Productivity Commission Education and Training Workforce Study

Vocational Education and Training (VET) Workforce

SUBMISSION PAPER

July, 2010

EE-Oz Training Standards

the Australian Government declared Industry

Skills Council for ElectroComms and EnergyUtilities.

Forward

The ElectroComms and Energy Utilities Industries (the energy industries) represent the following sectors, including those in both training and technical roles;

- General electrical installation, communications and Air-conditioning and refrigeration to commercial, industrial and domestic customers
- Electricity distribution, transmission and rail
- Electricity generation
- Gas Transmission

EE-Oz Training Standards, in developing their submission to the Productivity Commission study examining the Vocational Education and Training (VET) workforce, has conducted an online statistical survey, targeted focus groups discussions and interviews with leading industry representatives. These techniques have helped to inform the response outlined in this paper and ensure it actively reflects the concerns of the ElectroComms and EnergyUtilities industries. The statistical survey divided respondents into two groups, distinguishing between the developers and consumers of vocational skills;

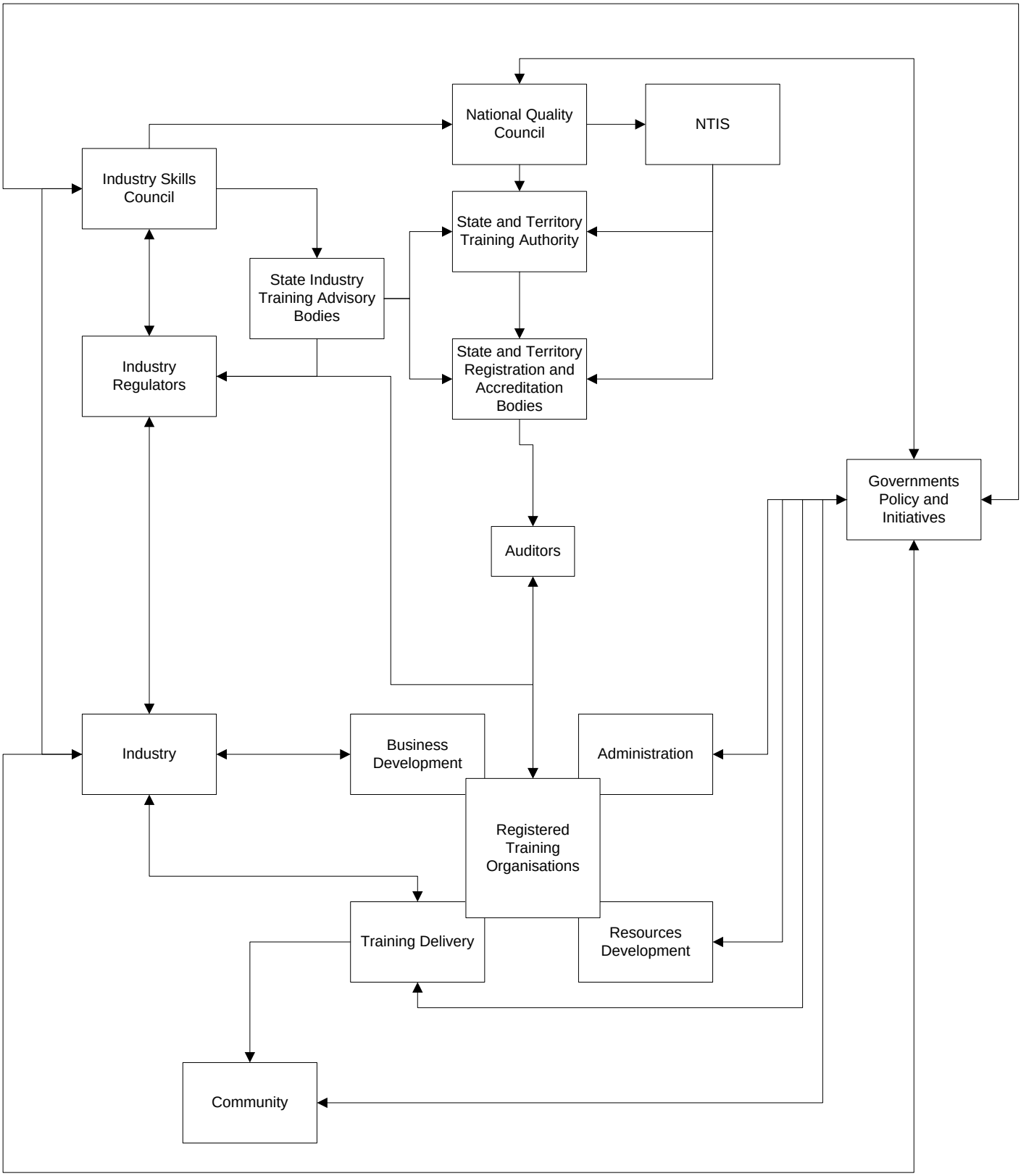
- Industry
- RTOs

Focus Group discussions targeted three interest groups;

- Public training organisations
- Private training organisations and enterprise trainers
- Industry representatives

The response has been divided into six sections for simplicity, these cover the areas of the PC Issues paper of greatest interest to the energy sector trades;

- Role of VET trainers as dual professionals (Professional development)
- Recruitment and retention issues
- Role of regulation in the VET sector
- Data (sufficiency of current data, suggestions)
- Division of duties, between training organisation and employer, in training contracts
- Determining resource allocation (supply vs. demand driven funding)


National Quality Council
NTIS
Industry Skills Council
State and Territory Training Authority
State Industry Training Advisory Bodies
Industry Regulators
State and Territory Registration and Accreditation Bodies
Governments Policy and Initiatives
Auditors
Industry
Business Development
Administration
Registered Training Organisations
Training Delivery
Resources Development
Community

Contents

Executive Summary

The Australian economy appears to be rebounding from the Global Financial Crisis (GFC) faster than initially predicted, spurred by a demand for commodities and strong employment growth.

There is a growing acknowledgment in Australian policy making circles that vocational training directly increases labour market productivity and that as we approach nominally full employment, this will be the essential ingredient in raising living standards and controlling inflation.

This paper draws on extensive industry consultation with representatives from across the energy sector trades, VET practitioners servicing these trades and the broader VET community. Across this forum a great diversity of opinion was expressed, which we have attempted to synthesize and where possible acknowledge alternative considerations

- **Salary implications of RTO trainer status as dual professions**

Representatives from across the energy sector industries support the requirement for five years technical work experience for new RTO trainers. This reflects the need for trainers to understand skill development and utilisation in an industry context, in order to ensure outcomes adhere to industry requirements. The corollary of this requirement is that prospective trainers will have the technical skills required to retain a job in industry and RTOs must present a competitive package to secure preferred candidates.

While RTO trainer remuneration fails to keep pace with the market demand for technical skills, RTOs will be unable to selectively recruit. This negatively affects the perception of training roles, the quality of new entrants into the field and outcomes for students.

- **ISCs to develop currency appraisal tools for qualifications and embed these into Training Packages**

EE-Oz stakeholders have expressed in-principal support for a methodology to measure the currency of a teacher's technical skill into Training Package qualifications. This information could provide purely indicative information for Head Teachers about staff allocation or professional development, provide a key performance indicator in relation to performance appraisal or provide a requisite level of currency for continued engagement in the training industry.

Through any of these models, allowing the industry to indicate a level of expected competency would increase confidence in qualifications delivered to industry and allow training organisations to address identified skills and knowledge shortfalls, improving trainer effectiveness.

- **Diploma of teaching for new entrants into the sector, incorporating specialised technical units**

Although VET trainers are required to operate as dual professions, most enter the training sector with little or no formal training as educators. The Cert IV TAE qualification, currently the standard

requirement for VET trainers, provides a preliminary basis in pedagogical theory although few industry representatives considered this an ideal level of training and many express concern at the declining proportion of VET teachers that have access to high level vocational teacher education programs.

Recent entrants into the VET workforce identify a huge learning curve from full time technical work to full time teaching and many refer to a lack of support at this time from their RTOs as a cause of discomfort and anecdotally advise this causes some trainers to return to technical roles. Given the difficulty in recruiting new entrants and the demonstrable advantages in terms of training outcomes of establishing higher level teaching skills, this is a problem that must be addressed. EE-Oz supports the adoption of a Diploma of Technical Teaching qualification which incorporates industry specific units for currency verification with educational delivery and management competencies.

The intention of promoting this Diploma level qualification is not to replace the Cert IV TAE qualification but to encourage new entrants into the sector to undertake a higher level teaching qualification part time in their first year (with a part time teaching load). In this manner it is not envisioned that the Diploma will act as a barrier for new entrants but that it will encourage them by helping them to develop effective teaching skills.

- **ISCs to develop industry intelligence regarding future labour market needs for the benefit of training organisations**

RTOs require timely, sector specific information to develop strategic plans, identify future training needs and predicted staffing requirements. Industry intelligence suggests that RTOs do not have an adequate forum to engage industry to establish skill requirements over the short term. ISCs through their extensive sector specific industry networks and training organisations links, can provide a bridge for the provision of targeted labour market information if funded in this role.

Given the intimate relationship between labour market data and skills demand, RTOs request greater provision of public data related to projections of changes and trends in demography, economic growth, employment trends, labour market participation, emerging technologies and participation in education and training. This information is integral to the development of plans to meet the nation's demand for training and retraining.

- **Acknowledgement of the dual social and economic objectives of the VET system in both resource allocation and outcome assessment.**

VET and its workforce are caught between economic and social imperatives, responsible for both developing the skills required by Australian industry (economic) and providing 'second chance' education (social). The VET sector has long played an important role in the provision of pathways and 'second chance' learning opportunities for people from disadvantaged backgrounds. Current policy settings indicate that both roles are becoming even more important.

In order for resources to be efficiently allocated to the fulfillment of both these mandates, both roles must be explicitly recognised, measured and reported.

- **Provision under AQTF for industry to benchmark standards of technical and educational qualifications in Training Packages.**

Industry representatives have expressed little confidence in the Cert IV TAE qualification which is the mandated standard, under the AQTF, for training in the VET sector. Since the mandating of this low level qualification, there has been a rapid decline in access to higher level vocational teacher education programs for VET trainers.

EE-Oz supports the continued role of the AQTF as the regulatory framework for VET and the VET workforce. However EE-Oz, with support from stakeholder groups, proposes that the AQTF include provision for industry to set appropriate benchmarks above minimum standards for teaching qualifications to deliver specific qualifications. This would occur through the same process as the current capacity to set standards for technical qualifications and industry experience, through inclusion of these specifications in endorsed Training Packages.

Role of VET trainers as dual professionals

The Issues Paper circulated by the Productivity Commission, accurately acknowledges the role of VET trainers as dual professionals, required to apply both technical and teaching skills.

This requirement is a unique feature of the VET workforce in that those delivering training are expected to maintain technical expertise and currency through practice rather than theoretical or research whilst also maintaining and developing pedagogical skills.

This dichotomy leads to a split focus that does not appear to be sufficiently recognised in terms of appraisal of outcomes, professional development and remuneration.

The recruitment issues experienced across the VET sector and demonstrated by an ageing workforce are exacerbated in the energy sector industries, with EE-Oz's online survey indicating an average technical trainer age approaching 55 years. Training organisations attribute their difficulty in attracting young technicians from industry into training roles, to their inability to offer salaries commensurate to the market rate for their technical skills.

This advice reflects the reality that VET teachers particularly in technical trades are drawn from the ranks of industry professionals, and are required to have industry experience (typically a minimum of three to five years experience). Competition for these recruits therefore comes from industry, who are less restricted by established pay scales, and will be dictated by the market for technical skills.

The actuality that that VET trainers are dual professionals dictates that training organisations must compete with remuneration packages offered by both professions if they seek to selectively recruit candidates. The need to replace an aging workforce recruited in previous decades on which the VET sector has historically relied is bringing the nature of the job role and its value into sharp focus.

This issue is addressed in greater depth in the Recruitment and Retention section of this paper.

Professional Development

As mentioned above the nature of the job role of a VET practitioner/technical trainer requires a dual qualification. This then highlights the need to maintain and enhance these skills via continuing professional development.

The consensus from EE-Oz's consultations was that Continuing Professional Development (CPD) is of paramount importance in maintaining trainer currency; although methods to ensure this training is adequately funded, relevant, well targeted, of high quality and innovative are highly contentious. The availability of CPD is largely dependent on whether the VET practitioner is employed by a public or private provider and whether their employment status is full-time, contract or part-time/casual.

For VET teachers CPD is split into three key areas technical, pedagogical and administrative. The relative importance of each of these is determined by a confluence of factors including the qualification being

delivered, the capacity of the class, the trainer's time out of industry and the specific skills being developed. Lack of currency in any of these fields is potentially detrimental to the skill development outcomes of students.

Professional Development Category	Stakeholder Priority
Technical	Industry
Pedagogical	RTO and Industry
Administrative	RTO

Getting the balance right in CPD development is essential to ensuring skills development occurs in an effective and efficient manner. Determining who has responsibility for the nature, quantity and funding of CPD training however is a highly controversial topic and there is no standard systematic approach by TAFE management to the planning and funding required to meet the CPD needs of staff. Industry practitioners alternatively recommend responsibility should lie with the individuals, RTOs or even lie with standardised VET requirements.

Individual trainers will have different relative strengths and weaknesses and require different CPD support to ensure they are operating at peak capacity. For this reason training must be targeted; industry wide currency requirements although addressing 'worst case' issues tend to be inefficient across the sector as a whole.

By and large, public training organisations allow staff a greater level of independence in determining their own CPD requirements and training. Head Teachers report that this provides motivated staff while a valuable opportunity to address their own shortcomings but express concern that not all staff use this time effectively.

Some private training providers advised that their trainers are not allocated CPD time as standard but that CPD is directed against skill needs identified in staff reviews. An alternative model is to reward individuals for their performance in imparting skills and knowledge and then allowing them to determine their own CPD allocation. While this bears some resemblance to the public training organisation model, it provides greater accountability and encourages the effective use of CPD training by aligning performance to a tangible benefit.

RTO Type	CPD Strategies
Public	Employment condition managed at local level Where required by VET or Industry Regulation Value of engagement with industry often not recognised
Private	Where required by VET or Industry Regulation 'Just in time' based on delivery need

	Remuneration based on performance outcomes Based on partnerships with industry
Enterprise	Integral to job role to support enterprise investment and business development strategies Where required by VET or Industry Regulation

The primary difficulty in applying targeted training, which is not determined by the individual, is the problematic nature of measuring outcomes against the three key areas.

Several industry figures identified a role for industry in determining a level of 'currency expectation' associated with various qualifications and have these embedded in the Training Package (TP). Consultations surrounding this 'currency expectation' were preliminary but the proposed model would involve ISCs conducting consultative forums through their Technical Advisory Committees (TACs) to develop a methodology to establish expected levels of competency. It was not immediately clear whether the results of this methodology would be purely indicative for the internal use of RTOs, provide a key performance indicator in relation to performance appraisal or establish a requisite level of currency. Any of these arrangements would provide training organisations with a basis upon which to measure currency, the corollary of which would be more efficient and effective identification of currency shortfalls. We note that trades licensing is under review in
Australia and technical currency is an aspect of this review, it is currently unclear how this will affect technical trainers.

EE-Oz will be holding further consultations with training organisations and industry representatives in the coming months to investigate potential methodologies and their implementation.

In almost all job roles across the economy, CPD is an integral part of maintaining skills currency. For VET trainers this can dramatically affect their ability to engage students and develop skills which conform to current industry requirements. If the VET sector is to fulfill the COAG objectives outlined in the issues paper of engaging a broader section of the community while simultaneously deepening the level of skill development, it will need to recognise targeted CPD as part of any quality assurance program.

Whichever model of CPD training is accepted it must ensure that outcomes can be measured and shortfalls addressed without disengaging staff. Training organisations appear to be best placed to make determinations about areas of relative weakness and appropriate compensation for workers to address these. Allowing these organisations the flexibility to address these issues will be necessary if they are expected to become more accountable.

Recruitment and Retention

Recruitment and retention is a problem for the Vocational Education and Training (VET) sector with problems in attracting the right people to the jobs as well as giving them incentive to remain in the VET workforce.

Throughout our consultative process EE-Oz Training Standards has conferred with many groups regarding the recruitment and retention of VET trainers now and into the future. A number of issues were raised by industry representatives including pay scales, currency of teacher training, onsite training, possible career paths, flexibility and working conditions.

Recruitment

RTO representatives highlight an extended period for which their ability to recruit qualified trainers has not matched the increase in demand.

A consensus was reached among representatives from the energy sector that candidates should have a minimum of five years experience in industry before they are considered for training positions within RTOs. This means that, in the current climate of technical skills shortages, by the time a candidate is eligible to move into the VET sector, they will generally be required to take a significant pay reduction. This is the key issue with regard to the recruitment of new teachers into the energy sector trades and occurs more widely through the VET system.

Throughout EE-Oz's consultation process it was found that almost 100% of respondents believed that increasing salaries for VET trainers to industry competitive rates was a fundamental and relatively simple step to increasing the desire for highly qualified workers in the industry to move into the VET sector as teachers and trainers.

A number of respondents involved in the consultation process identified other issues which contribute to a negative perception of VET training roles including;

- Only for those no longer suited to the physical demands of technical work
- Poor community perception of training roles
- At lower levels there is a perception of trainers as chaperones
- Constrained by policy and budgetary pressures
- Quality outcomes not a priority

For VET training roles to be attractive to high quality candidates these perceptions will need to be addressed.

In addition to performance based remuneration being identified as a powerful motivator for CPD training, several industry representatives promoted this as a tool for recruitment and retention. Their rationale was that a performance based salary would generate a greater benefit through leveraging existing skills into higher quality outcomes and greater accountability. Other representatives raised concern that a move to performance based remuneration would impede recruitment by creating a less flexible working environment.

Taking advantage of flexible working arrangements for highly skilled industry subject matter experts to contribute specialist skills would also ease recruitment pressures. Initiatives to promote engagement and collaboration with industry were generally favourably viewed by all industry participants, although administrative hurdles limit this interaction.

Retention

Industry representatives advise that many of the factors which affect recruitment also affect retention. The main area of distinction is the support provided to new recruits, with some organisations reporting difficulties retaining new staff despite attractive remuneration arrangements. The primary factors affecting retention were identified as;

- Working conditions
- Remuneration packages competitive with industry
- Career paths
- Flexible employment options including guest lecturing or casual teaching
- Community perceptions

The provision of 'good' working conditions was considered to be of primary import. Key elements of 'good' working conditions included;

- Access to ongoing professional development (issues related to professional development are discussed in greater detail above)
- Access to current and well maintained technical teaching facilities, whether within the RTO or through industry partnerships
- Funding and flexibility to obtain as required support materials, staff and resources
- Time and support to develop coordinated delivery strategies and moderated assessments. There was a recognition that this support would be greater for new staff

Of these elements, recent entrants into the VET workforce identify a huge learning curve from full time technical work to full time teaching and many refer to a lack of support at this time from their RTOs as a cause of discomfort and anecdotally advise this causes some trainers to return to technical roles. Given the difficulty in recruiting new entrants and the demonstrable advantages in terms of training outcomes of establishing higher level teaching skills, this is a problem that must be addressed. EE-Oz supports the adoption of a Diploma of Technical Teaching qualification which incorporates industry specific units for currency verification with educational delivery and management competencies.

The intention of promoting this Diploma level qualification is not to replace the Cert IV TAE qualification but to encourage new entrants into the sector to undertake a higher level teaching qualification part time in their first year (with a part time teaching load). In this manner it is not envisioned that the Diploma will act as a barrier for new entrants but that it will encourage them by helping them to develop effective teaching skills.

EE-Oz, with the support of industry stakeholders, has proposed such a qualification for the energy sector trades. However, this has been opposed at the jurisdictional level due to concerns that this would raise salary expectations within the VET workforce and may represent a barrier to entry.

Due to the relationship between recruitment and retention strategies, it was envisioned that support for new entrants to the sector through the provision of higher level training would encourage greater participation. The need for higher level training is likely to become more acute over the next decade as a large proportion of the current teaching workforce with higher level qualifications retires, leaving only recently recruited staff with the minimum Cert IV TAE qualification. Maintaining outcomes, let alone improving outcomes, will require these skills be replaced.

Role of regulation in the VET sector

Currently regulation of the VET workforce is jointly managed by the National Quality Council, State and Territory registration and accreditation bodies through the Australian Quality Training Framework and industry through National Training Packages.

Industry representatives value the ability to specify the level of technical qualifications and industry experience required by trainers delivering Training Package qualifications. This ensures minimum standards of technical competence to deliver of technical qualifications. Issues related to maintenance of technical currency and professional development are addressed in the *Role of VET trainers as dual professionals* section of this report.

In contrast, industry representatives express concern that there is no such provision for industry to establish a requisite standard of teaching (educational) qualifications for delivery of Training Package qualifications for their sector. Additionally, they expressed little confidence in the Cert IV TAE qualification, which is the mandated standard, under the AQTF for training in the VET sector. Since the mandating of this low level qualification, there has been a rapid decline in access to higher level vocational teacher education programs for VET trainers.

This qualification is seen as insufficient as it does not adequately prepare the trainer for the full scope of activity required by the VET workforce. The major issues raised in consultations with regard to the Cert IV were the lack of actual training skills provided including;

- Preparation and presentation
- Developing material
- Protocols involved in class management
- Mentoring students
- Contextualisation of methodologies and resources for technical training

EE-Oz supports the continued role of the AQTF as the regulatory framework for VET and the VET workforce. However EE-Oz, with support from stakeholder groups, proposes that the AQTF include provision for industry to set appropriate benchmarks above minimum standards for teaching qualifications to deliver specific qualifications. This would occur through the same process as the current capacity to set standards for technical qualifications and industry experience, through inclusion of these specifications in endorsed Training Packages.

Data

Training organisations separate data availability into two sections, VET workforce data and labour market data, and acknowledge that VET workforce data is necessarily derivative of labour market data given the primary economic mandate of VET to provide the skills demanded by the Australian economy. The practical effect of this distinction is that training providers consider accurate data covering the evolution of skills demand in the economy to be of greater value in determining their own strategic planning including workforce planning. While VET workforce data is considered important, it is acknowledged to be a lagging indicator of labour market demand. VET workforce data is more important in VET's response to its social mandate where RTOs seek to maintain full utilisation of their workforce (supply driven training).

Australian Bureau of Statistics (ABS) data, although comprehensive, was condemned as out of date and being of little use for identifying short term workforce challenges and opportunities. Data of this nature is useful for historical analysis and the identification of longer term trends but is not sufficiently current for practical application in workforce/infrastructure planning.

Most training organisations report a reliance on internal administrative collections, local industry contacts and ISC publications such as the Environmental Scan when developing business plans.

NCVER data is seen as more timely but somewhat limited in scope, focusing primarily on public training providers and conducting 'state of the industry' rather than predictive analysis. Industry representatives note that 'in depth' analysis provided by NCVER, intended to support regular 'state of the industry' updates, tends to be project driven. Whilst these provide useful point in time analysis, industry would appreciate data sets developed for these reports be updated and made available for ongoing decision making. Where appropriate, responsibility for these models could be provided to ISCs, to maintain on behalf of their industries.

NCVER is the primary source of data related to the social mandate of VET, including information about the provision of services across disenfranchised groups. Issues related to the social mandate of VET are discussed in the *Determining resource allocation* section of this report.

Analysis of the future demand for post-school skills and qualification, as was undertaken by Access Economics on behalf of Skills Australia in 2009, provides a heuristic basis for further sector specific analysis. This study provided many useful suggestions and highlighted the importance of the VET sector in promoting productivity growth in the broader economy. The wholesale review of the sector inspired by this report has encouraged an informed debate about how best to achieve productivity growth and likely challenges in this pursuit. Whilst such reports provide a basis, industry representatives repeatedly highlighted the need for sector specific intelligence regarding the demand for post-school skills and qualifications in order to promote efficient systems and processes.

ISC polling through its network provides more timely data, focused to sector specific industry skill needs and therefore a more practical tool in assessing future labour demand for skills. Expanding the capacity of ISCs to collate public information about predicted skills demand will provide training providers with a tool for more effective business planning, prevent costly duplication by individual providers and encourage broader involvement in the development of predictive information.

Governments seeking to implement policy initiatives which may have training implications should more consistently engage with ISCs, to determine the extent of those implications. This will better inform project design through access to road based industry intelligence on training related requirements.

The VET workforce and industry

Industry consultations indicated widespread concern that both the real and nominal rate of Government funding for the VET sector has fallen each year for most of the past two decades. This was generally considered to be the primary cause of staff recruitment and retention problems, falling completion rates and a compromised level of skill currency due to outdated infrastructure. These issues are discussed in a 2005 NCVER study entitled *Keeping up with technology: A pilot study of TAFE and the manufacturing sector*[1].

These consultations conversely acknowledged that this situation has drawn RTOs to rely more heavily on industry support, which provides many practical benefits and has to some extent mitigated the negative effects of funding downgrades. This acknowledgement was not intended as a vindication of decreased funding but a demonstration of the innovation of RTOs.

Auspice arrangements between training providers, and between training providers and industry can ensure resources are most efficiently allocated. For the energy sectors, equipment and infrastructure represent a significant outlay and sharing the costs can prove economically beneficial for all organisations. This collaboration also ensures that students can be trained in workplace environments with the equipment and to the standard expected by industry.

Site visits and guest lecturers benefit students, trainers, training organisations and industry by ensuring 'best practice' processes are being implemented and strengthening the links between trainers, trainees and the industry. The value of regular contact between industry and RTOs cannot be overstated in disseminating practices and techniques across the industry.

While training organisations and industry representatives express a preference for 'in house' equipment, infrastructure and subject matter expertise; sharing where possible will ensure that limited resources can be used most effectively. Representatives of industry and VET indicate a high level of interest in collaboration, although both cite administrative barriers to further engagement. Eliminating or mitigating these administrative barriers should be a high priority, given the potential for cost effective improvement in outcomes.

It must be noted that while efficient allocation of resources is clearly desirable, it is not a substitute for investment in training infrastructure and skills. For partnership models to develop parties must be able to demonstrate the mutual benefits of engagement. The *Keeping up with technology* paper also highlights that opportunities for industry engagement are not uniform across regions and that reliance on these arrangements should not be used to justify narrowing the scope of qualifications to areas of sufficient industry support. The emphasis must always remain on the breadth and quality of student outcomes, with industry engagement being sought in pursuit of these goals.

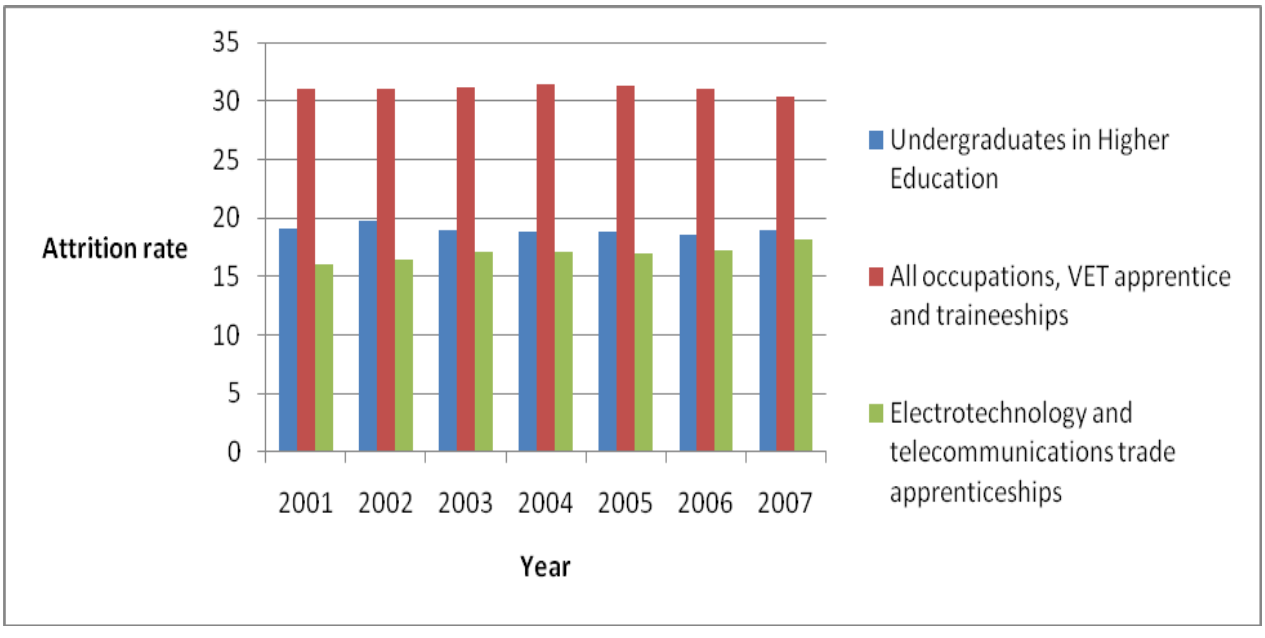
[1] http://www.ncver.edu.au/publications/1508.html

Extending the apprenticeship system

The current apprenticeship system determines competence on the basis of the specifications of knowledge, skills and work performance as documented in the Training Package. This training model creates industry demand driven outcomes and ensures that apprentices develop their theoretical knowledge in the context of industry conditions.

The apprenticeship system continues to demonstrate best practice in VET education, allowing students to contextualise theoretical knowledge with concrete workplace implementation. It promotes student demand through the provision of employment coupled with a publicly funded training place, demonstrating an identified industry demand for the skills they will develop. Keeping apprentices on worksites represents a significant value to business, where they directly contribute to productivity, and a benefit to apprentices who receive mentoring from senior colleagues, actual workplace experience and exposure to current technologies.

Industry figures attribute the comparatively low attrition rate from Electrotechnology and Telecommunication sector trainees to the prevalence of apprenticeships as the preferred mode of training. NCVER statistics demonstrate that attrition from Electrotechnology and Telecommunications trades from 2001 to 2007 was the lowest sampled, 45% below the average (Apprentices and trainees 2008, Table 12). This attrition rate is also lower than the average attrition rate for undergraduates in Higher Education, which averaged 19% over the same period (as reported on the DEEWR website)[2].



[2] http://www.deewr.gov.au/HigherEducation/Publications/HEStatistics/Publications/Pages/2008FullYear.aspx

This contractual arrangement maximises the efficiency of VET delivery toward its economic imperative. The skills being developed are of an identified economic need and investment in training is efficiently shared with industry, minimising duplication and contributing to productivity. Industry representatives stress this arrangement is contingent on the capacity of VET trainers to coordinate and manage a flexible learning environment and maintain currency with industry practices and technologies.

For occupations which can accommodate this manner of training, apprenticeship based vocational training provides a mutual benefit for both RTOs and industry. There is a reflected through efficiency benefit for RTOs, as enterprises contribute through supervision and infrastructure (it also ensures that the technology utilised in training is the equivalent of that used by industry) and a benefit to enterprises through the productivity contribution of apprentices. It encourages greater enterprise engagement due to confidence in the skills being produced.

It also presents a preferred model for engaging mature workers by minimizing time spent off-the-job and the associated salary loss.

What is working

Successive governments have introduced programs to improve the efficiency and effectiveness of the vocational education system. The most successful schemes work by encouraging employer engagement in the training sector, to ensure skills are being developed in a manner and at the rate required by industry. The success of these schemes should be recognised and, where possible, their scope expanded;

- **Competency based apprenticeships** enable participants to complete units at any time provided they have met the competency requirements; this provides the opportunity for skills to be developed at a higher rate (contingent on the ability of the apprentice). From industry's view impediments to accelerated progression and completion are mainly concerned with the flexibility afforded RTOs in delivery. Increasing flexibility would improve industry outcomes.

- **Pre-apprenticeship programmes** aid apprentice retention by giving apprentices a 'taste' of the trade and ensuring they have the prerequisite enabling skills in maths, English and science. These programs also encourage employers to take on apprentices, providing confidence in their investment by demonstrating the ability and enthusiasm of aspiring apprentices.

- **Employer incentives.** The Government's recent 'Kick Start' initiative demonstrated the power of financial incentives in encouraging employer participation. Despite falling apprenticeship uptake due to the GFC, an additional 22,000 apprentices were recruited in three months.

- **Group Training Organisations (GTOs)** can provide a buffer for apprentices who would otherwise be out-of-trade by redistributing apprentices amongst employers and projects. This also encourages the development of a wider breadth of skills through work across a range of work environments.

Determining resource allocation

VET and its workforce are caught between economic and social imperatives, responsible for both developing the skills required by Australian industry (economic) and providing 'second chance' education (social). The VET sector has long played an important role in the provision of pathways and 'second chance' learning opportunities for people from disadvantaged backgrounds. Current policy settings indicate that both roles are becoming even more important.

This duality is often characterised as "supply driven vs demand driven", where social goals are supported by the supply of untargeted training places and economic goals driven by the demand for skills from business and individuals. These are applied as funding and resource allocation drivers for the VET sector.

The VET Workforce both within Registered Training Organsiations (RTOs) and the broader VET community is impacted by this dichotomy which creates internal and external tensions. These impacts have been heightened over the last decade by a drive to make VET lower cost, whilst delivering a wider range of services to industry and the community. Further, the shift to corporatization of public RTOs and increasingly competitive business models both in the domestic and international training markets has somewhat polarized the goals of VET and its workforce around these two imperatives.

Government also faces this dilemma which is further complicated by its roles as the major owner/regulator of the VET system and the major investor in training.

The VET workforce outside of RTOs is similarly impacted in that those in the consultancy, advisory, standards and compliance sections of VET are conflicted about quality, resourcing, outcomes and priorities.

The significance of these factors is borne out by a 2008 study by the National Centre for Vocational Education Research (NCVER) entitled *Second-chance Vocational Education and Training*[3] which estimated 41% of VET students in 2004 were regarded as undertaking 'second-chance' education . The report includes important data on the nature and scope of the VET's role in providing "second chance" opportunities including:

- Estimates suggest that the overwhelming majority of eligible adults will access second-chance VET at some stage during their lives between the ages of 25 and 49 years (over three-quarters of the eligible population).
- Females access second-chance VET at higher rates than males.
- The percentage of the second-chance population actually completing an award is low, and is particularly low when we focus on the completion of VET qualifications at certificate III or higher.
- Our estimate suggests that 11% of male and 12% of female early school leavers complete a certificate III or higher VET qualification within four years of leaving school.

[3] http://www.ncver.edu.au/research/core/cp0508.pdf

- Depending on the methodology adopted, our estimates indicate that between 10 and 30% of adults eligible for second-chance VET will complete a certificate III or higher VET qualification (at least up to the age of 49 years).

This is in contrast to data for the ElectroComms and Energy Utilities sector where according the NCVER report *Training and skills in the electrical and communications industry*[4]*:*

- Ninety-seven per cent (97%) of all electrotechnology (UTE) and telecommunications (ICT) apprentices surveyed gave employment-related reasons as the main motivation for undertaking training, with only 3% citing further study and/or personal development as their main reason for undertaking an apprenticeship.

Further information about attrition rates in the Electrotechnology and Telecommunications industries is provided in The VET workforce and industry section of this paper.

RTO responses to the challenges of operating in the VET sector where there this duality of purpose exists have been varied but the following trends across the sector should be noted:

- Increasing competition for low cost, short duration, high volume markets
- Decreasing effort in higher cost, longer duration low volume markets
- Increased dependence on supply side funding for recurrent funding
- Shift to fee for service to make up budget shortfalls
- Reduced levels of investment in capital equipment
- Reliance on an increasingly ageing and casualised workforce
- Rapidly change and alterations to administrative systems, educational practices, compliance and technical standards

The VET workforce is currently servicing these two client groups. Whilst it is acknowledged that there are overlaps between these which provide some efficiencies, this split focus is not adequately acknowledged in appraising VET outcomes. This duality leads to a perception of poor performance across all outcomes. The frustration of VET practitioners with this situation was reflected in EE-Oz consultations through comments such as “a race to the bottom” regarding VET quality and “professional band-aid” in regard to trainer professional development.

Interviews undertaken for this report indicates that, in technical areas such the energy sector industries, RTO staff believe they are disadvantaged by the conflicting priorities set by management and government to address social and economic outcomes.

[4] http://www.ncver.edu.au/research/commercial/op338.pdf

The success of the VET sector is judged on its having participants complete qualifications and enter the workforce. This achievement is measured against the ratio of commencements to completions and also against the value of the resources applied.

Many would acknowledge this as an effective way of achieving the economic role (although as sole criteria it will create pressure for the erosion of competency standards) and measuring the effectiveness and efficiency of meeting skills needs of the economy.

However the achievement of the social goals set for VET as the major provider of "second chance" opportunities is not so easily quantified. 'Failure' of the VET sector against the above criteria, may in fact be a significant achievement for individual learners and their teachers and mentors and thus a highly valued social outcome.

Measurement of overall performance of the VET Sector without taking into account the different motivations for engagement and the purposes for which training is sought and delivered means that the sector continues to be regarded as performing badly.

This extrinsically impacts the perception of VET and the quality of services it offers whilst intrinsically causing low morale in the VET workforce. This is also reflected in the low status assigned to VET Training and qualifications which is reflected in comments such as "TAFE (VET) is for dummies" which are often associated with the "second chance" aspect of the system.

Effective and realistic valuation of both the economic and social contributions of the VET sector must be made. Research bodies such as NCVER have shown that it is possible to differentiate, identify and quantify VET participants' prime motivations for engaging with the system. Thus, it must be possible to report on the quality and value of those outcomes against these motivations, so that both the social and economic contributions are recognized. This can only serve to address adverse perceptions, the realities of declining budgets and ongoing quality issues (real and perceived). Failure to recognize these often conflicting objectives in regard to measuring outcomes leads to;

- skewed priorities
- unserviced demand
- unrealised initiatives
- unfulfilled policies

Further, a culture of frequent systemic change as a policy response to the perception of poor performance reduces the organisational effectiveness of VET and consumes valuable resources where more accurate measurement and valuation may alter perceptions allowing smoother development of policy responses.

The challenge is who, how and what is measured and reported and how this information is disseminated and used. VET delivery and associated programs have been increasingly scrutinized over recent years

and there is a high level of accountability due to high levels of public funding, industrial arrangements for trainees and statistical reporting of student data.

Analysis and reporting presents some difficulties as there a number of bodies engaged in data collection, including;

- State and Territory government agencies
- Commonwealth agencies
- VET research bodies
- various industry bodies

This confluence of sources introduces various lags and skewing factors (e.g. re-withdrawals and re-commencements) which must be taken into account in measuring outcomes against the conflicting goals.

These are principally based on the division activity on the lines of desired outcomes;

- socially oriented delivery which focuses on the supply of services which engage the participant in the learning process with qualification outcomes as a secondary goal
- economic targeted delivery which responds to industry and individual demand and focuses on the achievement of qualifications for the workforce with social inclusion as a secondary goal.

Possible Approaches

1. Create two new organisations VET and “VET Plus”.

VET Plus would be socially focused with the aim of providing life and functional skill development in a training environment. Typically this would address qualifications at AQF levels 1 to 3 in non-trade areas and provide participants with a high level of equity and access support for Language, Literacy and Numeracy Skills. Pathways to further training and higher education would be identified.

The preparatory and enabling role of VET Plus would be paramount. Suitable traineeship/cadetships and enabling qualifications would need to be identified to provide pathways into work and/or further training. Leveraging the already established ‘VET in Schools’ programs which aim to facilitate transition to work should be included into this structure. In this way, a VET Plus system could be developed with minimum disruption to the existing structure. This would have resource implications for RTOs and the VET workforce.

Assessing and measuring performance against social goals around literacy, numeracy and skills which enable employment could be measured in this environment with a lower priority on economic value. Capturing the value to the community of this training and identifying suitable pathways to work and

training based on these outcomes would need to be done at individual levels. This means that the VET Plus delivery is more focused on process rather than outcomes. Tools such as the Australian Core Skills Framework would be essential in the analysis and reporting of progress and the allocation of resources into this VET Plus system.

A VET system would meet the economic demand for skills and workforce development by providing high quality technical and para-professional level training to existing workers and new entrants engaged in traineeships, apprenticeships and cadetships.

This refocused VET system would be measured by outcomes and its ability to meet industry standards and demand for skills and give a lower priority to social goals.

Existing data collection, analysis and reporting systems could be applied and expanded to capture better quality information on:

- The current demand for skills
- The availability of skills
- New and emerging skills demands
- Public and privately funded training
- Numbers in training and anticipated availability

These could be tested against policy directions and industry intelligence e.g. that contained in Industry Skills Council Environmental Scans and Industry Training Impact Statements, to establish measures and provide a basis for the allocation of resources.

This data would enable measurement of system outcomes and performance and inform on the requirements of the VET workforce to meet current and anticipated needs.

2. Restructure the existing VET/Post Secondary Education and Training Sector

Another approach would be to restructure the functions of existing institutions within the VET/Post-secondary sphere would be able to address the both the social and economic goals currently the responsibility of the VET sector.

These institutions would include:

- Secondary Schools delivering VET In Schools
- Adult and Community Education (ACE) Colleges
- VET sector RTOs

A division of social and economically targeted training roles across these institutions so as to remove internal conflicts would similarly allow resources to be allocated to these goals more effectively. Measurement of outcomes would then be more closely aligned to the goals assigned to each institution.

VET in Schools currently functions to provide pathways from secondary school into work and/or training and to provide a more practical learning environment for these with learning and/or behavioural difficulties.

ACE meets the need for interest based training and education which engages primarily on a social level rather than the delivering skills for work.

VET meets demand for "second chance" education and training, skills for work and to a lesser extent interest based training and education.

More clearly assigning these roles across these institutions can only serve to reduce competition between them and allow them to perform against clearly defined parameters which would guide resource allocation.

The workforce implications of theses approach are discussed below.

Alternatively, if it can be shown that the current VET system is effective in achieving both the social and economic outcomes these role must be explicitly recognized and measured. This would provide a basis for ongoing development within the VET sector whilst recognizing the different priorities and adjusting policy, funding and reporting settings in line with these and long term goals.

Workforce impacts

At any scale a typical RTO has to meet five main operational requirements and these are reflected in the managerial divisions across the sector. These are shown in the table below.

Training Delivery	Training Support	Administration	Student Support	Business Development
Teachers Head Teachers Ancillary Staff	Resources development Professional development Capital Equipment and Technology Support Knowledge Management	Student Records Funding and Budget Facilities Management Human Resources Compliance Communications	Access and Equity Knowledge Management Counselling Community Liaison	Industry Liaison Commercial Programs Management Promotion and Communciations

These internal services are applied in different mixes in response to the goals set for the outcomes of training. This directly impacts on the composition and professional development needs of the workforce and therefore has a direct relationship to resources allocation.

For example: Training aimed more at socially oriented outcomes will require more student support services and specialist priorities in terms of training delivery and training support services but may not require extensive business development services.

Industry representatives support moving to a system which allows specialization in servicing the social or economic roles of the VET sector. Such a move would facilitate measurement of outcomes against defined goals, presenting a clearer picture of resource allocation against demand.