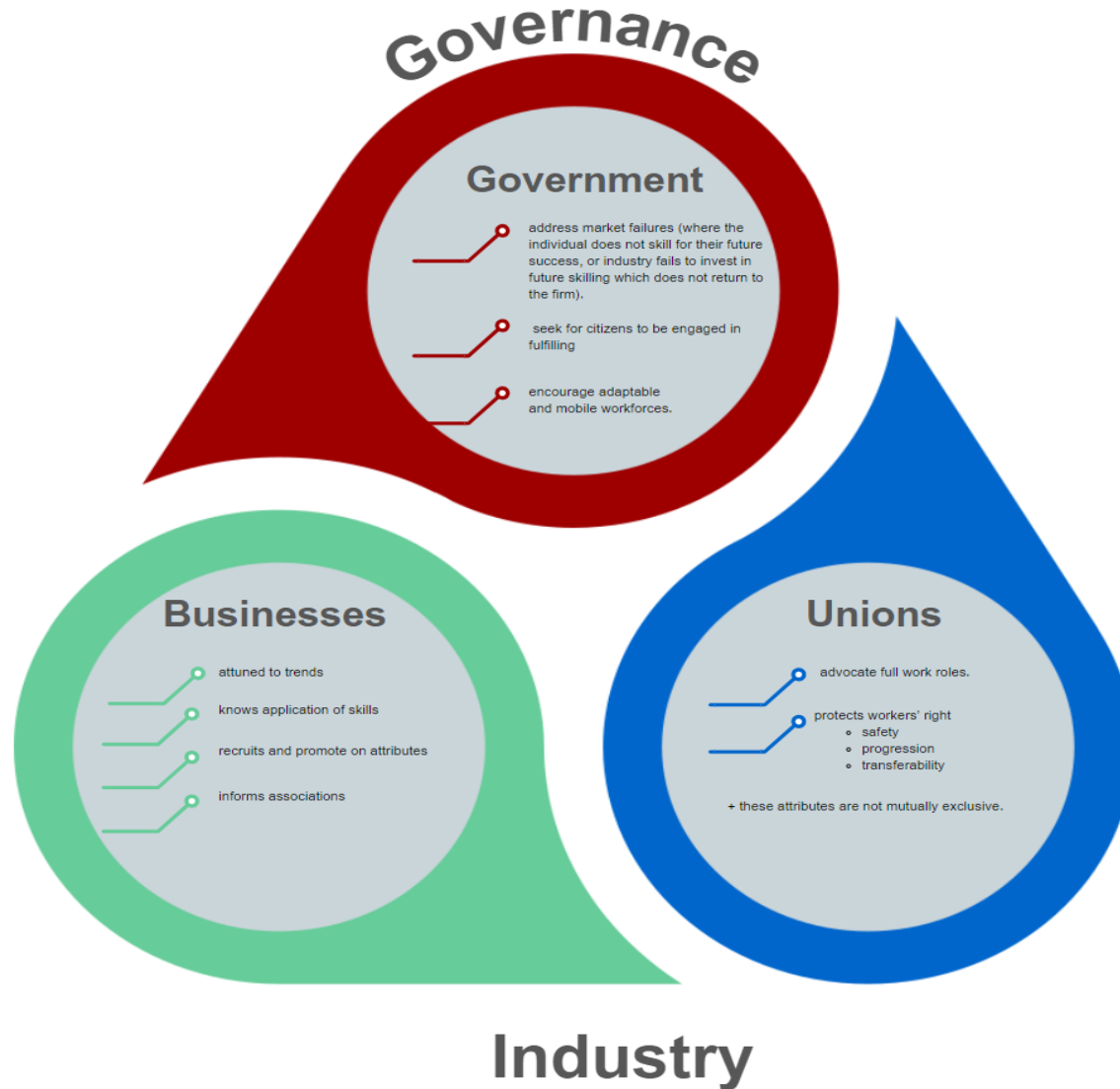
# VET Qualifications need to operate at a higher level





# The move to Tri-Partite

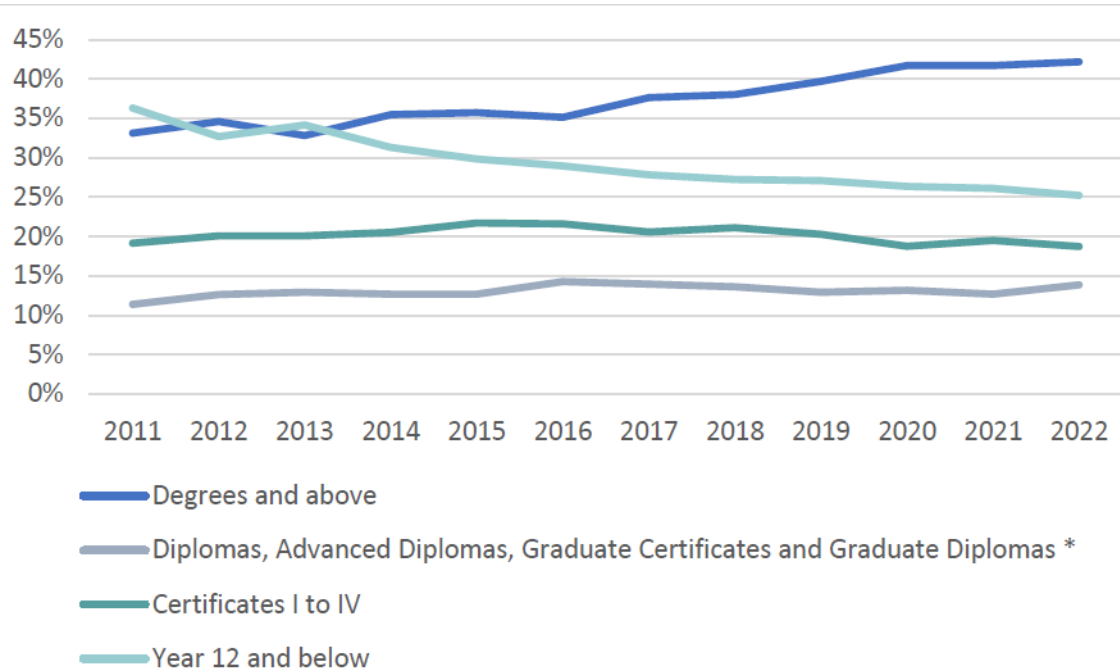
---



# Qualification reform aims to increase confidence in the value that VET delivers

## Young Australians are increasing choosing higher education over VET

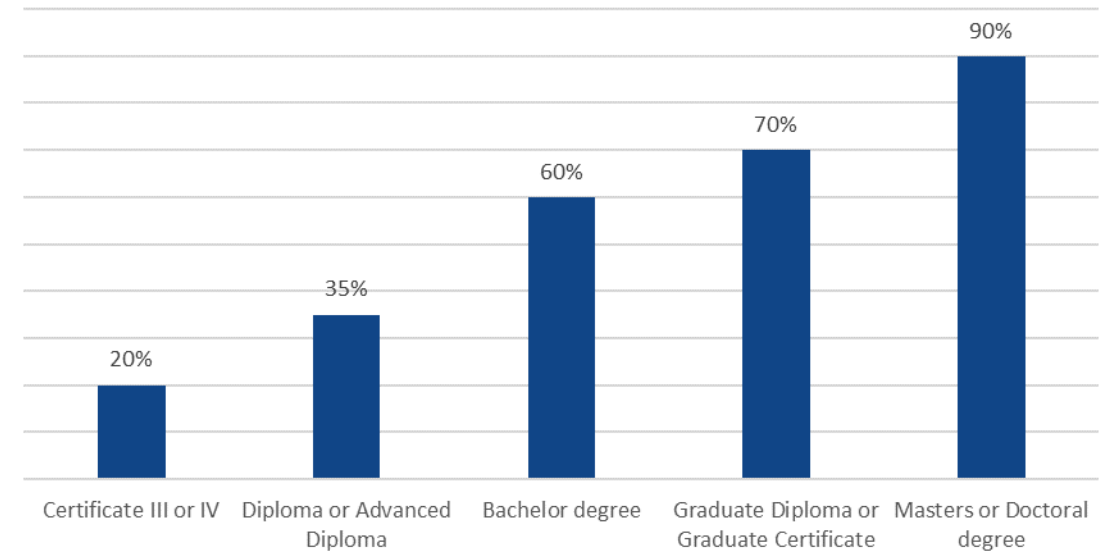
Percent of 25-34 year old Australians by their highest level of qualification



Source: *Education and Work, 2022*, Australian Bureau of Statistics

## Qualification reform can improve VET's value proposition to productivity

Increase in lifetime earnings relative to people with Year 11 as their highest level of education



Source: Universities Accord Final Report

## Low level specification has resulted – often to protect for quality

| Qual Code | Qual Title  | Release Year | Estimated average criteria per unit | Expected criteria per qual | Minimum number of units |
|-----------|---|--------------|-------------------------------------|----------------------------|-------------------------|
| BSB30120  | Certificate III in Business                           | 2020         | 24.9                                | 323.4                      | 13                      |
| ICT20120  | Certificate II in Applied Digital Technologies        | 2021         | 30.5                                | 365.8                      | 12                      |
| NWP30222  | Certificate III in Water Industry Operations          | 2022         | 40.4                                | 443.9                      | 11                      |
| TAE40122  | Certificate IV in Training and Assessment             | 2022         | 59.3                                | 711.5                      | 12                      |
| FBP40321  | Certificate IV in Food Processing                     | 2021         | 55.6                                | 1111.9                     | 20                      |
| CHC30121  | Certificate III in Early Childhood Education and Care | 2021         | 76.5                                | 1299.9                     | 17                      |
| CHC52021  | Diploma of Community Services                         | 2022         | 65.2                                | 1304.2                     | 20                      |
| CPC50220  | Diploma of Building and Construction (Building)       | 2020         | 48.9                                | 1321.5                     | 27                      |
| HLT54121  | Diploma of Nursing                                    | 2021         | 63.5                                | 1588.5                     | 25                      |
| SIT20421  | Certificate II in Cookery                             | 2022         | 135.4                               | 1759.7                     | 13                      |



Victorian Engineering Senate

# David Christy and Georgina Hamilton

Professional Educator College, Chisholm



# Educator Passport Presentation

A new way to upskill your teaching workforce

*Chisholm*

Professional Educator College

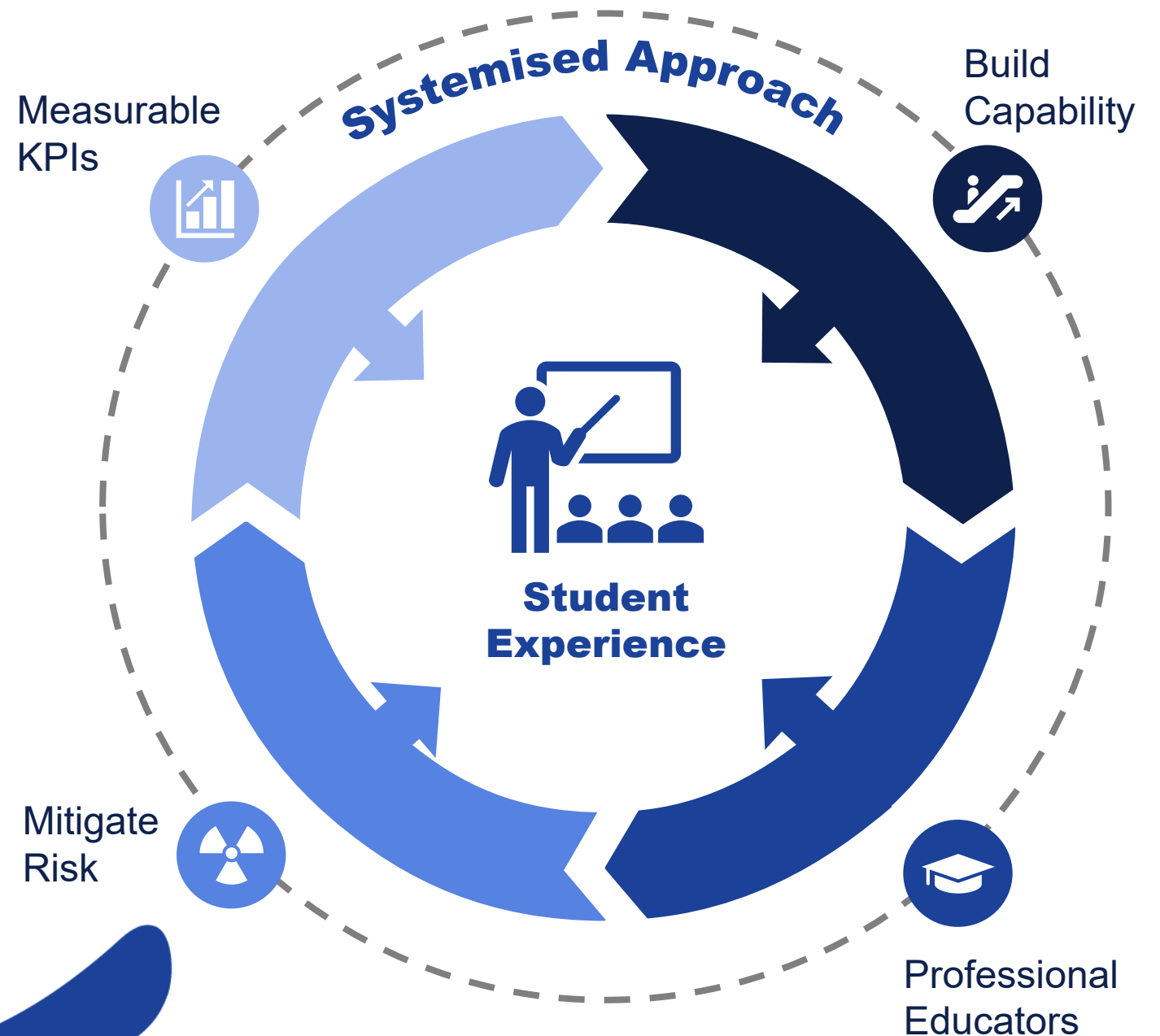
Victorian Engineering Senate

29 August 2024

*Chisholm*

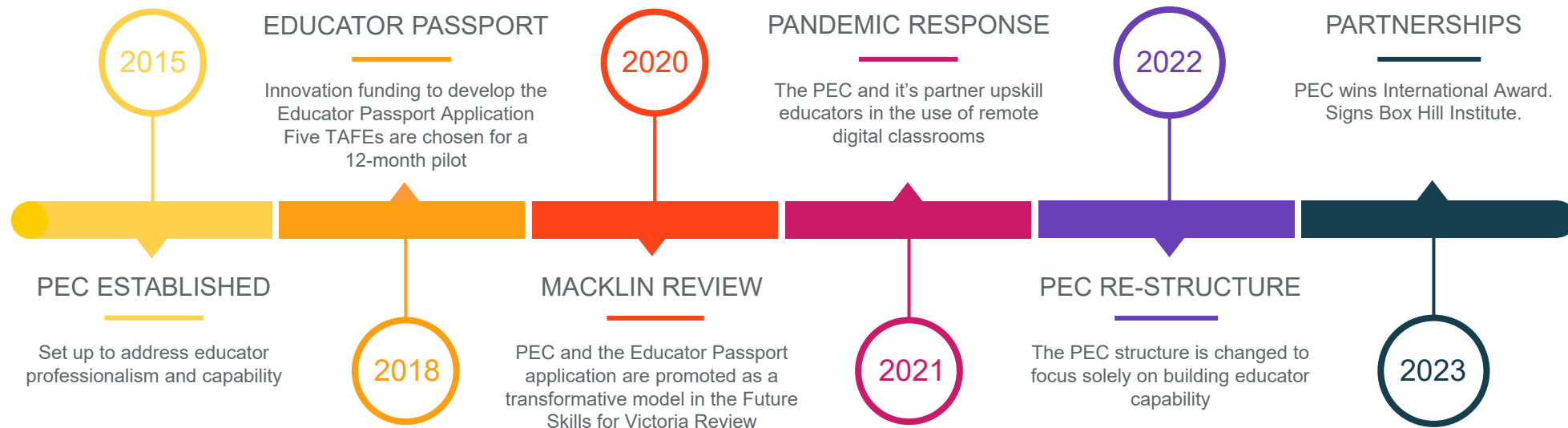
# Strategic Overview

Why was the Professional Educator College created?





# From then to now...



# Educational Excellence Framework



1. **Capability Statement**
2. **Capability Statement**
3. **Capability Statement**
4. **Capability Statement**
5. **Capability Statement**



# The One-Stop-Shop

*Chisholm*

Professional Educator College



The Professional Educator College and Educator Passport application offer a comprehensive solution.

# What are the benefits?



Educator  
Passport

## For institutes

- > Drive teacher capability growth and improve student engagement
- > Establish baseline expectations and provide high-quality, targeted PD
- > Leverage data to manage risk and reward staff accomplishments
- > Embed a culture of continuous improvement through targeted PD activities.

## For supervisors

- > Assure teacher compliance with regulatory requirements
- > Monitor teacher progress towards their annual goals
- > Provide targeted support to teachers for professional growth
- > Ensure the quality and relevance of PD programs.

## For teachers

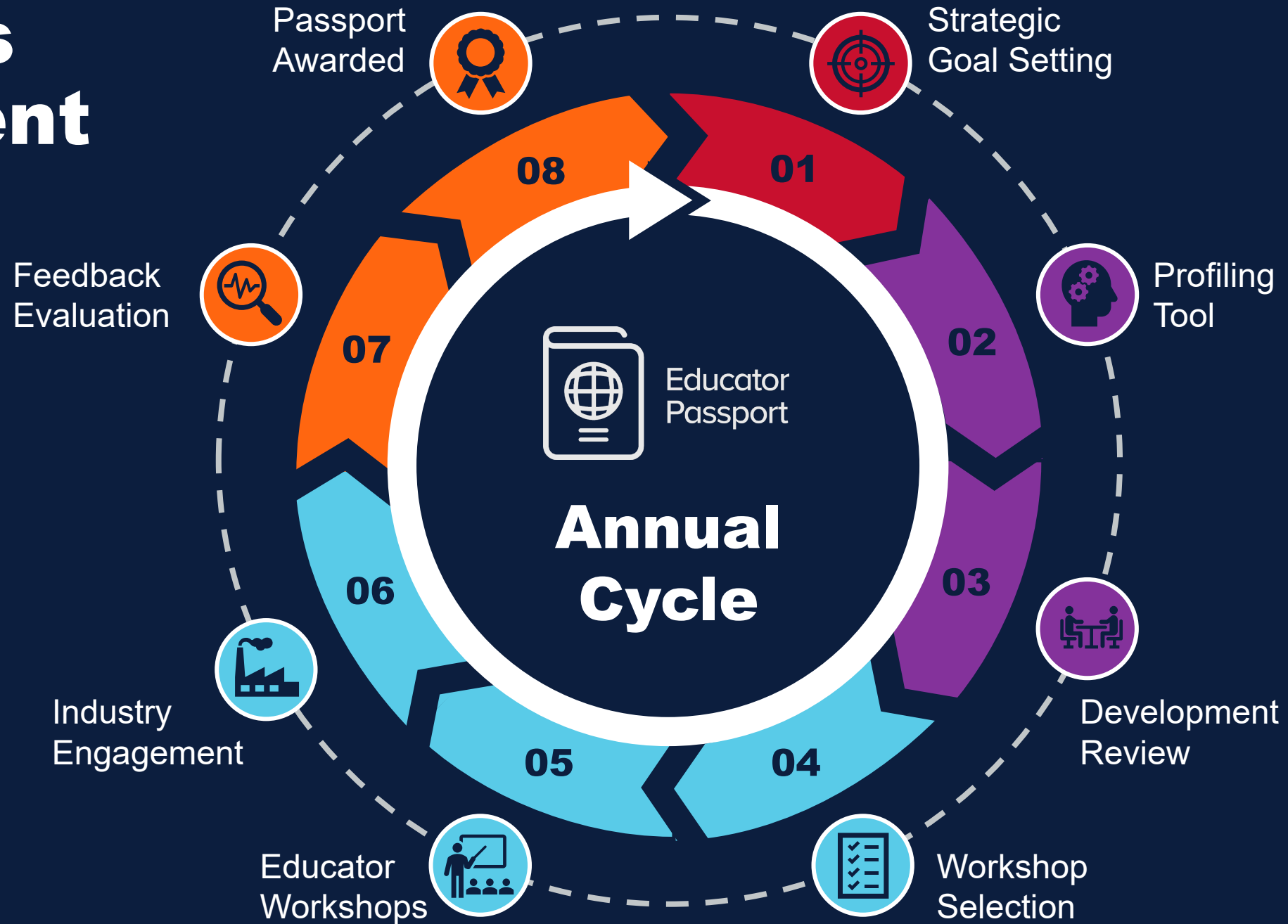
- > Self-assess personal teaching skills
- > Choose from a range of PD opportunities
- > Plan and track PD activity
- > Maintain teaching currency and stay up to date with industry skills.

## For auditors

- > Confirm self-assurance principles through a systemised approach to PD
- > Review and assess teachers' activity history to meet currency compliance
- > Check and verify the quality and relevance of PD workshops
- > Identify potential risks at department or organisational level.

# Continuous Improvement

Embedding a Culture of Professional Development



# Educator Passport Demonstration



Educator  
Passport



# Our Endorsements

At Chisholm, we work in conjunction with many regulatory bodies, complying with all relevant legislation. Our courses are conducted in line with the expectations of one or more of the following:



**Australian Government**  
**Tertiary Education Quality and Standards Agency**

## Tertiary Education Quality and Standards Agency

TEQSA is Australia's independent national regulator of the higher education sector. Our degree programs are designed to meet the rigorous TEQSA standards that also apply to Australian universities.



## Victoria State Government

Our training is delivered with Victorian and Australian Government funding and oversight. This means that we work in conjunction with the state government to ensure that the education we provide suits the needs of the state and local communities.



**Australian Government**  
**Australian Skills Quality Authority**

## Australian Skills Quality Authority

Registration with key governing bodies such as the Australian Skills Quality Authority ensures that Chisholm complies with Australian Government requirements, as well as operating in a way that benefits students and provides them with quality education.



**NATIONALLY RECOGNISED TRAINING**

## Nationally Recognised Training

Chisholm is a registered training organisation and provides nationally recognised training. This means you can be assured that our training will provide you with a qualification that is recognised and respected across Australia.



**Victorian Registration & Qualifications Authority**

## Victorian Registration and Qualifications Authority

This is the Victorian Government organisation that regulates to ensure provision of quality learning outcomes in safe and well-governed environments. We work closely with VRQA to ensure we are performing to the highest standards.

# Thank you!

*Chisholm*

Professional Educator College







# Morning Tea

Building A, Level 2 – Room 206



# Matthew Baker

Manager – Engineering, Chisholm



Dressed by TradeMutt

Chisholm



Victorian Engineering Senate

# Troy Crawford

**Wodonga TAFE – MEM Resource Development**



# TAFE Network Shared Resources Project

Network Courseware Development



WODONGATAFE



COMMUNITY AND  
COLLABORATION



CREATIVITY AND  
INNOVATION



INTEGRITY  
AND RESPECT

# OTCD – TAFE Network Shared Resources Project

## Nous Group and Audit Express

Project Management

Provided Resource Templates

Delivered Webinars

- Implementing Templates
- Industry Engagement
- Conducting Pre-Validation
- Learning Designer
- Contextualising Resources
- Copyright



## Across the TAFE sector 10 priority areas identified



**Wodonga TAFE**

**Certificate III in Engineering Fabrication Trade - 18 units**

Timeline: January – December 2024

Potential for additional units in 2025

## Product expectations

Learner resource has engaging multimedia content.

Content is industry relevant and suitable for Australia.

Suitable for trade students ACSF level.

Accessibility considerations – WCAG requirements.

Copyright – Referencing and attribution.



## Learner Resource

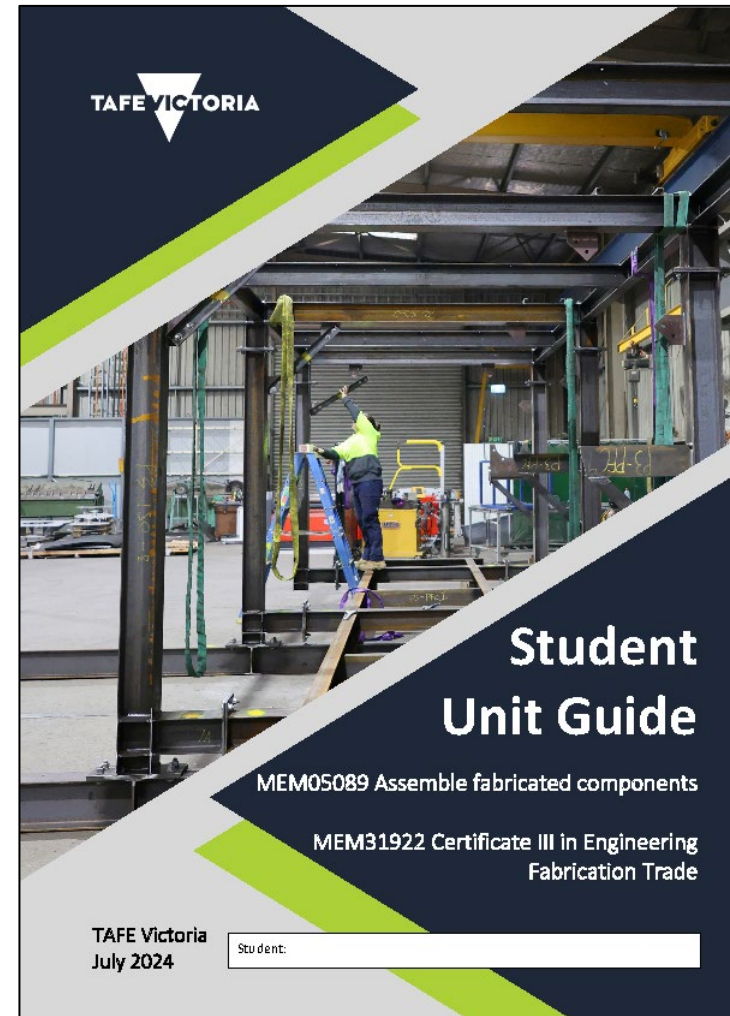
Word format according to the template provided.

A Moodle format for blended delivery if required.

Content structured to assist in future resource mapping.

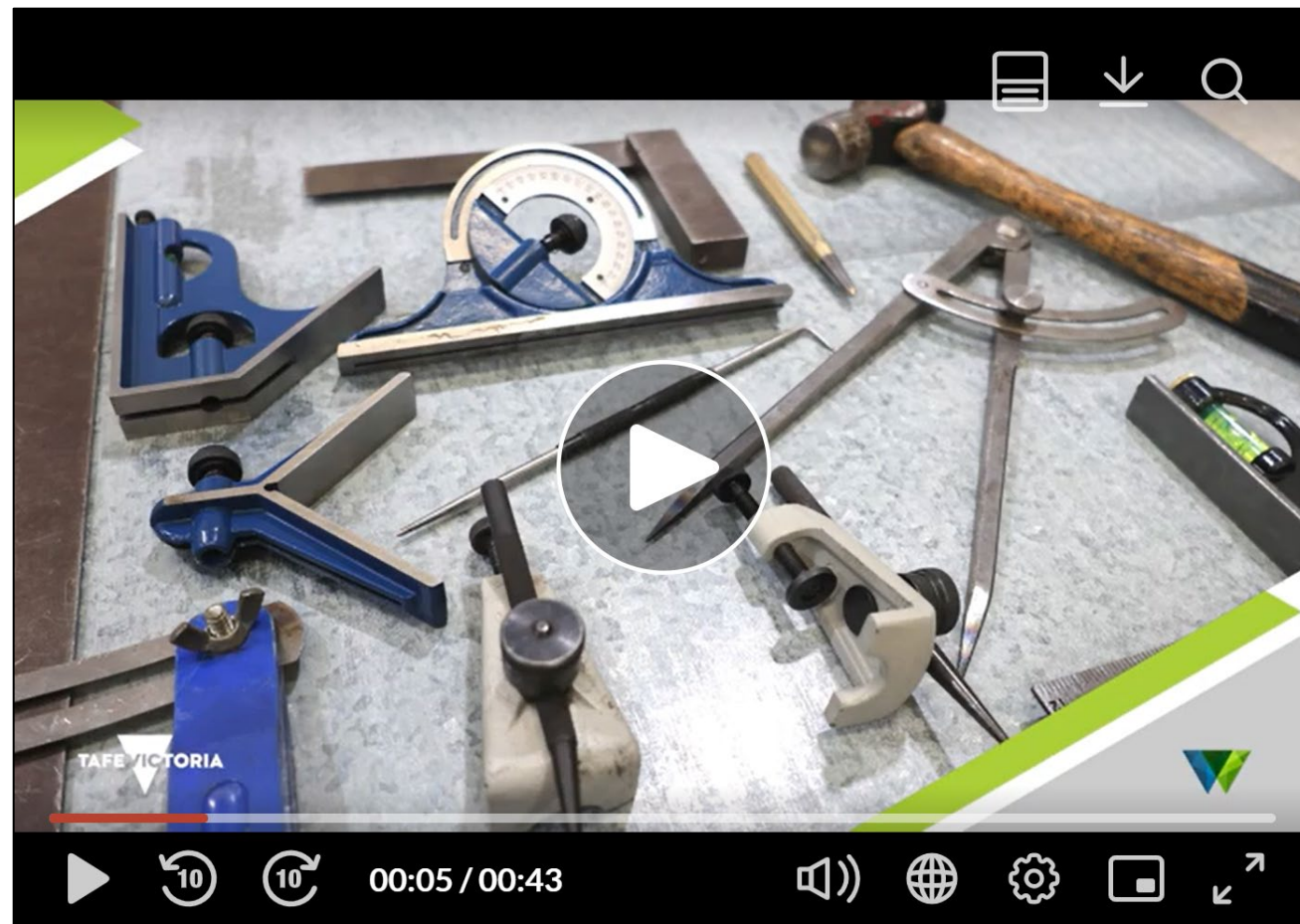
Can be contextualised according to different requirements.

Student instructions and feedback where appropriate.



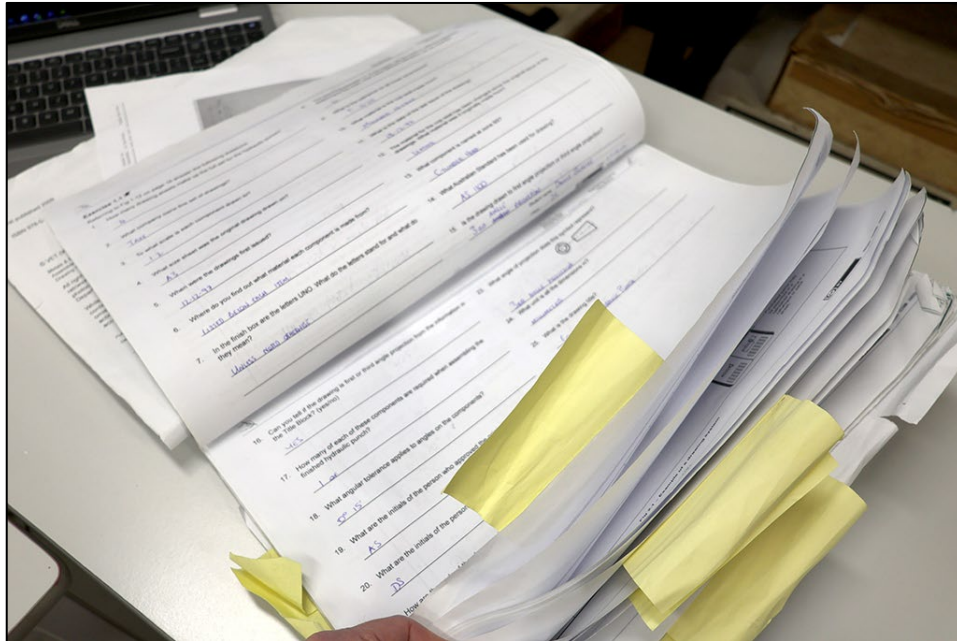


## Introduction Videos



## Learner Resource

Self-marking review quizzes in learning.

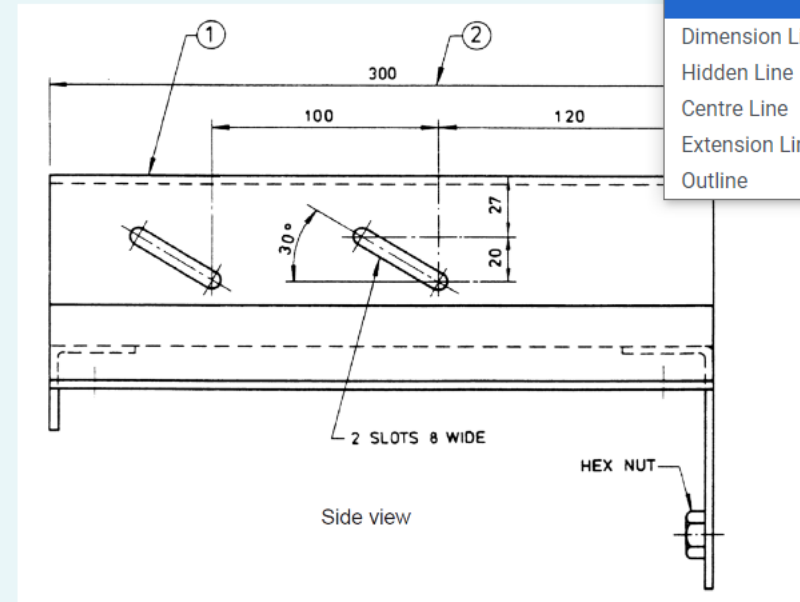


## Question 8

Tries remaining: 1 Marked out of 3.00 Flag question Edit question v3 (latest)

Refer to the drawing below and select the types of lines indicated by the numbers

1:  2:  3:

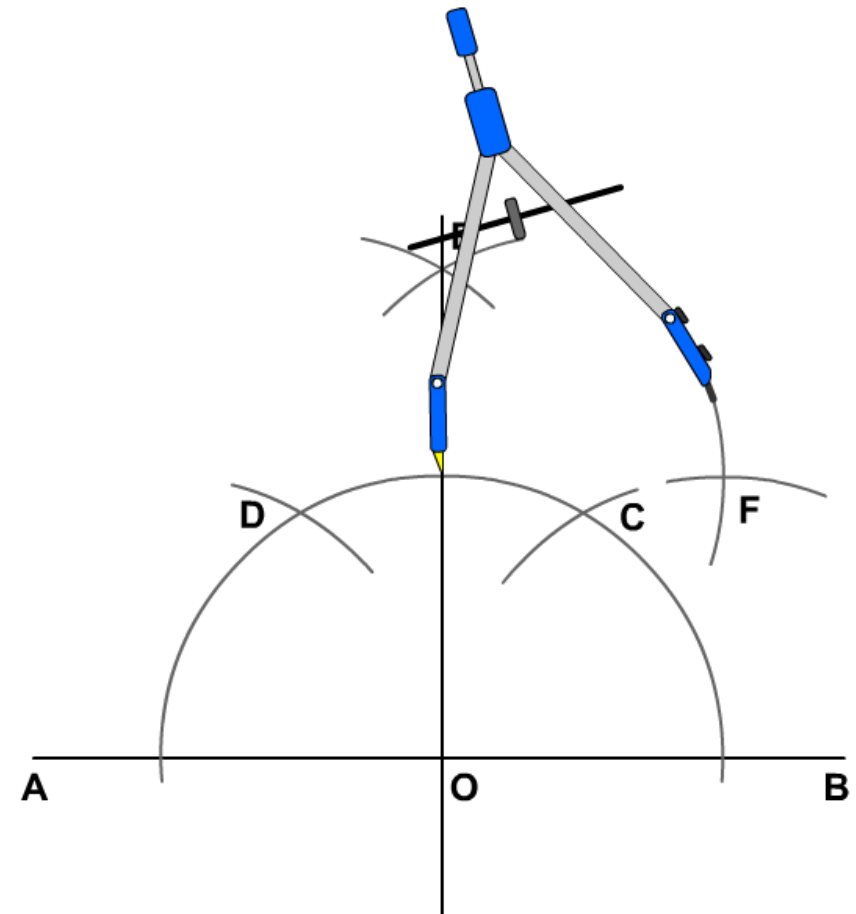
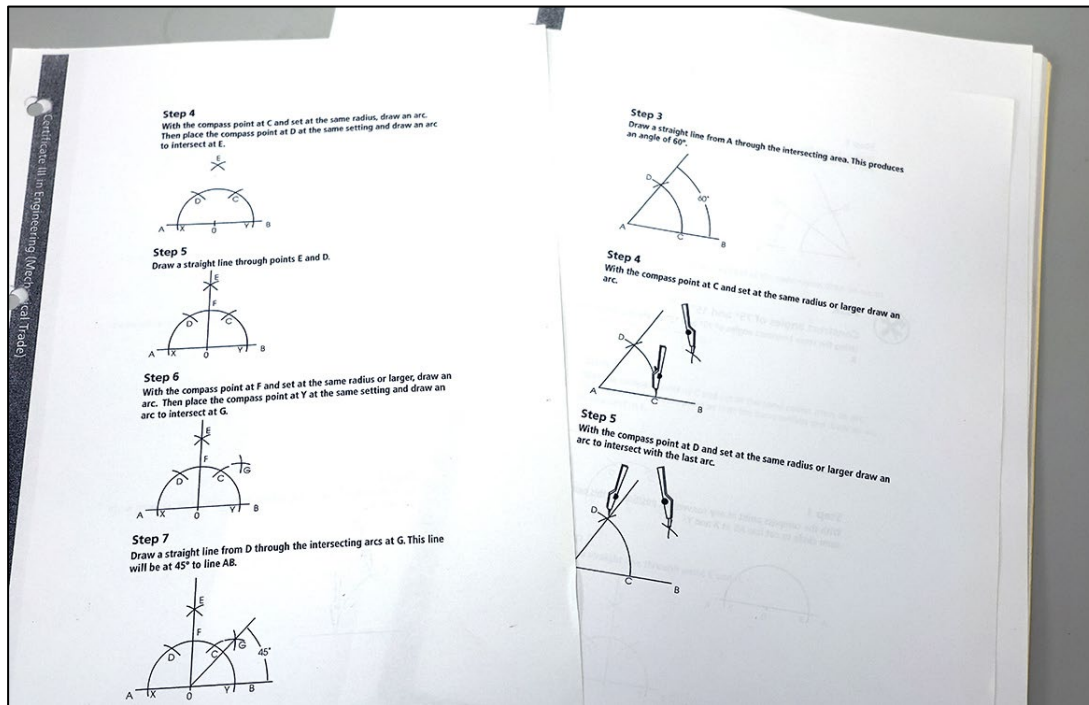


Check



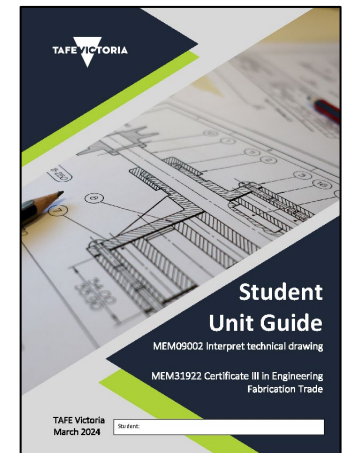
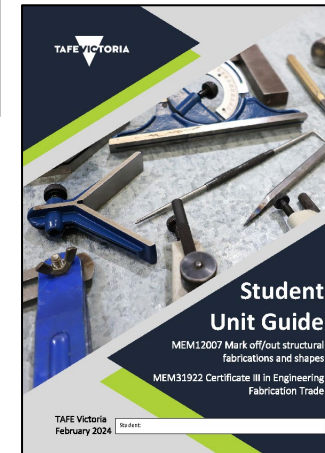
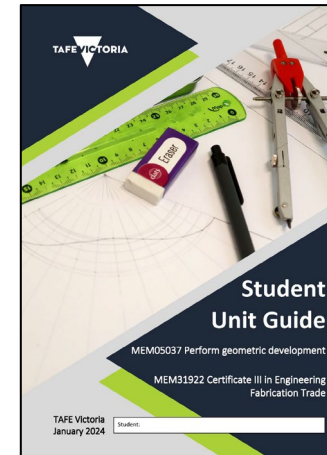
# Animations

Animations to assist learning.



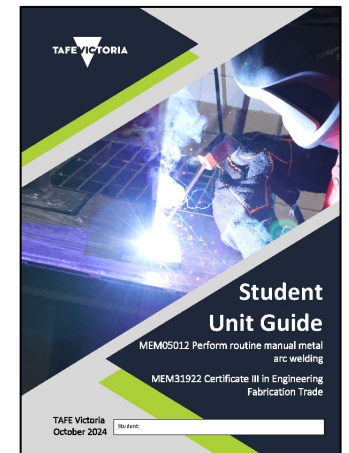
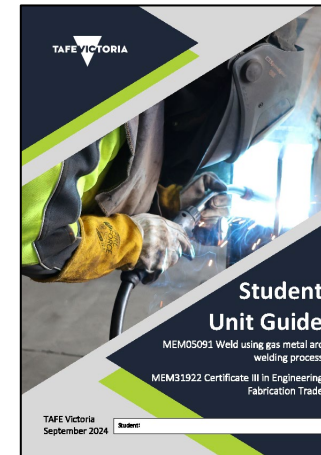
## Fabrication Units

|          |   |
|----------|---|
| MEM05037 | Perform geometric development                     |
| MEM12007 | Mark off/out structural fabrications and shapes   |
| MEM09002 | Interpret technical drawing                       |
| MEM05010 | Apply fabrication, forming and shaping techniques |
| MEM05089 | Assemble fabricated components                    |
| MEM05050 | Perform routine gas metal arc welding             |
| MEM05085 | Select welding process                            |
| MEM12024 | Perform computations                              |
| MEM05052 | Apply safe welding practices                      |



## Fabrication Units

|          |  |
|----------|--|
| MEM05091 | Weld using gas metal arc welding process                     |
| MEM05090 | Weld using manual metal arc welding process                  |
| MEM05012 | Perform routine manual metal arc welding                     |
| MEM05092 | Weld using gas tungsten arc welding process                  |
| MEM05071 | Perform advanced manual thermal cutting, gouging and shaping |
| MEM05007 | Perform manual heating and thermal cutting                   |
| MEM05049 | Perform routine gas tungsten arc welding                     |
| MEM18002 | Use power tools/hand held operations                         |
| MEM05073 | Perform advanced welding using gas metal arc welding process |



## Contact Details



Troy Crawford  
Educational Leader Resource Development  
**Wodonga TAFE**  
[tcrawford@wodongatafe.edu.au](mailto:tcrawford@wodongatafe.edu.au)



Will Frauenfelder  
Educational Leader Engineering  
**Wodonga TAFE**  
[wfrauenfelder@wodongatafe.edu.au](mailto:wfrauenfelder@wodongatafe.edu.au)

# Thank you



Victorian Engineering Senate

# David Wilson

Ringwood Training - MEM Sheetmetal Qualification



# WORK SKILLS 1989





# Sheetmetal Skills-Shortage



## ► Sheetmetal

|          |  |
|----------|--|
| MEM05003 | Perform soft soldering                                 |
| MEM05004 | Perform routine oxy fuel gas welding                   |
| MEM05005 | Carry out mechanical cutting                           |
| MEM05006 | Perform brazing and/or silver soldering                |
| MEM05007 | Perform manual heating and thermal cutting             |
| MEM05010 | Apply fabrication, forming and shaping techniques      |
| MEM05012 | Perform routine manual metal arc welding               |
| MEM05037 | Perform geometric development                          |
| MEM05049 | Perform routine gas tungsten arc welding               |
| MEM05050 | Perform routine gas metal arc welding                  |
| MEM05052 | Apply safe welding practices                           |
| MEM05056 | Perform routine flux core arc welding                  |
| MEM05057 | Perform routine submerged arc welding                  |
| MEM05085 | Select welding processes-                              |
| MEM05089 | Assemble fabricated components                         |
| MEM05090 | Weld using manual metal arc welding process            |
| MEM05091 | Weld using gas metal arc welding process               |
| MEM05092 | Weld using gas tungsten arc welding process            |
| MEM05097 | Weld using oxy fuel gas welding process                |
| MEM09011 | Apply basic engineering design concepts                |
| MEM12007 | Mark off/out structural fabrications and shapes        |
| MEM18055 | Dismantle, replace and assemble engineering components |

## vs Boilermaker

|          |  |
|----------|--|
| MEM05004 | Perform routine oxy fuel gas welding                         |
| MEM05005 | Carry out mechanical cutting                                 |
| MEM05007 | Perform manual heating and thermal cutting                   |
| MEM05009 | Perform automated thermal cutting                            |
| MEM05010 | Apply fabrication, forming and shaping techniques            |
| MEM05012 | Perform routine manual metal arc welding                     |
| MEM05037 | Perform geometric development                                |
| MEM05049 | Perform routine gas tungsten arc welding                     |
| MEM05050 | Perform routine gas metal arc welding                        |
| MEM05052 | Apply safe welding practices                                 |
| MEM05056 | Perform routine flux core arc welding                        |
| MEM05057 | Perform routine submerged arc welding                        |
| MEM05071 | Perform advanced manual thermal cutting, gouging and shaping |
| MEM05085 | Select welding processes                                     |
| MEM05089 | Assemble fabricated components                               |

|          |  |
|----------|--|
| MEM05090 | Weld using manual metal arc welding process            |
| MEM05091 | Weld using gas metal arc welding process               |
| MEM05092 | Weld using gas tungsten arc welding process            |
| MEM05093 | Weld using submerged arc welding process               |
| MEM05094 | Repair, replace and/or modify fabrications             |
| MEM05096 | Weld using flux core arc welding process               |
| MEM05097 | Weld using oxy fuel gas welding process                |
| MEM09011 | Apply basic engineering design concepts                |
| MEM12007 | Mark off/out structural fabrications and shapes        |
| MEM18055 | Dismantle, replace and assemble engineering components |

# USA TRAINING COLLEGE

BEST CHOICE AMONG THE TRADES

## SHEET METAL APPRENTICESHIP

What distinguishes us from the other trades is our unique ability to both design and fabricate the products made from raw materials, as well as install the exceptional creations we have crafted. Our apprentices are both artisans and craftspeople. As an apprentice in our industry, you specialize in working with materials like steel and aluminum, with a focus on HVAC expertise. You also develop proficiency in blueprint reading and design, often using advanced technology like Computer Aided Drawing (CAD) software. Overall, a sheet metal apprenticeship combines traditional craftsmanship with modern technology, offering you a dynamic and multifaceted learning experience.

# MANUFACTURING WORKFORCE PLAN 2024

- ▶ 2023 PRIORITY LIST IDENTIFIED 39 OCCUPATIONS
  
- ▶ SHEETMETAL ONE OF THE OCCUPATION GROUPS LISTED
  - ▶ SHEETMETAL SKILL CONTRIBUTION CATERGORIES;
    - ▶ PHARMACUTICAL MANUFACTURING
    - ▶ FOOD & BEVERIDGE
    - ▶ GENERAL MANUFACTURING
    - ▶ HVAC –Ductwork
    - ▶ ARCHITECTUAL

# SHEETMETAL TRAINING DE-EVOLUTION CERT III

- ▶ N/F modules

  - ▶ MEM98

    - ▶ MEM05

      - ▶ MEM19

        - ▶ MEM1922

# MEM05

- ▶ MEM03003 Sheet & Plate 4
  - ▶ MEM09002 Int Tech DWG 4
  - ▶ MEM05037 Geo Development 6
  - ▶ MEM05038 Adv Geo Dev –Cyl/Rect 2
  - ▶ MEM05039 Adv Geo Dev-Conical 2
  - ▶ MEM05040 Adv Geo Dev Transitions 4
  - ▶ MEM08010 Manually Fin/Polish 6
- ▶ = 28%

# MEM31922

- ▶ MEM09002 Int Tech DWG 4
  - ▶ MEM05037 Geo Development 6
- ▶ =10%

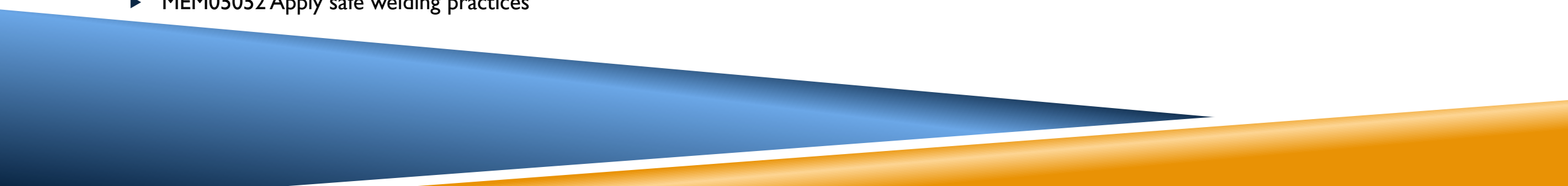
## Section H

- ▶ MEM07024 Operate & Monitor 4
  - ▶ MEM08010 Manually Fin/Polish 6
- ▶ =10%

## Import

- ▶ MEM03003 Sheet & Plate 4
- ▶ = 4%

# SHEETMETAL TECHNICAL COMMITTEE

- ▶ SCOPE OF WORKS
  - ▶ The project deliverables
  - ▶ Update sheetmetal specialisation requirements in MEM31922 and develop a new unit – CAD introduction.
  - ▶ The following updates are proposed to the specialisation:
  - ▶ Additions
  - ▶ MEM03003 Perform sheet and plate assembly (or similar)
  - ▶ MEM07024 Operate and monitor machine and process (or similar)
  - ▶ MEMXXXXX CAD introduction (new unit – see below)
  - ▶ MEM05009 Perform automated thermal cutting (90's Melbourne Laser cutting capitol)
  - ▶ MEM05086 Set and edit computer controlled thermal cutting machines
  - ▶ Proposed removals
  - ▶ MEM05056 Perform routine flux core arc welding (not relevant )
  - ▶ MEM05057 Perform routine submerged arc welding (underwater welding not relevant to sheetmetal specialisation)
  - ▶ Possible removals
  - ▶ MEM05085 Select welding processes and
  - ▶ MEM05052 Apply safe welding practices
- 

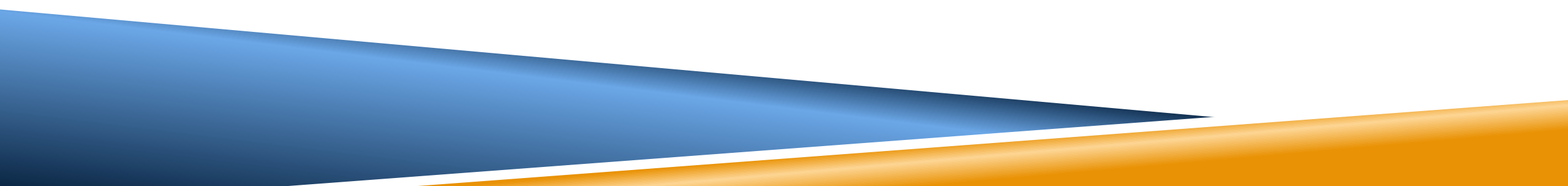




# VETIS - CERTIFICATE 2 ENGINEERING

- ▶ TECHNOLOGY in Apprenticeship to Attract younger generation
  - ▶ Izzy Jewelry box – Vic design awards
  - ▶ IRC Representative 2018 “NO WAY”
- 

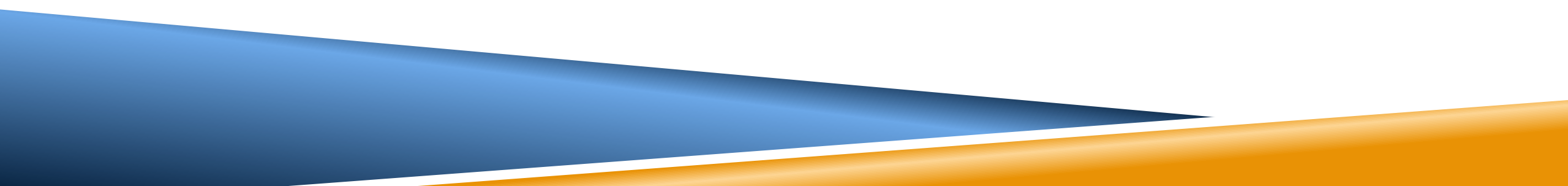
# BAYSWATER INDUSTRY -SHEETMETAL

- ▶ PACCAR- KENWORTH
  - ▶ ANCA
  - ▶ CADBURYS & PETERS
  - ▶ DAN MUPHYS, KFC, COLES
  - ▶ TNA SYSTEMS
  - ▶ CSL & GLAXO SMITH KLINE
- 

# EMPLOYER FEEDBACK-

- ▶ These people need to realise that sheet metal covers all types of materials including, extensively stainless steel.
- ▶ Food and Beverage
- ▶ Pharmaceutical
- ▶ Architecture
- ▶ Shop fitting
- ▶ Marine
- ▶ Just to name a few industries.

Polishing, pickling and different finishing is a massive part of the stainless trade  
In my opinion, this is definitely a part of sheet metal practices.

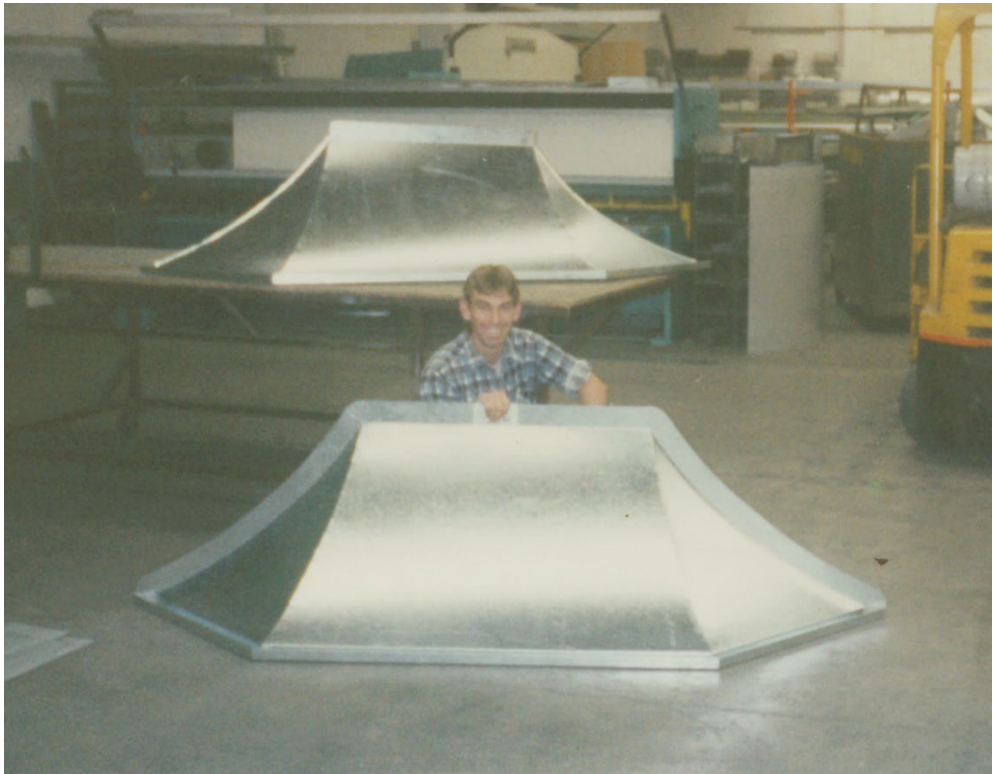


# WHY!

- ▶ 200 students per week
- ▶ 17 yr old son
- ▶ QUESTIONS?

# SLIDE SHOW SHEETMETAL

















Victorian Engineering Senate

# Andrew Simmons

**CEO - South East Local Learning and Employment Network**



# Victorian Engineering Senate Conference



# School and Industry Collaborations

- › State of play for industry
- › State of play for schools
- › Why collaborate with schools
- › How to collaborate with schools



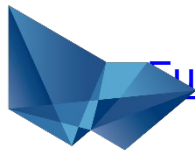
# State of Play - Industry

- › Long term recruitment challenges
- › Skill shortages in engineering and manufacturing
- › May get more difficult before it gets easier



# State of Play - Industry

- › Southern Melbourne Area
  - › 2023 Manufacturing 64,857
  - › 2026, expected growth of 1.1%
  - › New workers needed to enter 6,278 (almost 10%)
    - › Reflects ageing workforce
    - › People leaving the sector

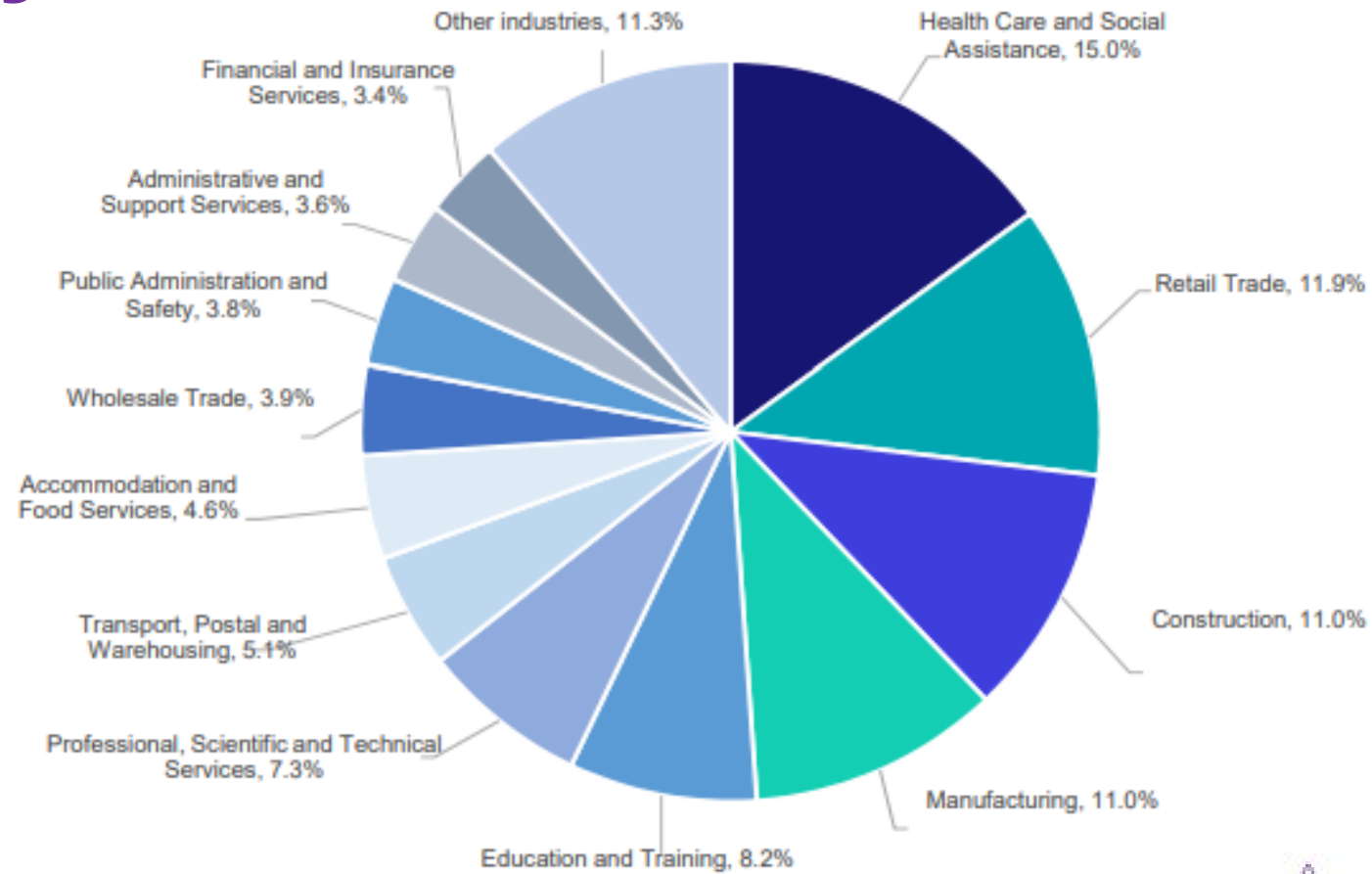


VicLLENs

[Future job growth in Melbourne's south-east | vic.gov.au \(www.vic.gov.au\)](https://www.vic.gov.au)



# State of Play - Industry





# State of Play - Schools

- › Shift to promote vocational and applied learning pathways as much as tertiary
  - › Withdrawal of VCAL (2022)
  - › Design and implementation of VCE – Vocational Major (VCE – VM)
  - › Expansion of student access to VET programs in schools



# State of Play - Schools

- › Every student should have access to VET offerings in:
  - › Health
  - › Building and Construction
  - › Community Services and Early Childhood
  - › Digital Media and Technologies
  - › Hospitality
  - › Clean Energy and Engineering



# State of Play - Schools

- › Clean Energy and Engineering includes:
  - › Certificate III in Laboratory Skills
  - › Certificate II in Electrotechnology
  - › Certificate II in Engineering
  
- › Enrolments in Certificate II in Engineering have almost doubled from 2013 to 2023
  - › Still not meeting demand



# Collaborating with Schools

- › Influencers on student career and pathway decisions
  - › Parents
  - › School Careers staff
  - › Employers



# What can industry do to support?

- › Support Careers Experiences
  - › Student Placements
  - › Industry Immersions
  - › Industry Tours
  - › Industry Presentations



# How?

- › Department of Education has funded organisations across Victoria that can do this for you.
  - › 31 Local learning and Employment Networks (LLEN)
  - › All holding the School to Work contract



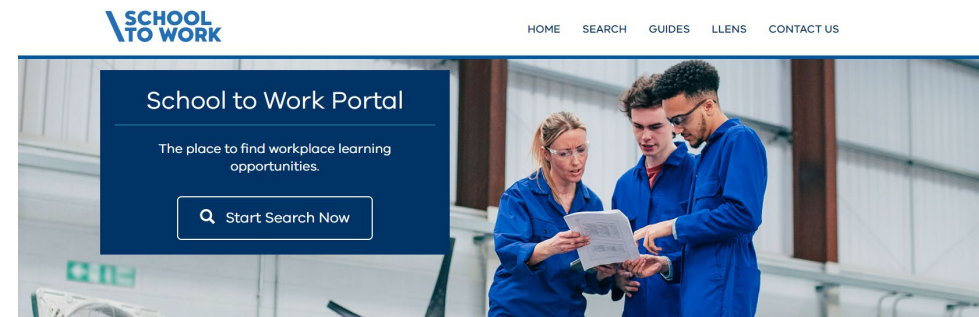
# LLENs

- › Funded to
  - › Be a conduit between schools, students and industry
  - › Organise a variety of work placements
  - › Run a range of events so schools, students and industry can connect



# LLEN Offerings

- › Work Experience
- › Structured Workplace Learning
- › School-based Apprenticeships
- › Events



Find opportunities for structured workplace learning (SWL), school-based apprenticeships and traineeships (SBATs) and work experience (WE) with Victorian employers across the state.

There are many ways that secondary school students can connect to the world of work. Select 'Start Search Now' or learn more from the guides below.

|                                  |                     |
|----------------------------------|---------------------|
| 7,554                            | Positions Available |
| 32,429                           | Positions Used      |
| <a href="#">Start Search Now</a> |                     |





# LLEN, Place-based Offerings

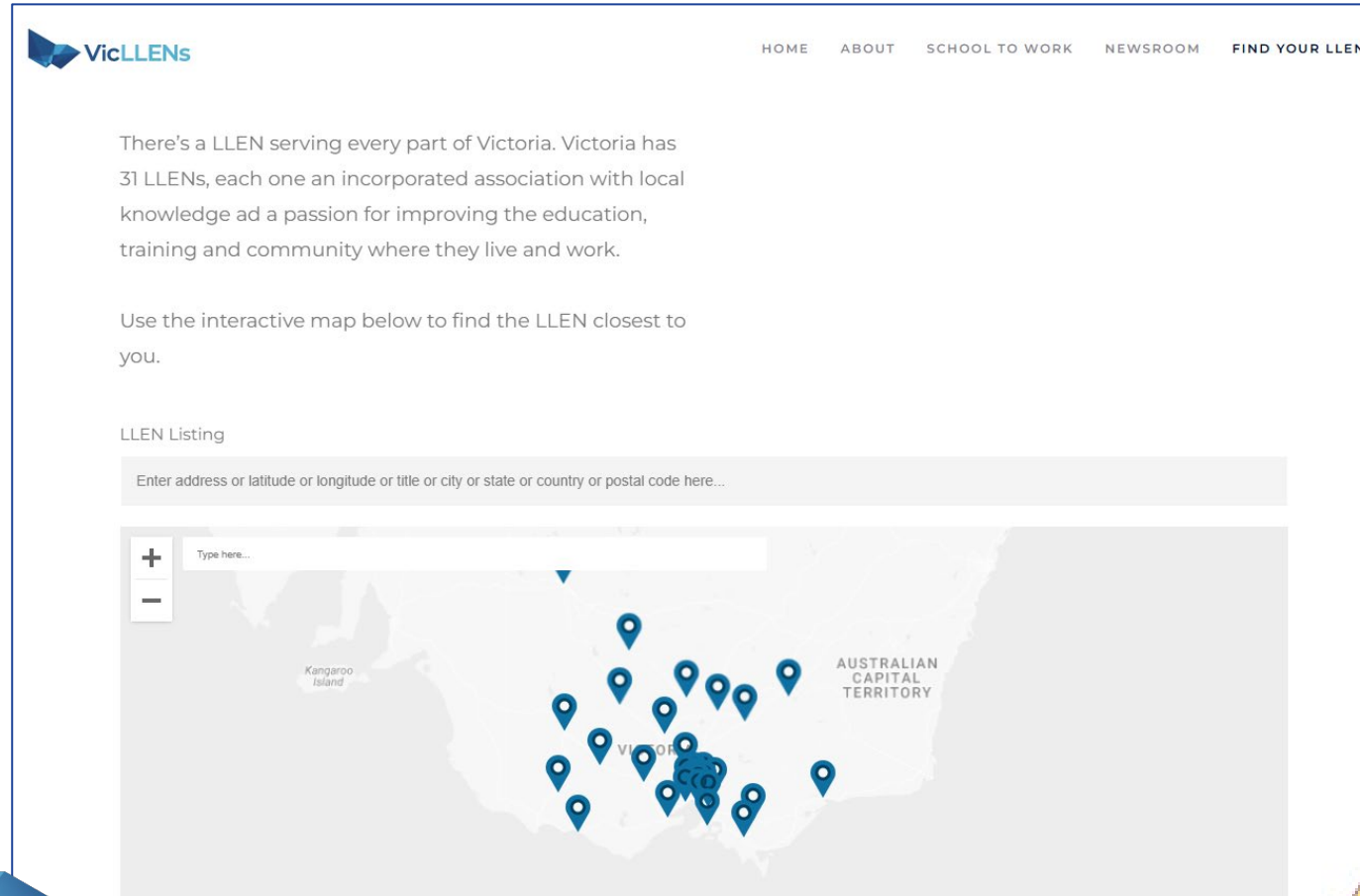


VIRTUAL INDUSTRY CAREERS EXPERIENCE  
"YOUR CAREER IN SIGHT"



# Find your LLEN

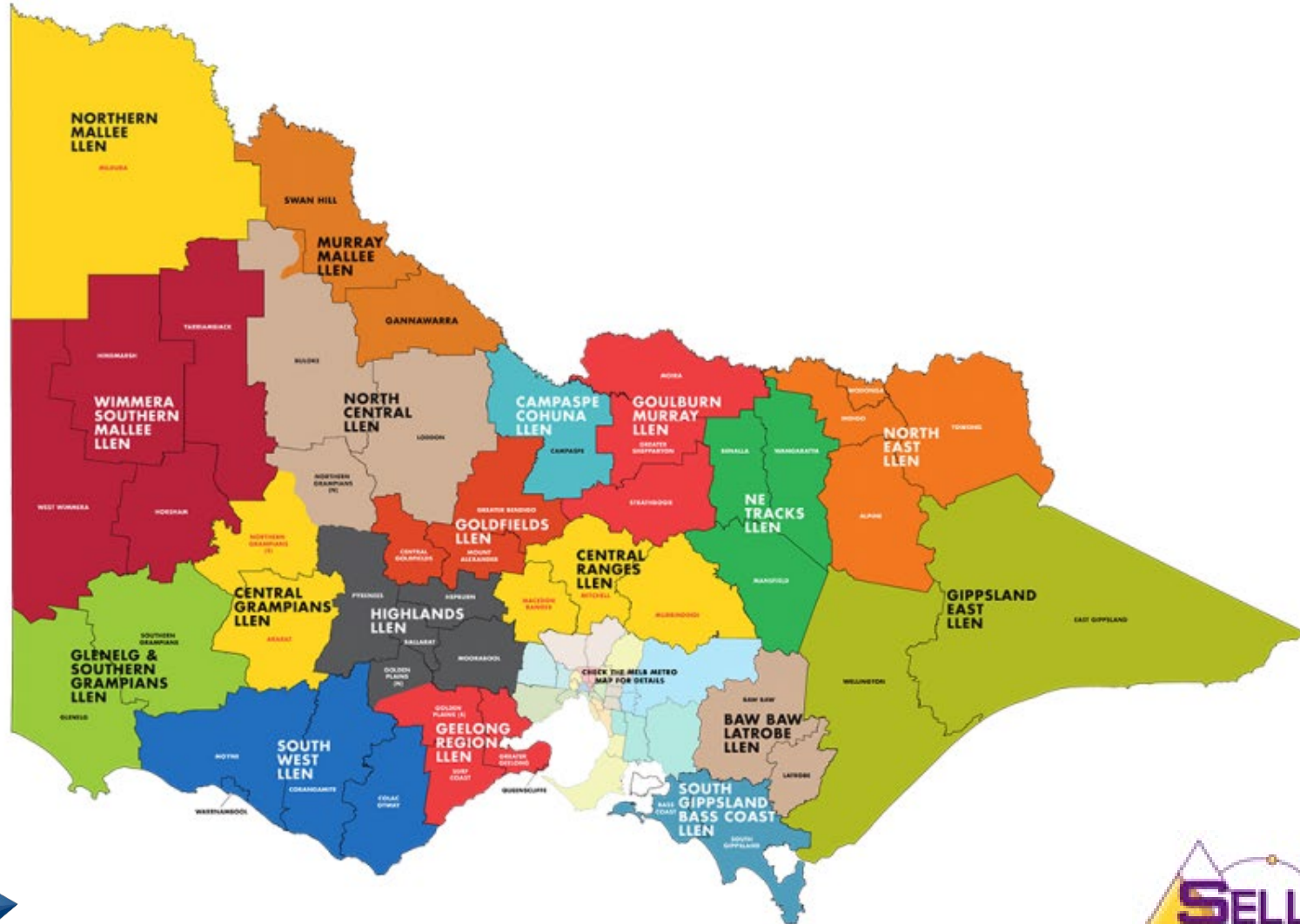
## › [Find your LLEN - VicLLENs](#)



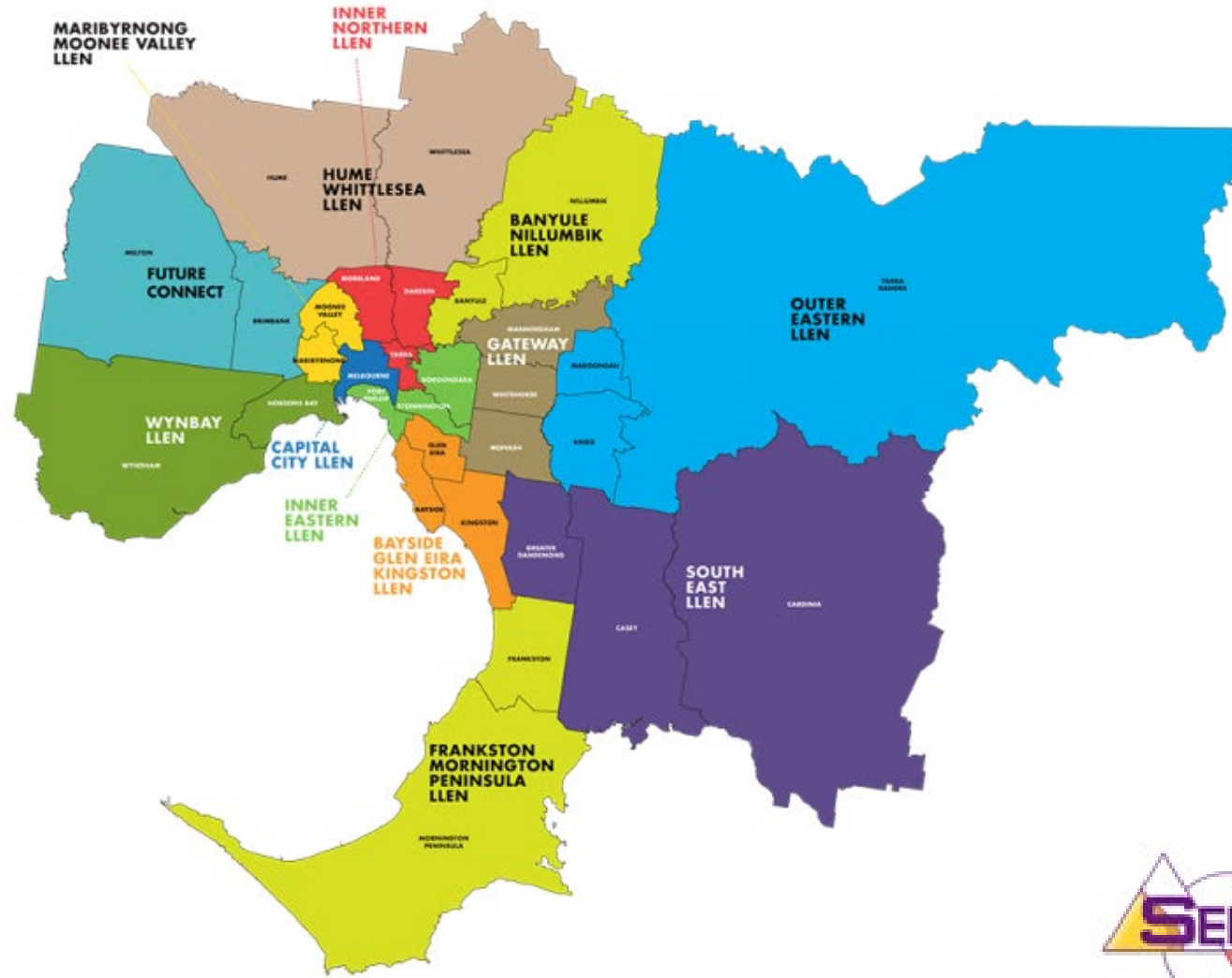
The screenshot displays the VicLLENs website interface. At the top left is the VicLLENs logo, and at the top right is a navigation menu with links for HOME, ABOUT, SCHOOL TO WORK, NEWSROOM, and FIND YOUR LLEN. The main content area features a text block stating: "There's a LLEN serving every part of Victoria. Victoria has 31 LLENs, each one an incorporated association with local knowledge and a passion for improving the education, training and community where they live and work." Below this is another text block: "Use the interactive map below to find the LLEN closest to you." Underneath is a section titled "LLEN Listing" with a search input field containing the placeholder text "Enter address or latitude or longitude or title or city or state or country or postal code here...". Below the search field is an interactive map of Victoria, Australia, with numerous blue location pins indicating the positions of the 31 LLENs. The map also shows labels for "Kangaroo Island", "VICTORIA", and "AUSTRALIAN CAPITAL TERRITORY".



# VicLLENs



# VicLLENs - Metro

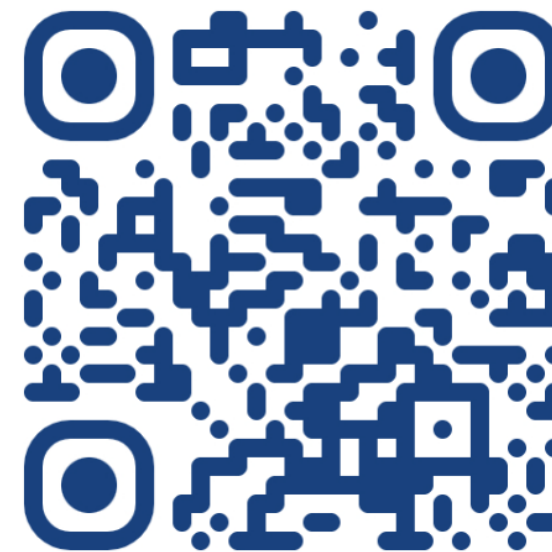




Victorian Engineering Senate

# Matthew Baker

Manager – Engineering, Chisholm



Dressed by TradeMutt





# Lunch

Building A, Level 2 – Room 206



# Trade Show 1pm - 4pm



Victorian Engineering Senate

## Building L and U





# Afternoon Tea

## Building Y







Victorian Engineering Senate

**Thank you to our sponsors**



Victorian Engineering Senate



Headland.





Victorian Engineering Senate

**Thank you for attending**