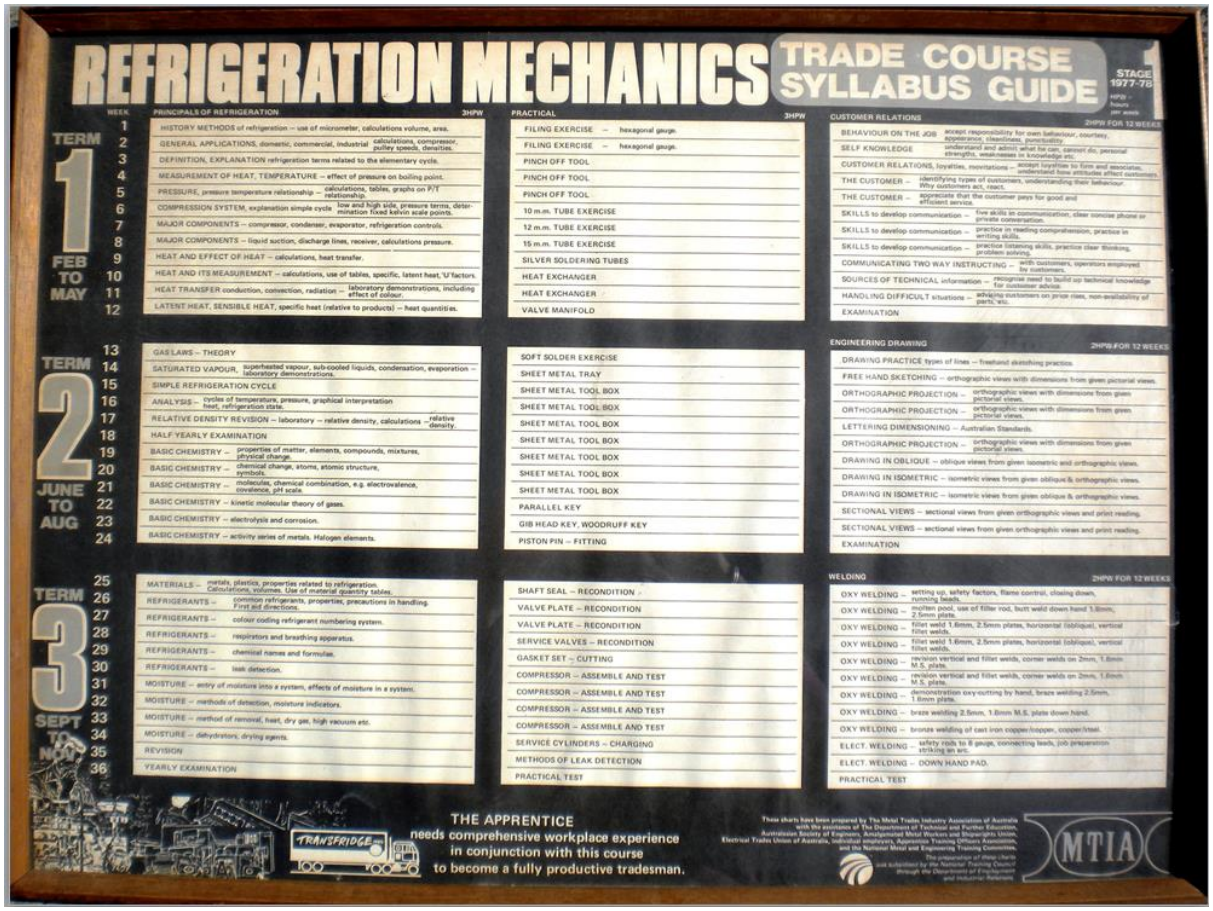
What's wrong with our industry?

First of all it is a great industry, where else can you be working at Randwick Racecourse in the morning, then a hospital and finish the day working on a chiller in a pharmaceutical factory?

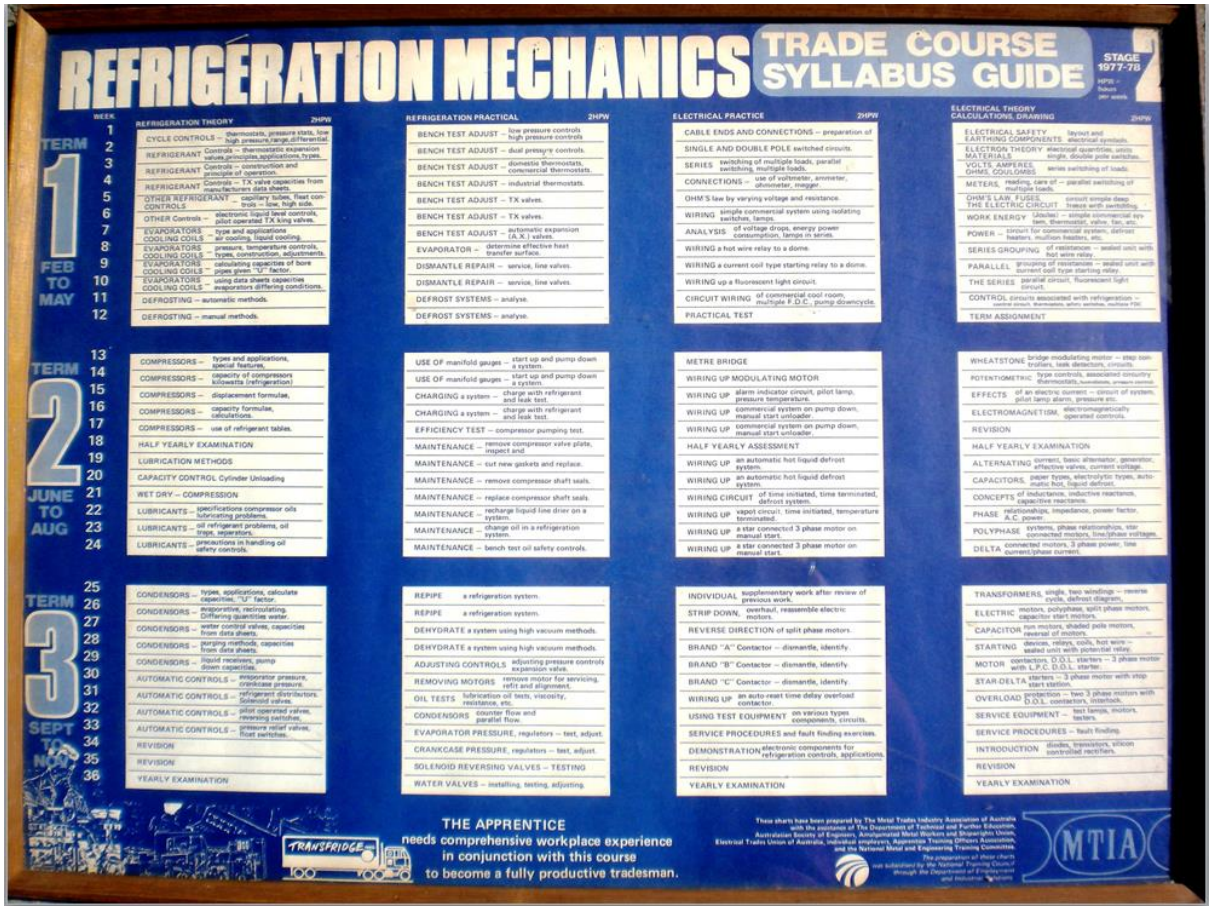
Where else can you work where you know you won't be doing the same thing every day? We can repair fractured pipes, stop water dripping through ceilings, or fault find on a highly sophisticated printed circuit board on any given day.

So we have established that there is variety in our work, not only by the places we service, but also what we do. The money and conditions are good overall, all service technicians generally get a good salary, and a company phone and vehicle.

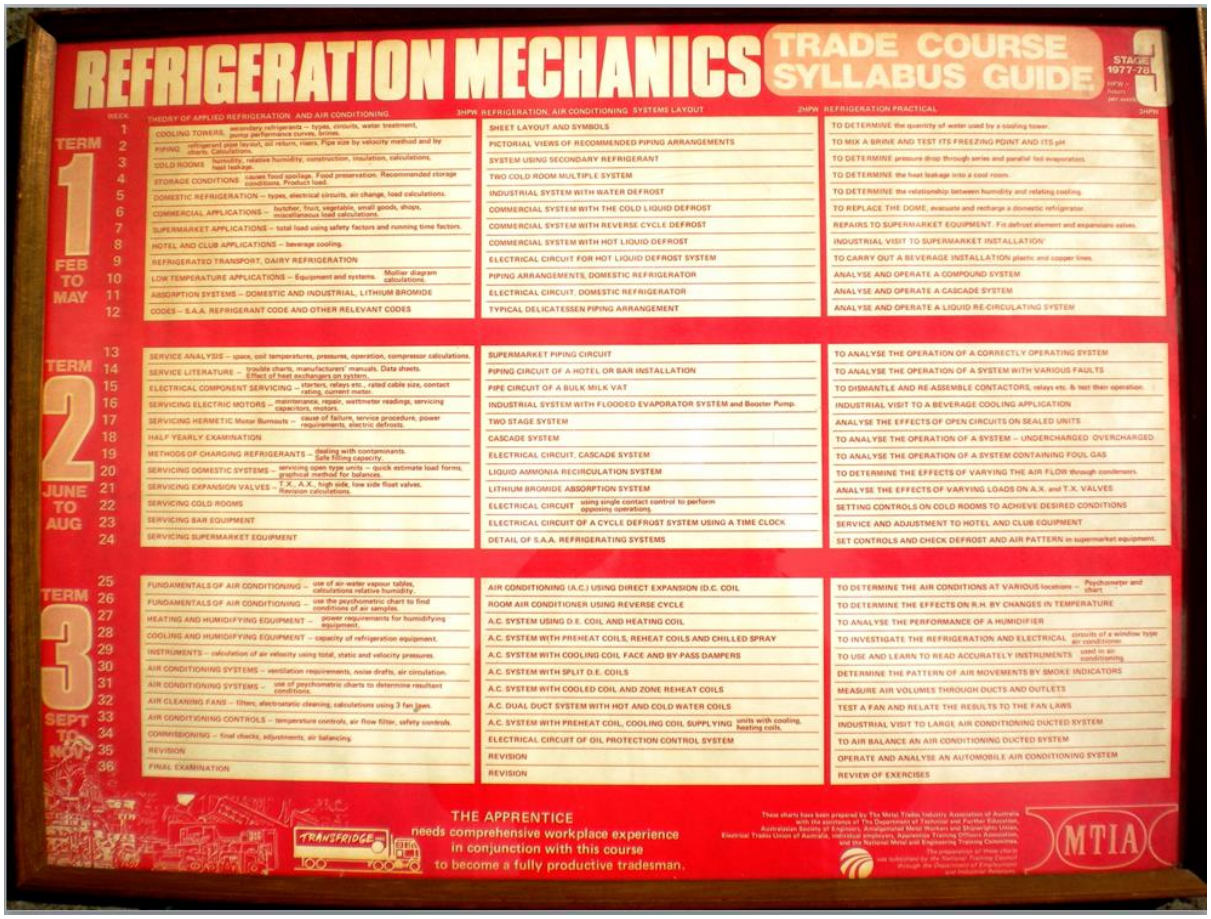
So why the hell are we not attracting the right calibre of apprentices to our industry?



As you can see from the slide, back in the old days, we had a trade course syllabus which had a variety of interesting material such as: calculations of volume, soft solder exercises, sheet metal tool boxes, filing exercises, behaviour on the job, and engineering drawing. We also had exams and practical tests throughout the year.

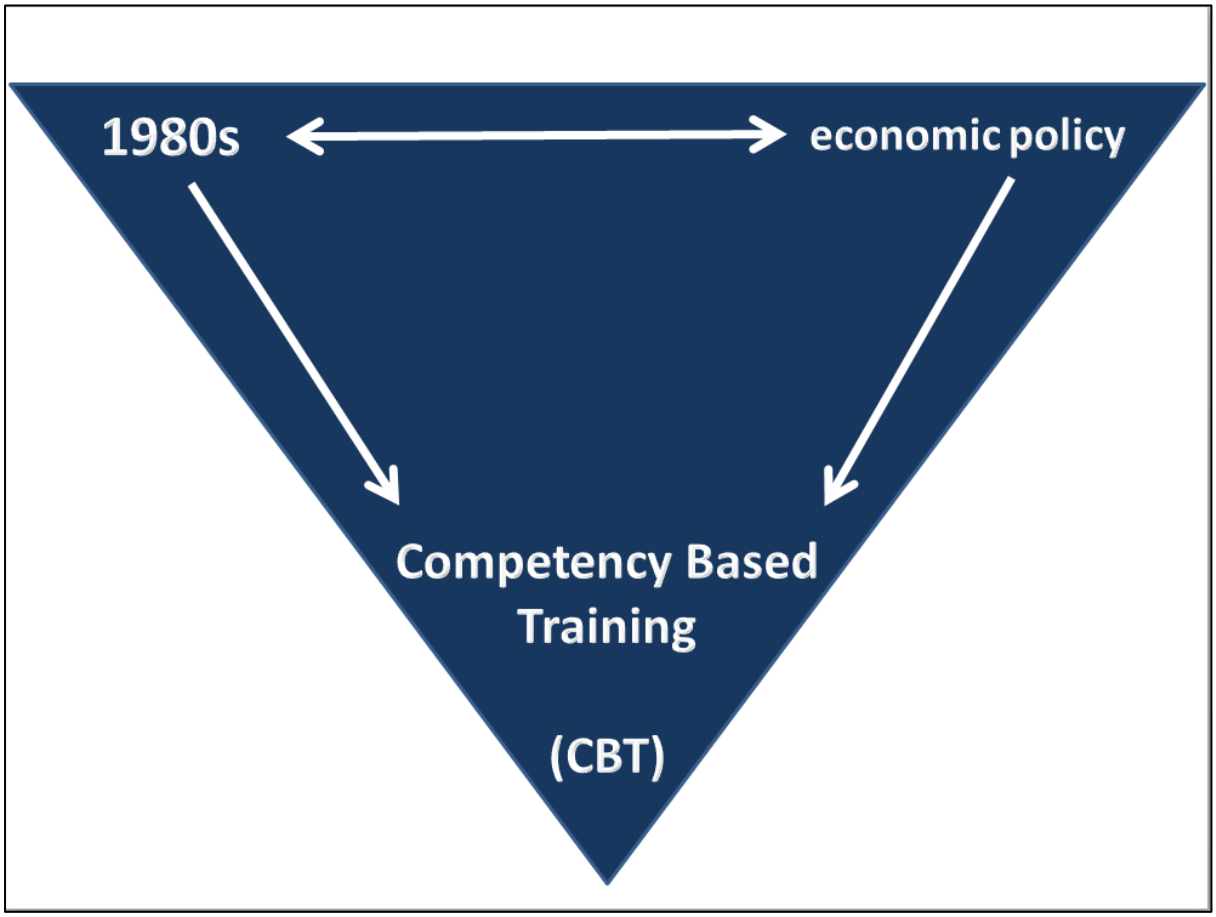


After that we progressed to stage 2 to learn more and gain skills on wiring up, compressors, lubricants, servicing systems, as well as having to complete more exams and practical tests.



We would then conclude on learning about cold rooms, supermarket applications, how to analyse and operate a compound system, and of course undergo more exams and tests.

This was a great course and it produced some top quality tradesmen. All of a sudden we woke up and this was all gone, there was now competency based training, which we still have today.



So in the late 80s, competency based training or CBT was introduced to improve the skills level of the Australian workforce.

Competency based training, in theory, should improve the skills and make for quicker completion of apprenticeships, which in turn, is supposed to increase the number of tradesmen in our industry.

The major flaw in this theory is that we are not attracting the right calibre of apprentices to our industry and we all know why. We want our children to go to university, and as parents there is a sense of failure if this is not achieved.

Yet an apprentice can earn approximately $130,000 during his training period, a uni student after their training has a debt of approximately $50,000—that's a difference of $180,000.

So why are we not attracting the right youth?

My thoughts on why we don't attract the right youth is that to be a fully competent tradesmen in refrigeration and air conditioning—to be able to fully understand a system and its sub cooling and superheating qualities, as well as having to gain electrical diagnostic skills and more, you need to have the same intelligence as someone doing a university course.

Talking to TAFE teachers around the country, I hear the same complaint—apprentices are not completing their off-the-job work and are resitting their capstone many times.

Why is this happening?

One idea is that the apprentice is not properly assessed before starting their trade. We need a national entrance exam that checks the numeracy, literacy and dexterity of a future apprentice. Tests like this were conducted 30 years ago.

Also, our industry is not promoted for what it is, we need to make it more sexy, more appealing to young people. We have promotional material that is sent to schools, but I wonder if it is actually shown to the children.

One of the main downfalls of competency based training is the ability of rogue Registered Training Organisations to deliver Certificate II courses in just a few hours.

The Certificate II split system course should be delivered in 360 hours, not 16 hours. I have spoken to many tradespeople about the Certificate II course and their main complaint is that you can obtain a Certificate II licence after a short course. However, they had no problem with people doing the course in the recommended 360 hours.

If it was compulsory that the course could only be delivered in the 360 hours then you would have very few people taking it up. I think the Certificate II Split System course should cease to be delivered. The Certificate II course has stopped people taking up the Certificate III course so it could be a possible reason for an industry shortage of trained tradespeople.

I have been in this industry for 50 years now and I am aware that a skills shortage has always existed. Most companies send their apprentices to TAFE or an equivalent however in NSW, TAFE training is in a real mess.

TAFE Training

I am aware that they are considering doing away with storeman, which may sound like a trivial thing but the storeman fulfil the flow of tools and equipment to make the days' training complete. If teachers have to take over the role of storeman, it then reduces their time teaching.

Another problem is that TAFEs are reducing the time an apprentice is required to attend in a year. I know some colleges have reduced required attendance from 36 to 30 weeks. Over the years more content has been added to the

course and nothing taken out, so how can they consider reducing the training times for an apprentice?

We all know we have the ARC licence and generally it works well. Most of the industry supports the ARC licence and the major complaints seem to come from the Certificate II courses, which I have spoken about. There are complaints that Certificate II people are going beyond their licence limit. I have even heard of Certificate II people installing cool rooms. What ARC needs to do

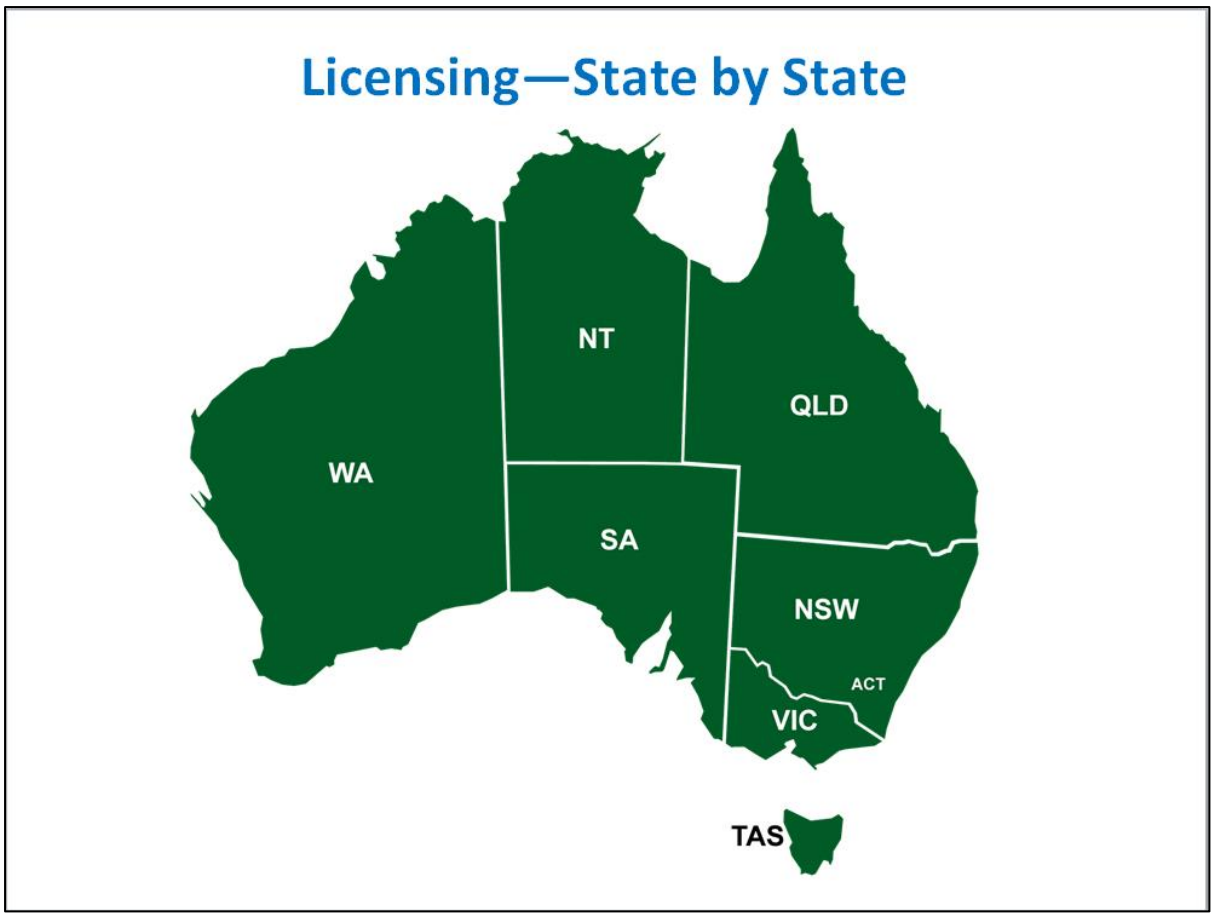
to retain its good will is to be able to check and make sure that everyone is working within the scope of their licence.

Certificate II people need to be audited and they need to prove they have vacuum pump leak detector and recovery unit.

ARC tends to get blamed for all the problems with licensing but I can say that they are working on improving the situation, and most of the blame is unfounded.

The majority of the industry is supportive of occupational licensing, not just environmental licensing which ARC is.

If you look at state licensing it is so diverse.



QLD has the Refrigeration, Air Conditioning and Mechanical Services Licence, which has Limited and Unlimited Design classes. They also have the Air Handling Duct Installation Licence and the Restricted Electrical Licence.

NSW has Contractors and Supervisors licences for refrigeration and air conditioning work, which only Certificate III qualified people can get. There is no recognition of Certificate II in NSW. I wish the whole country adopted this

system. The NSW Government have made it known that they would like to see the state licence gone.

The ACT has the Restricted Electrotechnology Systems—Refrigeration and Air Conditioning Licence, which is a class under the Construction Occupation Licence.

In Victoria, you must hold a Restricted Electrical Workers Licence and a Victorian Building Authority Plumbing Licence.

In Tasmania, you need a Restricted Electrical Work (REW) Licence, which falls under the Plumber Practitioner Licence.

In the Northern Territory, you must hold a Restricted Electrical Licence and in South Australia, you must have a Restricted Electrical Workers Licence and a Building Work Contractors/Supervisors Licence.

Finally in WA, you will need a Restricted Electrical Licence.

As you can see there is no uniformity between the states, except the restricted electrical licence and even then these are different in what work you are permitted to carry out.

In South Australia, you can carry out the interconnecting wiring between indoor and outdoor, but no mains. The industry needs to pursue this for all states.

We will never be able to wire the mains as this is not covered in our trade course but the interconnecting should be achievable.

With the new refrigerants comes more challenges for our trade:

Ammonia—is slowly growing and requires more available training.

CO2—has had a rapid rise in uptake and is not the mysterious refrigerant it was 10 years ago.

HFOs—will soon be here and being mildly flammable, it requires the workforce to be competent.

Hydrocarbons—are growing and require training.

R32—is plentiful and the training course is up before the IRC to review and sign off.

As you can see a lot of training is required for our industry, but if we can't attract the right apprentices, they will struggle to become competent.

In conclusion, I would like to see:

- Our industry profile lifted.

- A test to make sure new applicants for apprenticeships have the basic skills to be able to complete their apprenticeship.
- TAFEs and RTOs to stop delivering the Certificate II course and cease with the cost cutting measures.
- National licensing—this is a tough one, but let's try and get national consistency plus achieve the interconnecting wiring for all states.
- I would also like to make sure that training is in place for all refrigerants.

Refrigeration and air conditioning is a great trade.

Thank you.