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Committee Members,

Inquiry into the Perceptions and Status of Vocational Education and Training

I would be pleased if you could accept this as my submission to the above inquiry.

In preparing this submission I am mindful that it doesn't concern any specific element of the Committee's Terms of Reference. It is instead couched in a reflection on over 30 years' experience designing and implementing vocational education and training (VET) solutions and systems here and in several countries around the world. It is in such reflections that I am confident that lessons may be found which will help the Committee frame its recommendations for the future of VET in this country.

Before I do so I should submit that the comments in the following are solely mine and not in any way those of my employer. I am writing purely as a private citizen whose passion has for many years been in assisting individuals and others to truly understand VET – what it is, the important rationale for its implementation, and the benefits that a properly run VET system can bring to communities, regions, industries, and the nation as a whole.

Should the committee wish any further information I can be contacted at the below phone number or email address.



Phillip D Rutherford Ph.d



February 2023

The House Standing Committee on Employment, Education, and Training

Submission to Inquiry into the Perceptions and Status of Vocational Education and Training

Dr P D Rutherford FAITD FAIM
February 2023

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Overview

In this submission I will describe my background and how my vision and experiences of VET have been formed over the past three decades. I will describe and illustrate some of the results of research conducted over the past 25-30 years into the most effective features of VET and VET systems applied here and overseas. In doing so I will also highlight where the VET system in Australia may return to its once universally celebrated position as world leader.

Following this I will reflect on what in my experience is a best practice concept for VET in schools. The description given here illustrates what many schools and employers have found to be the most effective pathways to employment and a satisfactory career experienced by students upon graduation from secondary school. I will also suggest methods by which a similar process may be adopted in schools across Australia.

Finally I will address the notion of lifelong learning as it draws together all of the processes and pathways already available in this country but never integrated as illustrated here. The framework illustrated in these pages has ben extensively reviewed in the past by VET professionals, senior TAFE and university staff and agreed to by the Vice Chancellor's Committee. It was found to be an ideal model for tracing flexible pathways of learning which had the potential to take any student, from the highest to the lowest academic experiences, and employed or unemployed adult, on a seamless transition though to post graduate level studies.

In conclusion I will offer recommendations based on my experiences and what I have always seen as a vision for the future of VET in this country. I have been fortunate to have worked at every level of adult and technical education, principally within industry and later lecturing at university. I have also been intimately involved in the development of national VET policies, processes and guidelines in several countries. I hope that the committee can draw from these experiences some aspects which might assist in future decision making aimed at reversing the perceptions currently held concerning the status and quality of VET in Australia.

Background

While working in England in 1991, I was invited by the National Council for Vocational Qualifications (NCVQ) to assist in the further development and take-up of VET across defined sectors of the United Kingdom. As the committee may be aware, the NCVQ was established in 1990 by the UK Government to achieve a coherent national framework for vocational qualifications in England, Wales and Northern Ireland. At the same time a similar approach was being undertaken by the Scottish Vocational Education Council for that country.

The background to this project was detailed in a report published in the British Journal of Occupational Therapy in April 1989. The report was from the NCVQ Working Party and

described the problem for which the Council was being established. According to the report the Council was to address the following issue:

The present arrangements for vocational qualifications are complex and confusing. In some occupational areas there are many qualifications and the relationship between them are not understood by employers or those seeking training. In others there is a lack of suitable qualifications and access is unnecessarily restricted in many cases. Only 40% of the UK workforce hold relevant qualifications, a considerably lower proportion than in other major industrial countries with which we compete.¹

The response introduced by the NCVQ was quite radical with the result that British VET system was, for many years, the envy of other nations. As a result it was also much copied by other countries, including by Australia.

As can be seen, these issues are almost identical to those being experienced in Australia today. However, recent ABS statistics show that while Australia adopted a version of the British system in 1992, in 2022 only 30% of people aged 15-74 hold a vocational qualification as their highest qualification, and the percentage of this same cohort studying for a certificate II to IV was 22% while only 12% were studying for a diploma or advanced diploma.² These figures demonstrate that some 30 years after VET was introduced into this country the percentage of take up is less than it was in the UK when such an approach was first created.

The reason why the British model was so popular, even though it referred to NVQs (National Vocational Qualifications), is that it was focused solely on skills and knowledge required by students and others in the workplace. It mattered not how these were gained, just that they could be demonstrated at a level commensurate with the standard of work demanded by employers.

In addressing the issues described in the journal article the Council decided that that it would not award qualifications but instead work with and through employers and established examining and awarding bodies to reform the existing vocational qualifications system. The particular focus of this reform was to overturn the attitude that qualifications could only be earned through study. Instead the focus of the system was on demonstration of competence regardless of whether the skills and knowledge underpinning this knowledge were gained through formal study or simply experience.

The NCVQ was also charged with establishing a more simplified arrangements to link those possessing the required skills and knowledge with employers in areas of most need. On top of this the work of the Council was to develop pathways to meaningful career opportunities for all, regardless of status, gender, physical or mental ability, or any other circumstance.

¹ NCVQ Working Party (1989)' The National Council for Vocational Qualifications'. *British Journal of Occupational Therapy*. Volume 52. Issue 4. P. 145.

² Source: Australian Bureau of Statistics. Education and Work, Australia. Data on engagement in work and/or study, current and recent study, qualifications, and transitions to work. Reference period May 2022. Released 10 November 2022. On-line.

In this the Council had two major lines of effort:

- Design and implement a new national framework for vocational qualifications; and
- Gain agreement for national standards describing occupational competence across a wide range of industries.

On behalf of the NCVQ my task was to lead a team in a project entitled the 'Access to Assessment Initiative'. The aim of this project was to generate greater understanding amongst small and large businesses, training and education institutions, and prospective clients (students and employers) of the new and radical approach to VET and the new national vocational qualifications (NVQs). Within this was the requirement to also promote Accreditation of Prior Learning (RPL in Australia) into NVQ/SVQ programs as a component critical to progressing the uptake of the emerging competency-based education and training system.

My job, in simple terms, was to spread the word that the British system gave little effort to who provided training, or even what training was provided, as long as individuals – whether they were trained or not – could demonstrate that they had the skills and knowledge essential to the modern and technologically sophisticated workplace. The emphasis was on assessment of the skills and knowledge possessed by those seeking employment or further career opportunities. This included not only entry level employees but staff at all levels, including middle and upper management.

Upon my return to Australia I was sought out by the National Training Board (NTB) to assist in encouraging employers to adopt a similar system. This task was seen as essential to the success of the embryonic VET system then being promoted across all states and territories as part of the National Training Reform Agenda (NTRA). Of benefit was that, at the time, training and formal qualifications were not viewed as the critical issue. Unfortunately nor was the standard of skills and knowledge demanded by employers sufficiently understood – by either employer or training provider. The Board therefore had the responsibility of ensuring that a framework of standards was established to facilitate the development of a nationally consistent and responsive VET system. This framework became the central pillar for the National Framework for the Recognition of Training (NFROT).

Endorsed by the Board these standards were to be the national benchmarks for the delivery, assessment and certification of VET in this country. As was the situation with the British system, it did not matter where or how an individual was trained. The point was that through their prior experience or learning pathways they could demonstrate skills and knowledge to the standard required. As such we worked very closely with employers, unions and employer groups to create the conditions whereby they felt comfortable accepting certain higher standards of skills and knowledge and through these achieve more ambitious business and strategic outcomes. In doing so the pressure was on training providers to compete for opportunities to train potential staff against these standards. It was not until the mid 1990s that these standards were linked to a qualification, and it was from this point on that the Australian VET system progressively diminished in effect and outcomes.

I held this position until 1996 when the functions of the Board were taken over by the Australian National Training Authority (ANTA) and the focus shifted to levels of qualifications as defined in National Training Packages rather than standards of competence essential to workplace needs. It was clear that the agenda was no longer to be directed at the needs of employers and the economy but by the training and education fraternity with courses to sell, whether the outcome was a student with the skills and knowledge at the desired standard or not.

By this time the Australian system was seen as on par with, if not in several ways superior, to that of the UK. As a consequence I also travelled extensively while with the NTB, providing advice and support to employers and governments here and overseas. I visited and advised governments in several countries also seeking to adopt a similar work-centred VET approach to that which we adopted from the UK. These included New Zealand, the USA, and South Africa. Since leaving the Board I continued to work closely with employers to help them understand what they should be demanding of the VET system while also advising governments and other institutions (such as the International Labour Organisation and the International Baccalaureate Organisation) on the most effective VET systems for their needs and those of their constituent groups. In more recent times I have been employed by a government in the Middle East to reform and modernise their VET system as a means of future-proofing their economy.

I share this background with the Committee in order to highlight the fact that, as others are fond of saying, this isn't my first rodeo. The situation and issues concerning VET in Australia during the early to mid 1990s almost exactly mirrored those found in the UK, and arguably continue to exist today. In addressing these issues the British VET system was held up as something that other countries could only aspire to. In adopting the British model Australia too was seen as a model that others could look to emulate and we became the go-to destination for many countries seeking to develop their own system.

However, this was before both systems changed direction away from workplace-centred standards of competence and became mired in debates over the most effective way of providing training and education that it was hoped would result in the desired standard of competence being achieved. As the committee would be aware, this has not worked. But, sadly, this approach has over the past 30 years spread to other countries. As a result there are those who rightly claim that our current VET system is as good as, if not better, than those found overseas – conveniently overlooking the fact that overseas models (including the UK) have decreased in effectiveness and value over this same period.

Some might profess that Australia has a world-leading VET system but the quality of those being led means that it only requires the achievement of a very low standard to do so. It is this phenomenon that has in my opinion framed all of the problems found with our VET system today:

 A failure to fully understand VET – why we need 'vocational' education and training, what it is, its main (and only) focus, and the most effective means for achieving individual, business and economic success through its adoption over all other forms of adult and technical training;

- a strongly-held sense of ownership of VET and the VET system by trainers and academics who believe that heavy focus must be maintained on what must be trained as opposed to what individuals and employees must be able to do regardless of whether they have been trained or not;
- disengagement by employers who feel locked out of the decision making cycle concerning what constitutes competence in the workplace; and
- lack of centralised leadership devoid of politics, constitutional or personal agenda, or misguided belief that a high standard of skills and knowledge can only be gained through education and training.

Of course education and training contribute to the notion of competence as it is evidenced in the possession of a qualification, but only a level of competence that has been taught. There are many other factors affecting how our experiences and knowledge grow in line with an employer's needs, and we only need look at the number of highly successful people who have had little education or training, or whose qualifications are in areas other than those in which they've achieved success.

Paradoxically, I also believe that there is very little wrong with our current VET system which could not be fixed by a few simple redirections of effort. And a willingness to adopt a new paradigm.

I have worked in, and in later years personally developed, systems which both focus on and achieve outcomes that benefit individuals, their communities and the wider economy. The only difference is that the solutions adopted have not been centred on addressing individual elements of the VET system such as qualifications in a piecemeal fashion. Instead we have begun at the top with a global view of the needs of the economy and the communities most disadvantaged by a lack of opportunities. As we will see such a focus, when crystalised and maintained, forms the pinnacle of a well-functioning and effective VET system. Then we looked at the system itself and questioned what must be done at all levels to ensure that the system as a whole is effective, efficient, and fit for purpose.

It is to such a system that I will now turn my comments.

VET as a system

A common theme heard over the past couple of decades is that the VET system is not working. To this I respond "What system?"

The truth is that there is no system as we would recognise it. There are many individual parts and links, but few are connected and none is drawn together with a common purpose and well defined objectives.

As the committee would be aware, VET in Australia is not conducted in a systematic way but piecemeal and often with some pieces given greater emphasis and financial support than

others. In allocating this funding there appears to be an expectation that critical linkages and activities that create this system will be formed but which rarely, if ever, are. However, as is often the case, the funding body is none-the-wiser as long as the conditions of the funding are met.

The following illustrations provide a graphic representation of the ideal system. Although appearing convoluted and reminiscent of Dr Barry Jones' 'spaghetti and meatballs' diagram, this and the following illustration represent all of the different elements which make up an effective VET system.

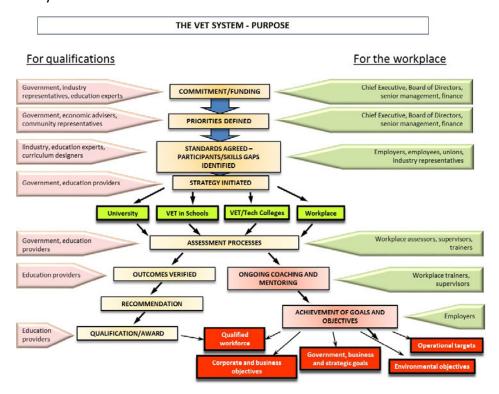


Figure 1. An overview of the purpose of a well functioning VET system

This model represents a bipartisan view of a VET system as it was designed. Employers and the education and training fraternity working closely together to achieve economic and business outcomes. However, over time the latter gained greater control with the result that the focus of the system is now only on qualifications. There is no evidence that the real outcomes have ever been achieved to the degree for which the system was created.

This model was developed during my employment in the UK and found to be equally as applicable in Australia while with the NTB. In the years since I have constantly referred to it in order to identify where and how our current approach is straying off course. In most cases the reasons have been twofold: Firstly, the different elements which go to make up the system have been disconnected and attended to as individual activities and, secondly, as noted above too much emphasis has been placed on the gaining of qualifications rather than the achievement of community and economic outcomes. This was further proven during several research projects undertaken into the way in which VET is applied in other countries.

In order to have a functioning VET system there must be three key elements which although separate are overlapping and have the same ultimate objectives. This is illustrated in the following:

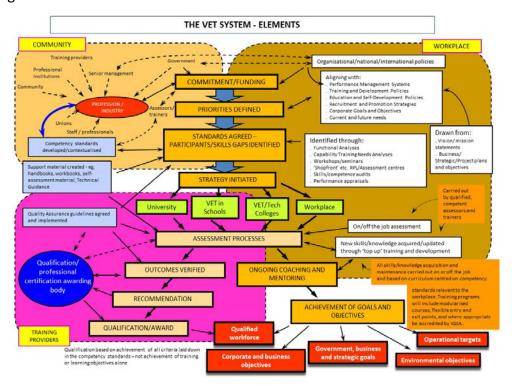


Figure 2. VET in action

One thing that this model clearly demonstrates is the purpose of VET. Why do we – or at least should we – have a VET system? What are the constituent parts and what are the drivers that ensure that they work effectively in the achievement of short and long term objectives? What and where are the linkages and how do they relate to each other? Where does each key stakeholder fit? And why there? These are some of the questions that anyone charged with the responsibility of developing and implementing an effective VET system should contend themselves with. *The first steps, however, are to develop a vision for VET, create and gain acknowledgement of its purpose, and design the policies and principles that will achieve this purpose. Then, and only then, consider what follows, including qualifications.*

At the moment our VET system works in reverse. Qualifications, through National Training Packages, are first devised and then their alignment with industry needs considered. As a result only one element of this trio – the training providers – is appeared. It is no wonder that so many employers are rejecting nationally endorsed qualifications.

Obviously the above model is one dimensional and provides only an overview of all of the elements and stages through which the notion of education and training for a vocation must pass if the objectives of VET are to be met. In my experience there are other important issues which should be considered. One of these concerns VET conducted in schools, and the other a broader view of learning pathways.

VET in schools

My research into VET in schools considered not only the way in which students undertake classes in technical skills or entry level apprenticeships but also the purpose of such education. My research considered the opportunities available to students upon graduation or during school based work placement, as experienced by students in countries such as the United Kingdom, Japan, Sweden, Spain and Germany. (Please note, this research was undertaken several years ago so future investigations may reveal a different picture. However, I offer these lessons as examples of what I consider to be best practice VET in schools as aligned with a wider VET system.)

The following illustration demonstrates that in countries where there is a higher take up of employment upon graduation the core subjects taught at school are not aligned with a nationally accredited qualification (as is currently the case) but with the skills and knowledge employers seek of students entering the workforce with at least a modicum of technical competence.

An example of this occurred whilst I was working in the UK. Employers in a regional town were concerned that the children graduating from secondary schools in their area did not have the basic skills essential for employment. They were qualified but basically unemployable. The solution I instigated was to have employers work with the school to develop and refine the final two years' curricula. What they came up with was similar to the below illustration which, over the years and with further research, has been refined to include modern technology and what some are calling 'soft' skills.

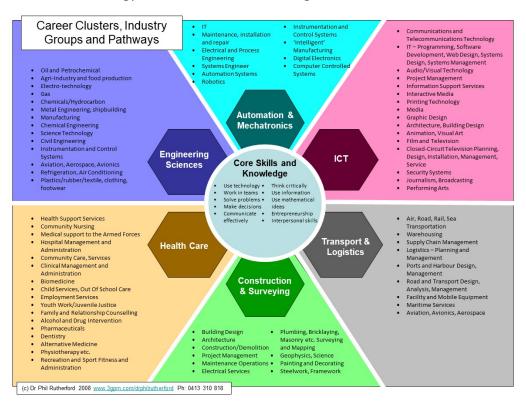


Figure 3. Career clusters as applied during VET in schools programs

This model is similar to that adopted by many secondary schools and colleges, including during my tenure as Operations Director with the largest VET institution in the world, the Institute for Applied Technology in the UAE. At the centre are the skills we determined were common to all career clusters. The final years' curriculum was based around these core skills and in which the students are assessed – both before commencing each year and again at its conclusion to evaluate their learning progression. Thus, all students were able to enter the jobs market or continue to university having been assessed as possessing the core skills employers demand, contextualised with the basic (eg, Certificate I level) skills and knowledge essential to the different career clusters.

In the UK these were called the GNVQs – General National Vocational Qualifications – and in Australia the Mayer Key Competencies attempted to develop a similar approach.³ Both models emphasised competence in the application of the essential core skills in the context of a certain trade or professional vocation. Further studies built on these core skills and thus began a career tempered by continuous professional development and ongoing learning. (This will be further discussed in the following section.)

As can be seen these core skills are what some are referring to as 'soft' skills. Depending on the school or technical college these are taught in the context of the vocation into which students would seek to progress upon graduation. They also provided a strong base upon which to undertake further studies at university or technical college.

In applying this model to all VET in schools studies, students are in a more favourable position to seamlessly progress into employment upon leaving school (whether through graduation or for other reasons) or continue their studies at university or technical college. This model was particularly effective in the UAE where whole schools were established to cater for the needs of Emirati youths who were disaffected by the formal education system or in other ways disadvantaged in the junior level jobs market. We also created specialised universities into which students graduated in order to continue their studies. Where this process differed from most western schools was the strong emphasis placed on the core skills and their application rather than generic qualifications and confirmed during studies in specific vocational fields.

(As a side note, research I conducted several years ago across a number of countries revealed that young people who left school after Year 9 and entered the workforce with these so-called 'soft' skills were much further advanced in their career and future expectations than those who graduated after Year 12.)

Learning pathways

In the early 2000s I was party to discussions with the Vice Chancellor's Committee (VCC) and others, including the ACTU, on how the emerging qualifications framework could be aligned with higher education qualifications thereby enabling a seamless transition from vocational studies to university. The model I developed (below) excited a lot of discussion and an

³ The difference with the Mayer Key Competencies – and similar initiatives followed in recent years – is that they were detailed and thereby assessed separately to similar 'soft' skills identified in the relevant standards. Thus the same skills were assessed twice: Once separately and the other time in context.

agreement that a student could enter into the VET system at any point and, after obtaining a qualification, progress through a number of pathways to a Ph.D in their area of expertise.

For example, someone with sufficient interest could commence an apprenticeship (at school or otherwise) and at some stage during or at the conclusion of their training transfer their interest to a higher level of learning and eventually on to university. Thus we could have, for example, a Ph.D in automotive mechanics, or plumbing, or any other non-traditional qualification. Such a qualification would include greater emphasis on research than practical application of knowledge and be equally as recognisable as someone who followed the traditional path from senior secondary school through to under-graduate studies and on to higher education.

While this concept was greeted with enthusiasm by the VCCs and ACTU, others were not as pleased with my contribution. It appeared that integrating training and education pathways diluted the bargaining power of those with an agenda which didn't always include concern for individual training and development. What they overlooked then, and continue to overlook today, is that such pathways already exist. It is just that few – if anybody – has taken the time to articulate it in the manner shown here.

The recognition of existing skills, knowledge and qualifications is a widely held practice by institutions when considering enrolment of applicants in further or higher education courses. Such practices go by varying titles, including Recognition of Prior Learning (or Assessment of Prior Learning in the UK), credit transfer or advanced standing.

SECONDARY **FURTHER EDUCATION** Yr12 Higher College Yr10 Yr11 Technical/Trade College Yr 2 Yr 3 Cognitive capability Business Degree VET in Schools Cadetship **Business Apprenticeship** onal Degree Engineering capability VET in Schools Professional studies Technical capability Trade Apprenticeship Other technical schoo Entry Point point/Pathway

CAREER AND TECHNICAL EDUCATION PATHWAY

Figure 4. Learning pathways

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Schools, deliberately or inadvertently, classify student by their capacity for technical, engineering or cognitive type studies. This would once have been seen as grading students by their ability whereas today it is accepting the reality that all of us possess certain attributes when it comes to capacity for learning. Some students like to study the history of clocks while others like to pull them apart to see how they...er...tick.

But then over our lifetime we take on other interests and a person who enjoyed motor mechanics yesterday might take an interest in jet propulsion systems tomorrow. After all, the Wright Brothers began their careers repairing bicycles, and Einstein failed his college (polytechnic) entrance exams. The future is unknown, but it is only through the lifetime learning of today's young people that it will become known.

The adoption of such a model as illustrated above is an acknowledgement that there are pathways between the lowest and highest levels of education which anybody can pursue. In doing so the continued impression that VET is the only option for students disengaged at school or who do not possess the prerequisites which enable them to pursue higher education will disappear. Gone will be the belief that VET is nothing more than a gap filler between the twin silos of secondary school and university.

Finally, and perhaps more importantly, this model will demonstrate exactly what VET is – education and training for one's chosen vocation.

Recommended way forward

The models and illustrations presented in this paper are not the subject of wild imagination or simple theoretical illustrations. All of the elements described here are in existence now, and been tested here and overseas for over 30 years. At each stage they have been found to be applicable and of continuing relevance. Nothing has been described in this paper which cannot be found embedded – sometimes extremely deeply – within what we are calling our current VET system. It would therefore take little effort to bring these to the fore and build around them a strong, viable and reliable system of VET which achieves individual and economic outcomes across all sectors.

It must be acknowledged, however, that there will be pushback. The reasons are twofold:

a. Firstly funding. Under the current system funding is only allocated to the achievement of the most obvious objectives: Ongoing revision and release of National Training Packages, development of so-called assessment tools and TAFE courses. Funding is also allocated to the management of this funding, that is to government and non-government agencies whose responsibility it is to protect the tax-payer's purse and ensure that the most obvious objectives are achieved. There is no funding for, for example, management and leadership for the VET system as a whole. Nor is there funding for research and development into VET, the needs of the system as a whole and of each constituent part. What research funding is available appears to be allocated to organisations whose output appears little more than telling us what we already know – that there are so-called skills shortages in certain

- industries, that there were so-and-so many courses conducted last financial year and x-number of students graduated. This is funding for history, not the future.
- b. Secondly perceived ownership. Because the system as a whole does not have one single authority responsible for its management and leadership, ownership appears to have been grasped by bodies funded to undertake discrete elements of the VET system. There are many publicly funded organisations each with a stake in different aspect of VET in this country, but no central authority with responsibility for providing over-watch of the entire system.

This last point is the most critical.

In order for VET to achieve the goals and objectives governments, employers, industries and our future demand of it, there must be one single body responsible for the development of a vision for VET. It must have responsibility also for clarification and acknowledgement of the purpose of VET, and wide agreement to and acceptance of policies and guidelines that support the achievement of key steps towards the ultimate objectives.

Such responsibility must include the development, understanding of and agreement to a vision and purpose for VET in this country. It must also undertake the development of policies and procedures to manage the strategic and business plans that ensure the achievement of this purpose. More importantly it must be responsible for providing leadership in the application of the guidelines and quality measures through which such achievements are assured of being fit for purpose.

In considering these recommendations it is useful to reflect that in recent years there have been several calls for similar reform to the national VET system, but in each case it appears that the concern was VET itself, not the system which supports its application. The arguments centred on how education and training, along with education and training providers, might be more effective in achieving the desired outcomes. But nowhere in these has been a clear image of how the two – providers and outcomes – are linked. And nor is there a clear indication of who would hold responsibility for ensuring that such links are effective and demonstrably enable the achievement of outcomes essential to the national economic need.

Moreover, and perhaps more importantly nor is there a single organisation or entity capable of providing vision, strategy or assurance that VET is fit for purpose in this country.

Over thirty years have passed since we first created our VET system and little has been achieved. My recommendation, therefore, is that such an entity be created and charged with investigating what worked so well in the past, what could have been done better, and what must we do in the future.