28 February 2006

Mr Michael Keating  
Chairman  
Independent Pricing and regulatory Tribunal  
P O Box Q290  
QVB Post Office  
NSW 1230

Dear Mr Keating

Re: Response to the review of the skills base in NSW and the future challenges for further education and training

Thank you for inviting NCVER to provide a submission to this review. A copy of our submission is enclosed for your consideration.

Our approach has been to provide the Tribunal with references to research undertaken or commissioned by NCVER that may be helpful in addressing the questions raised. Some of the references cited offer more general background material of relevance.

If we can be of further assistance, please do not hesitate to contact us.

Yours sincerely

Tom Karmel  
Managing Director

Encl
Review of the Skills Base In NSW and the Future Challenges for Vocational Education and Training

The National Centre for Vocational Education Research (NCVER) is in the business of collecting, analysing and broking information about vocational education and training (VET). The organisation is responsible for collecting and managing national VET and New Apprenticeship statistics, and managing national surveys of TAFE graduates and students, and employers’ views of training. We undertake a strategic program of research, and collect and provide VET research findings from Australian and international sources through the Vocational Education and Training Research Database (VOCED).

RESPONSE TO REVIEW QUESTIONS

The NCVER has either commissioned or undertaken research related to some of the topics raised by the Tribunal. References are provided to research reports that may be of interest.

1. Forecast supply and demand for skills in NSW over the next 20 years

Q. The Tribunal invites views on the difficulties in calculating and forecasting the demand for skills and potential shortages in the future.

Available at: http://www.ncver.edu.au/publications/1359.html

This paper highlights the difficulties of predicting future skill requirements, yet acknowledges the usefulness of applying some kind of structure on the notion of skill requirements. The paper discusses a ‘market segmentation’ approach to student demand and then considers a number of trends that will impact on that demand.

Available at: http://www.ncver.edu.au/industry/publications/815.html

Also available as an 'At a Glance' series ( http://www.ncver.edu.au/industry/publications/814.html ), this publication provides a summary of research into issues affecting the demand of skills in Australia and the implications of current trends in training and education on future skill supply. It also summarises the impact of Australia’s ageing population on future levels of participation and presents a synopsis of Australia’s position internationally. Finally, implications for the future of education and training within Australia are summarised.

Available at: http://www.ncver.edu.au/vetcontext/publications/436.html

This report describes the use of large-scale economy-wide models which are available in Australia for occupational forecasting and their use in the VET sector. Views are given on the constraints and limitations in the use of these models.
This report considers examples of applications of four approaches to assessing whether the stock of VET skills is adequate to meet the needs of industry. The four approaches include a) manpower requirements, b) international, national and industry comparisons, c) labour market analysis, and d) indicators. The report discusses why these approaches provide less than satisfactory answers to the question whether the stock of skills can be regarded as adequate, and proposes a method for providing an aggregate measure of the adequacy of VET skill formation.

Current Projects

Current projects managed by NCVER that are relevant to this topic include:

- Forecasting future demands: What we can and cannot know
  This study examines how the VET sector can know what the future needs of employers might be. It describes the difficulty of projecting the evolution of the economy, and the models that are used to try to do so. It offers an initial evaluation of the accuracy of the principal model used for skills forecasting (the MONASH model), and concludes with a discussion of how best to manage the unavoidable uncertainty about the shape of future skills demand.

- Future skill needs: Useful projections and employers’ views
  This study aims to project future skill needs, with the main question being 'what are the types of skills that will be needed over the next five to ten years?' It assesses how global and technological change has impacted on the structure of desired skills. In addition to quantitative analyses, consultations with employers, employer groups, and a large national recruitment firm are included.

- What is a skill shortage
  This study closely examines what a skill shortage is, and considers the levels of supply and demand and the increase in aggregate supply as aspects of the shortage equation. The report also discusses structural imbalances, how the market works, how best to understand and recognise a skill shortage, how to identify the circumstances under which any such shortage is likely to be naturally and efficiently resolved by market forces, and when there should be direct policy intervention.

Availability: While the published reports for all these research projects are expected to be available from NCVER’s website during April 2006, NCVER can provide the Tribunal with draft copies in confidence.

Q. The Tribunal invites views on the increased labour mobility and the tendency of workers of different ages to change careers more frequently and the reasons underlying these trends.

Sherman R, Forthcoming, Down the track: A follow-up of young people’s outcomes 2 ½ years after TAFE training. NCVER, Adelaide.

Availability: Expected to be published and available from the NCVER website during Q2 2006.

While this study does not specifically discuss reasons for change, it focuses on the changes and outcomes for students aged 15-24 who undertook training in 2001, whether they went on to undertake further training, and the benefits they derived. Information is included about their occupation before training and 30 months after training.
This paper examines the employment status and occupational destination of recent VET students and how this relates to the training they have undertaken. In particular, it focuses on what kind of match there is between what the person is training for, and how the training is subsequently used. Data is included which gives the main reason for study in relation to employment status and change in employment pre- to post-training.

Available at: http://www.ncver.edu.au/publications/1549.html

This report investigates the extent and nature of student traffic between higher education and vocational education and training, nationally and in South Australia from 1997 to 2002. Among other things, the study sought to identify what opportunities students were seeking in cross-sectoral movement and whether there were particular groups of students who access and benefit from cross-sectoral movement. Findings are presented on which students are more likely to move from university to VET – including the reasons for their move, and which students are more likely to move from VET to university, and why they made the move.

Cully M, 2003, Pathways to knowledge work. NCVER, Adelaide.
Available at: http://www.ncver.edu.au/publications/927.html

This study is based on analysis of Census data in 1986 and 2000, and looks at how the occupational structure of the Australian labour market has evolved over recent years. It attempts to detect the underlying factors which explain change and the paths people have taken. The study includes a detailed look at occupational change and identifies the fastest growing occupations as well as jobs on the rise and jobs on the decline. The central question investigated relates to knowledge of work – whether jobs now demand more knowledge of workers and what this means for vocational education and training.

Current Projects
There are two relevant projects being managed by NCVER currently which relate to skills acquisition and use during a person’s life.

- Skill acquisition and use across the life course: Current trends, future prospects
This study, undertaken in 2005, presents a perspective on life transition changes and the impact on skills acquisition. The aim of this study is to assess the extent of life course change amongst Australians over recent decades, consider likely future patterns of change, and examine the implications for the VET sector. Particular attention is given to changes in the place of skill acquisition in the life course, and changes in the ways skills are used in the labour market over people’s working lives. Implications for post-secondary education are assessed and the varying patterns of skill usage through the life course are examined.

Availability: the published report for this research is expected to be available from NCVER’s website during April 2006.

- Changing forms of employment and their implications for the development of skills
This study examines the ways in which people are employed have changed over the past decade, and how these ways of employment affect the level of skills development acquired as a result of their employment. Non standard forms of employment (part-time, casual, labour hire, and self-employed workers) are contrasted with the standard form of employment (fulltime continuing
jobs). The ways in which people are employed are related to the nature and extent of skills development they obtain on the job.

Availability: the published report for this research is expected to be available from NCVER’s website during April 2006.

2. Demand for VET If participation rates were to be increased

Q. The Tribunal welcomes views from stakeholders on the demand for VET over the next 20 years if participation rates were to be increased. Stakeholders may wish to distinguish between:

- the magnitude of the respective training efforts directed at youth and at adults who are being retrained or upgrading their skills.

Available at: http://www.ncver.edu.au/publications/1574.html

Many older Australians are up-skilling or retraining to maintain gainful employment or pursue other interests. This study, a systematic review of existing research, set out to find evidence that skill development activities for the mature-aged lead to improved employment opportunities and improved productivity. It also looks at what factors act as barriers or facilitators to outcomes, and the implications of this review for VET policy, practice and research.

Available at: http://www.ncver.edu.au/vetcontext/publications/1585.html

This report investigates factors that influence the decision-making process of applicants and the outcomes of post-school applications using the 2001 Survey of Education, Training and Information Technology. The probability of applying for post-school education is also examined in relation to the characteristics of applicants. The report adds to the understanding of what is known about the prevalence and causes of unmet student demand for tertiary education.

Available at: http://www.ncver.edu.au/vetcontext/publications/1526.html

Discussion about Australia’s ageing population has focused on the importance of increasing labour force participation rates of older people. This report uses a quantitative approach to examine the roles of education and training in affecting the participation of older people in the labour market. It uses current and past levels of education, as well as future projections to determine the impact that rising levels of education are having, and will have, on employment rates now and into the future. The report also examines the relationship between the timing of education and training and engagement with the labour market to determine the pay-off to undertaking education and training as an older person compared with undertaking education and training earlier in the lifecycle.

Available at: http://www.ncver.edu.au/publications/1527.html

Prepared for the review into the South Australian Certificate of Education, this paper aims to establish the importance of VET to young people in South Australia in Adelaide and regional areas. It is based on analysis of the number of young people and their characteristics within two broad groups: those who complete 12 years of schooling and continue their education in VET; and those who leave school before Year 12 but continue their education in VET.
The increased focus on the economic and social consequences of Australia’s ageing population has implications for employment, education and training policies. This report uses several data sources to investigate people aged 45 years or more undertaking training in Australia’s public VET system. Trends and changes over recent years are presented, as well as an overview of older student characteristics (comparing them with younger learners and with older non-learners). The nature of training being undertaken and motivations for study are also presented.

3. Managing the cost of VET and Increasing Its effectiveness

Q. The Tribunal invites views on the extent to which future changes in the nature of work require changes in training that favour generic and institutional training, for example, to provide more emphasis on foundation skills that promote problem solving and human interrelations.

This volume of readings summarises NCVER managed research into generic skills undertaken in 2001 and 2002. The work covers four main topics: 1) defining and specifying generic skills, 2) exploring training providers’ teachers’ and learners’ perspectives of these skills, 3) exploring the workplace perspective of generic skills, and 4) assessing these skills.

This study examines the role of VET and occupations in innovative industries and firms. Amongst other findings, firms identified the need for employees to develop generic skills, such as working in teams and developing problem-solving and communication skills, as an opportunity for the VET sector to meet unmet demand.

This publication identifies what generic skills are and explains how generic skills can be fostered in VET programs and workplaces. It also focuses on research into describing, teaching, learning, assessing, recognising, and certifying these skills, and includes the views of a variety of groups.

This report presents the findings of qualitative research which sought to develop a better understanding of generic skills in life, work and re-employment. The study is based on interviews with workers who became displaced through job loss and who had to seek alternative employment. The study investigates how generic skills are perceived and valued by these workers, where they acquired their generic skills, and what the implications of this are for teachers and trainers in the workplace and registered training organisations.
Available at: http://www.ncver.edu.au/publications/986.html

The aim of this research was to find out the attitudes students undertaking VET courses and their teachers have about generic skills, and to investigate a) the extent to which generic skills are valued by students and VET teachers, and why, an n) how generic skills are being facilitated through VET subjects and courses, and in traineeships and apprenticeships.

Available at: http://www.ncver.edu.au/teaching/publications/602.html

This review of research examines how sets of key competencies/key skills/generic skills have developed in Britain, the United States, and Australia. The review analyses the literature that relates to the following questions: a) what are the generic skills?; b) what are the teaching and learning implications for VET providers?; c) what impact do generic skills have on business performance?

Current Projects
Current projects managed by NCVER that are relevant to this topic are:

- Changing forms of employment and their implications for the development of skills
  This study examines the ways in which people are employed have changed over the past decade, and how these ways of employment affect the level of skills development acquired as a result of their employment. Non standard forms of employment (part-time, casual, labour hire, and self-employed workers) are contrasted with the standard form of employment (fulltime continuing jobs). The ways in which people are employed are related to the nature and extent of skills development they obtain on the job.
  Availability: the published report for this research is expected to be available from NCVER’s website during April 2006.

- Provision or development? Exploring employers’ understandings of workplace literacy, numeracy and employability skills.
  This study is investigating employers’ judgements about the relevance and responsiveness of training provision through four different networks of employers and industry representatives. The aim is to investigate how industry perceives, identifies and addresses literacy, numeracy and employability skills issues, and to explore the implications for policy and practice in workplaces and in adult and vocational education.
  Availability: the project is expected to be completed in the last quarter of 2006.

Q. The Tribunal invites views on the outcomes from VET, and in particular, whether the proliferation of New Apprenticeships reflects value for money. Are there any steps that could be taken to improve the value for money of New Apprenticeships, including the possibility of changing their funding in some way?

Available at: http://www.ncver.edu.au/publications/1582.html

This publication reports completion rates for apprentices and trainees who commenced their apprenticeship or traineeship between 1995 and 1999. Completion rates are provided by gender, age, highest school level, Indigenous ethnicity, presence of a disability, residential region, level of qualification, occupation, and length of training contract.
Presented to the Australian Labour Market Research Workshop, this paper examines a range of demographic and institutional factors which measure the impact and likelihood of completion. These include the student’s age, gender, residential region, Indigenous status, whether they reported a disability, prior education, qualification level, and occupation. The analysis is based on the student cohort who commenced their apprenticeship or traineeship in 1998-1999.

The objective of this study was to examine existing literature and national data to identify key factors in achieving quality outcomes from shorter duration apprenticeships and traineeships. Training completion rates are analysed, including factors affecting the quality of outcomes. Implications for improving the quality of outcomes are indicated.

NCVER manages the collection of national apprentice and trainee data which relates to the characteristics of apprentices and trainees and program information.

The above publication provides a synopsis of the issues surrounding attrition in apprenticeships and traineeships, and incorporates an analysis of NCVER data relating to completion levels.


The following studies present views of outcomes for learners not undertaking an apprenticeship or traineeship:

In this study, the long-term benefits of a VET qualification are compared with the long-term employment outcomes for university graduates and for individuals whose education ceased at Year 12. Also looked at are the long-term effects for VET graduates with disabilities and from non-English speaking backgrounds and what differences exist for males and females over time.

This publication presents an analysis of information collected in the 2001 Student Outcomes Survey about TAFE graduates. Graduate respondents are divided into market segments based on the students' primary motivation for undertaking TAFE training. These include apprentices/trainees, labour market entrants, career changers/re-skillers, self-employed, skill improvers, and further education. The market segments are compared by age, gender, location,
field of study, qualifications gained, employment status, further study, occupation, skill-level industry, earnings, and satisfaction measures.

Available at: http://www.ncver.edu.au/students/publications/704.html

This study investigates the differences in terms of outcomes between those who completed courses at diploma level and those who chose to complete only portions of these courses. The report analyses the data on graduates and module completers by age, prior highest qualification, employment, industry of employment, field of study, reasons for undertaking study, why module completers did not complete their course, student satisfaction with the course, employment outcomes and income.

Available at: http://www.ncver.edu.au/publications/493.html

Providing a more general view on measuring outcomes in VET, this report describes the range of outcome measures used in the VET systems and reviews a range of literature concerning these measures. The report identifies various perspectives on outcome measures including those of governments, employers, students and the broader community, and how these perspectives influence the type of measures in use. The report covers research related to student outcomes, training markets and outcomes, reducing unemployment as an outcome, industry-oriented outcomes, industry investment in training, VET in schools, and outcome measures in the broader context.

Q. The Tribunal invites stakeholders to comment on how well Training Packages reflect current workplace requirements and the future skill needs of NSW. Comments are invited on the appropriate balance in training between generic skill development and competency outcomes.

Dawe S (Ed), 2004, Vocational education and training and innovation: Research readings. NCVER, Adelaide.
Available at: http://www.ncver.edu.au/publications/1486.html

This book of research readings explores the role Australia’s VET sector can fulfill to assist business innovation. Various chapters consider the implications of innovation for Australian workers and identify the VET sector’s contribution. Other chapters, based on international comparisons, evaluate elements of the national innovation system currently missing or under-emphasised. One chapter deals particularly with Training Packages – *Tackling emergent needs: The Applied Technology Framework project* by Catherine Down.

Available at: http://www.ncver.edu.au/publications/1454.html

This publication presents an analysis of data on training package activity undertaken by VET students, including apprentices and trainees, in Australia throughout 2002. It also identifies major changes in activity from 1998 to 2002.

Available at: http://www.ncver.edu.au/publications/1475.html

This research investigates the implementation of training packages in rural areas and the ways in which providers, community and industry stakeholders interact to achieve positive training.
outcomes. The research looked at the strategies being employed in rural communities to ensure effective delivery of VET, particularly in situations where access to training infrastructure or to a diversity of workplaces and work experiences is limited.


This publication is referenced on page 5. Of relevance to this topic, the publication covers the workplace perspective of generic skills and the research suggests, inter alia, improving the documentation of generic skills in training packages.


This report describes how the implementation of training packages has led to new, flexible approaches to training and assessment at six case study sites. It also shows how the implementation has affected the role of registered training organisations, industry bodies, and enterprises.


In this study, ten industry training packages are investigated to assess how much focus they give to the attainment of generic skills. The study also examines approaches that can enhance the delivery of generic skills so that students are better prepared for the new demands of the workplace.

Australian National Training Authority (ANTA), 2002, Training packages: successes, issues and challenges in implementation. ANTA, Brisbane.

This report, prepared for ANTA by NCVER, summarises a major research report on the qualitative impact of training packages on vocational education and training clients.

Q. The Tribunal invites views on the suitability of the current regulatory and quality assurance arrangements of the VET system in relation to registration, accreditation and auditing in order to best support future skill requirements. What mechanisms can be developed to address the quality assurance of training system outputs including the skills and knowledge of graduates?

Australian National Training Authority (ANTA), 2004, Review of the implementation of the Australian Quality Training Framework (AQTF) Standards. ANTA, Brisbane.

A review of the AQTF Standards (which comprise the Standards for Registered Training Organisations and the Standards for State and Territory Registering/Course Accrediting Bodies) was undertaken by KPA Consulting in collaboration with NCVER from December 2003 to July 2004. This report presents the findings of the review, including the different perspectives of major stakeholder groups, the strengths and weaknesses of the standards, overarching issues, content and operation of the standards, and other AQTF issues.
This study aimed to identify what constituted the quality journey in the VET sector, how quality was understood and put into practice within TAFE institutes, and what impact the implementation of quality in the VET sector appeared to be having on the learning environment. The study also drew on the findings and the literature to investigate the quality movement's potential impact on the learning environment.

This research explores the ways in which quality is defined and understood within VET systems, and the indicators that various systems and institutions have adopted around the world. The quality indicators have been brought together into an evaluative framework and reveal Australia’s need to consider how to accommodate the aspirations of learners in a changing society and to better meet broad community needs.

As part of its consultancy work, NCVER has been commissioned to undertake an assessment of the quality assurance arrangements in seven of the eight jurisdictions (in total, covering some 97% of the VET population), to ensure that practices are consistent across the jurisdictions in the application of the Australian Quality Training Framework Standards.

Q. The Tribunal invites views on completion rates for VET courses, how they have been trending, and what this implies for the effectiveness of these courses.

NCVER is responsible for collecting and managing VET statistics. The data collected for students and courses includes information about VET programs and providers, level and field of education, student characteristics, and level of activity.

This publication provides a snapshot of Australia’s publicly funded VET sector for 2004, including statistics on module and qualifications completed. Completion rates have not been calculated in general because of the difficulty of tracking students over time. It should be noted that qualifications completed are known to be under stated because they reflect varying state training authority administrative practices.

Other reports presenting a view on completion rates that may be of interest include:

Available at: http://www.ncver.edu.au/students/publications/1582.html

This publication reports completion rates for apprentices and trainees who commenced their apprenticeship or traineeship between 1995 and 1999. Completion rates are provided by gender, age, highest school level, Indigenous ethnicity, presence of a disability, residential region, level of qualification, occupation, and length of training contract.

Available at: http://www.ncver.edu.au/publications/1566.html

This research investigates the characteristics and motivations of VET students who do not complete any of the subjects they enrol in. Strategies are presented to identify in more detail the nature and extent of the problem of students leaving VET, and how to manage their needs more effectively. In addition, implications are given for teachers and courses.

Available at: http://www.ncver.edu.au/publications/1460.html

This study identifies student characteristics – demographic and life-stage factors – which influence successful completion of VET subjects. The scope of the analysis was all enrolled and assessed VET subjects during 2000 which resulted in a pass or fail outcome.

Available at: http://www.ncver.edu.au/publications/1443.html

This study investigates how students experience TAFE from the point of view of the learning experience, and what factors influence them to continue or discontinue their studies. The study aimed to test two propositions – 1) that the quality of instructional experience is a factor in student retention, and 2) that many of the student-level reasons for non-completion can be addressed successfully at the institution level by formulating successful instructional and organisational responses. Recommendations are made to address some of the factors which influence some students not completing courses.

Grant P, 2002, Staying on course: Factors which impact on students' completing their courses. NCVER, Adelaide.
Available at: http://www.ncver.edu.au/students/publications/810.html

This research explores the possible reasons why students enrolling in VET courses do not complete their courses. It adds to the understanding of completion patterns in VET and presents an in-depth discussion of the factors that complicate any analysis of course completion.
Q. The Tribunal invites comment on changes to funding, and assistance or incentive arrangements which might assist take up and completion of courses.


This book of readings combines the results of a body of research on the funding and financing of VET in Australia. Chapters on funding for disadvantaged groups are relevant to this question.

4. Factors affecting the take-up of VET

Q. The Tribunal invites views on the actual and perceived returns to training for employers and individuals—for example:

- Are there differences between the returns for initial training from those stemming from retraining and upgrading of qualifications?
- If there are differences in the perceived returns to different forms of training, is the apportionment of funding between different qualifications/courses appropriate in terms of the incentives to undertake training?
- How important is the cost of providing VET for employers, and the cost of undertaking study for learners in determining their take-up of VET?


The provision of training and its associated expenditure are highly variable across employers, notably by industry and employment size, and employer engagement with the formal system of VET is substantial and growing, but a number of employers are not entirely satisfied with the system. This publication consolidates and synthesises a body of research conducted over the past few years on the topic of training provided by employers for their workforces, and includes information about the types of employer-provided training, how much training employers provide (including expenditure), why employers provide training, choice of training, how employers find out what training is available, and why employers provide and do not provide nationally recognised training.


This publication synthesises recent research which shows what value employers place on qualifications and how they use them to contribute to the success of their business. While there is a focus on the academic value of qualifications to employers, the report includes a view on what the economic and exchange value may be, and provides discussion on the topic of whether employers are prepared to pay for qualifications.


This study examines the economic returns to different levels of education or types of training for adults with low numeracy skills by analysing Australian and United States longitudinal data. Examining the returns to further education or the types of training for the low literacy or low numeracy groups provides additional insights into how education or training can be effectively targeted to increase skills and therefore wages for these groups. Implications for public policy are provided.
Discussion about Australia’s ageing population has focused on the importance of increasing labour force participation rates of older people. This report uses a quantitative approach to examine the roles of education and training in affecting the participation of older people in the labour market. It uses current and past levels of education, as well as future projections to determine the impact that rising levels of education are having, and will have, on employment rates now and into the future. The report also examines the relationship between the timing of education and training and engagement with the labour market to determine the pay-off to undertaking education and training as an older person compared with undertaking education and training earlier in the lifecycle.

An assessment of the financial benefits to individuals of investing in VET is undertaken in this study. Data from a representative sample of Australian employees are used to identify the effect of possessing a VET qualification on individual wages.

This study examines the training/learning cultures in small to medium-large sized enterprises, using case studies to develop cultures of training and learning. The report identifies the special value of both formal and informal training and learning to both employees and the enterprise itself, where cultures of respectful relationships and cooperation exist. The study provides evidence of the critical importance of informal learning and new insights into the ways small and medium-large sized enterprises create cultures where the value of training and learning is amplified.

Following on a new body of research on the returns to investment in training in Australia, this report synthesises the findings of this research.

This publication presents the results of five research projects, four of which examined the returns to enterprises of their investments in training. The fifth study was part of a suite of work that investigated the development of training and learning cultures in Australian enterprises. This project examines some of the non-financial returns that enterprises can gain from their training investments.

In this study, the research investigates a method to demonstrate that Australian enterprises that invest in the training of their employees gain a return from that investment through their
employees being more productive. The study reports the industries in which the method appears to have been used successfully, where the results suggest that each dollar invested in training of personnel each year, results in dollar value-adding.

Q. The Tribunal invites views on the impact pay structures and other aspects of the industrial relations system might be having on decisions to undertake training. For example:

- If competency-based training were accompanied by competency-based pay, what difference would this make to take-up and completion of VET?

No research has been commissioned or undertaken by NCVER that is of relevance to this question.

- Is the shift to casualisation and part-time employment inhibiting training, and if so, how could those inhibitions be reduced or offset?

Availability: The report for this current in-house project is expected to be available from the NCVER website later this year.

This study examines, through an industry case study approach, whether the model of employing casual workers is sustainable in terms of maintaining a highly skilled workforce in the future.

Available at: http://www.ncver.edu.au/vetcontext/publications/455.html

This research investigates the implications of the increase in non-standard forms (casual work, working through labour-hire companies, and work which is outsourced) of employment for VET. The report identifies the disincentives for employers to invest in training and indicates that the responsibility for training falls mainly on the employee. Suggestions are made for spreading the responsibility for training more evenly. Implications are also given for policy and the need for the VET sector to develop some means of responding to the training needs of the non-standard workforce.

Available at: http://www.ncver.edu.au/publications/245.html

This study sought to find answers to the questions concerning access to, and participation in, structured training for casual and outsourced labour. The report describes levels of casualisation and outsourcing over time and within the Australian workforce, and through multi-variate data analysis identifies how casualisation and outsourcing are related to training. Some reference is also made to the motivational factors of both employees and employers towards participating in and offering training.

- How well is training leading to career paths, particularly in the case of New Apprenticeships?

Smith E, Green A, 2005, How workplace experiences while at school affect career pathways. NCVER, Adelaide.
Available at: http://www.ncver.edu.au/vetsystem/publications/1606.html

This report describes and analyses how the work activities undertaken by students while at school affect their post-school pathways into and between work and study. Views are also included on school-based apprenticeships and traineeships.

This study analyses the role of traineeships in the transition from school to work, using data from a sample of a group of young Australians who were in Year 9 in 1995. This group of young people has been surveyed each year from 1995 to 2002. The characteristics associated with participation in a traineeship are examined, as are the labour market outcomes.


This study reports the findings of a case study investigating links between an industry-specific school VET program and subsequent work transitions to the building and construction industry. It provides important insights into the early career experiences of young people.

**Current Projects**

A current project managed by NCVER of relevance to this topic is:

- **Stepping stones? Learning pathways within and beyond VET for young people.**

This study focuses on the choices and learning pathways available to, and used by, young people. Specifically it analyses initiatives that have been implemented in recent years to broaden choices for young people and facilitate clear and easy pathways. It also investigates patterns in learner movement to show how these initiatives have operated in practice, and examines the more qualitative issues of moving within and between various pathways.

Availability: This project, together with a published report, is expected to be available around July 2006.

- **Has restructuring and labour flexibility led to truncation of career paths in some sectors?**

The following reports, while not answering this question specifically, provide some perspective on the effects of restructuring in relation to work and occupations for some groups.


Reforms to Australia’s VET sector over the past few years have brought about significant changes to the work of VET staff and the focus of their roles. This publication summarises recent research into the changing roles of VET leaders, managers, teaching and support staff, and the way they work. Human resource and professional developmental issues which need to be addressed to help them work more effectively in the future are also covered.


This paper examines trends in occupational mismatch in the metal, building, vehicle and electrical trades and questions whether the process of award restructuring which began in the late 1980s has created incentives for unskilled blue collar workers to pursue skill-based career paths in the trades. The reasons for high attrition rates by qualified workers from their trade as well as the motives behind employers’ decisions to hire unqualified workers to do trade work are also examined.
Are there ways in which work and jobs could be reorganised so as to make better use of employees' skills and thus improve incentives?

While not answering this question directly, the following reports provide views of how employees’ skills can be developed—in line with ongoing skill needs—through collaboration between industry, VET and government. These views show how all parties can benefit.


This study explores ways existing workers develop advanced skills in a technically demanding industry. It is based on the underpinning rationale that the ability to develop workforces operating at the leading edge of skill and knowledge is critical if Australian enterprises are to be globally competitive; and that it is important to understand whether the policies and practices of the formal VET sector are equally applicable to advancing the skills of already skilled workers employed in their industry of choice. The progression of workers from process workers to supervisors in the oil and gas (hydrocarbons) industry is analysed, and the kind of training and work experiences they have undertaken. It also looks for commonalities in the skills progression for different workers, and draws out implications for the oil and gas industry, other industries and the VET system. The study offers insights into the way advanced skills are developed by mature workers in a demanding industry, and suggests ways in which the VET sector could respond.

Q. The Tribunal invites views on the factors preventing mature workers from increasing their skills and undertaking additional training.


This study, a systematic review of existing research, set out to find evidence that skill development activities for the mature-aged lead to improved employment opportunities and improved productivity. It also looks at what factors act as barriers or facilitators to these key outcomes, and the implications of this review for VET policy and practice and research.

Current Projects

NCVER is currently managing three projects which have relevance to this question. It is expected that all these projects will be completed in the fourth quarter of 2006, with reports being published shortly thereafter.

- Men’s sheds: Older men’s learning spaces and programs in Australia

This research examines what skill development takes place for older men in dedicated men’s programs and spaces. It aims to research the circumstances and attitudes that have been shown to bring otherwise disengaged men to learning; and, from the research, to create a typology for learning by older men (defined as age 45+). In particular, it seeks to closely examine the rationales, pedagogies, experiences and outcomes of participants in Australian learning and community contexts and programs devised for and used by men. The research will consider the increasing difficulties older men have in the changed world of work and will examine the impact of a range of factors shown from previous research to pose barriers to older men’s attitudes to learning.

- Older workers’ perspectives on training and retention of older workers

The purpose of this research is to identify and analyse older worker’s perspectives on training and retention of older workers, to determine what training and other complementary policy measures are likely to work best to foster retention of older workers as efficient and effective workforce participants.
- **Effective skills development for a diverse older workforce**

The purpose of this research is to identify and understand a number of issues in order to provide an informed basis for the development and implementation of skills development programs that make a substantial contribution to the retention of a diverse older workforce. Issues include: a) which forms of skill development are most effective overall for people aged 45 years or older, b) the extent to which the diversity in the older workforce needs to be considered in framing skills development activities and opportunities that aim to encourage older workers to continue working, c) the kinds of differences that will be required in skills development activities and opportunities if they are to be effective in encouraging older workers from different subgroups of the population to remain in the workforce, and d) the elements in skills development programs that make them successful in meeting the needs of diverse older workers and their employers.

Q. The Tribunal invites views on the specific issues preventing more young people from undertaking education and training. It also welcomes views on:

- **What the VET system can do to encourage more younger people who are currently not studying or working to do so.**
- **How we can ensure that young people in low-skilled occupations receive adequate training that will enhance their employment opportunities over their careers.**

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This report investigates whether school VET programs provide successful outcomes for participants, in terms of retention to Year 12 (or its vocational equivalent) and full-time engagement with employment or learning.

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The aim of this research is to develop a stocktake of activities and issues in vocationally oriented education in schools through the perspectives of the published research literature and policy documentation between 1997 to mid-2003. A number of issues are highlighted, including those of implementation, resourcing and sustainability, and school reform.

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This publication provides an overview of research into the VET options available to school-aged people. It also details the emerging social benefits and outcomes of undertaking recognised VET options. The challenges which face the implementation of VET in schools are also summarised.

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Available at: [http://www.ncver.edu.au/students/publications/1611.html](http://www.ncver.edu.au/students/publications/1611.html)

This report explores access to VET (and university) currently and historically over the past 20 years. It looks at both young people and adult workers, and examines a range of specific disadvantages and VET initiatives in which both economic and social outcomes are relevant.
This study investigates the outcomes from lower-level AQF qualifications (certificates I and II) for young people (aged 15 to 24 years). Findings on outcomes are reported in detail and conclusions given.

Available at: http://www.ncver.edu.au/publications/1466.html

This report indicates that social partnerships can be helpful in addressing the needs of young people as well as communities whose sustainability depends upon establishing lifelong learning. The aim of this research is to examine the nature of social partnerships and how they may be relevant to the VET sector. VET—which supports industry, individuals and communities—is increasingly identified as an important means of strengthening local communities. This role for the VET sector complements its long-standing role in the development of skills and attitudes necessary for work and offers ‘second chance’ opportunities to those who have been unsuccessful at school or university. The findings provide a basis for considering how community-building through social partnerships might be used to support VET and suggests strategies for advancing community capacity-building.

Current Project
The following project, being managed by NCVER, provides a perspective on career development services for young people. The research is expected to be completed in June 2006, with a published report available shortly thereafter.

- Choosing VET: Evaluation of career development services

The purpose of this study is to evaluate the effectiveness of the range of careers development services available to and used by young people (up to 24 years) at the transition point of post-compulsory schooling and in the early years of their careers, with a particular focus on outcomes relating to VET.

Q. The Tribunal invites views on the factors that impact on employers’ decision to provide training. For example:
- Does the capacity to hold onto skilled staff affect this decision?

Survey of Employer Use and Views of the VET System.
Available at: Results due for release in early March 2006

The results of this survey, undertaken in 2005, are due for release in early March of this year. This survey captures employer views on the reasons for providing, or not providing, nationally recognised and/or unaccredited training.

Available at: http://www.ncver.edu.au/publications/1551.html

This study investigates issues associated with the training of existing workers and their implications for the labour force, industry, employers, and the VET system. It looks at small to medium sized businesses in retail, manufacturing, and building and construction, where little accredited training occurs and the reasons for this. Current approaches to training and learning for existing workers are considered, and also the responsibility for training costs. Barriers to the training of existing workers are identified and implications outlined.
This research seeks to obtain a greater understanding of how and why enterprises use nationally recognised training for existing workers. The study finds that an enterprise’s decision to engage in recognised training is not made lightly. The availability of funding strongly influences whether they use recognised training. Details of findings are given. The process of embedding training in enterprises is also discussed, the benefits to enterprises of nationally recognised training are outlined, and implications given to address the issues raised.


This study provides a view of the value employers give to qualifications. It seeks to ascertain the overall level of importance employers place on the qualifications of their employees; whether employers value qualifications differently for new versus existing employees – by occupation classification and type of enterprise; the types of competence for which employers require formal recognition; and the decision-making processes employers adopted when assigning value to qualifications. There is evidence that employers use formal qualifications most when planning for future skill and training needs, recruiting new employees, and ensuring regulatory compliance.


Another recent study on employers’ views on the value of qualifications, this report focuses on the general question of the value of vocational qualifications to employers by considering three areas in which the economic value of vocational qualifications to employers is evident: in prerequisites specified in job hiring, in employment levels of people with different qualifications, and in the wage levels of people with different qualifications.


This research explores the quantitative relationship between factors identified in previous literature as influencing the extent and intensity of training within organisations across the entertainment and process manufacturing industries. Amongst other objectives, the study sought to identify the key factors influencing the take-up of training in these industries – and whether these factors are different from influencing factors in other areas, and what the key barriers are to training involvement.

- **Is the VET system offering the right services?**

Survey of Employer Use and Views of the VET System. Available at: Results due for release in early March 2006

This survey provides employer views on their satisfaction with training provision.
Previously referenced on page 12, this publication also provides a view on employers’ satisfaction with the VET system.

Available at: http://www.ncver.edu.au/publications/1451.html

Previously referenced on page 5, this research – inter alia – sought to provide information on employer, TAFE and private provider inputs to training for personnel in innovative industries. The report discusses what the strengths and weaknesses of VET provision are within these industries.

Available at: http://www.ncver.edu.au/vetcontext/publications/1004.html

This publication summarises research on workplace learning in Australia. There is some discussion on networks, partnerships and supply chains used to facilitate training, and also discussion on enterprises’ use of the formal VET system.

- Is there sufficient flexibility in the system to accommodate employers’ needs?

Available at: http://www.ncver.edu.au/publications/1596.html

In the environment of a more industry-driven VET system, a key question motivating this research is ‘how, and how effectively, do public VET practitioners work with private enterprises?’ This study explores the roles of TAFE practitioners working with private enterprises. The objectives include: a) to identify how TAFE practitioners work with and within enterprises; b) to analyse the perceptions of these ways of working held by TAFE staff; c) to evaluate the effectiveness of these ways of working; and d) to draw implications for how these ways of working may be enhanced.

Available at: http://www.ncver.edu.au/publications/1444.html

This study examines the training requirements of emerging industries and the role Australia’s VET sector plays to develop further employees’ skills and knowledge. The study identifies opportunities for the VET sector to make changes to more effectively meet employers’ needs.

Available at: http://www.ncver.edu.au/publications/1509.html

This study addresses three questions: 1) what are the practices of highly innovative organisations?; 2) how are VET providers currently promoting greater levels of innovation?; and 3) what other strategies have the potential to create further innovation in VET organisations? Suggestions are made how VET organisations can develop innovation further.
This research investigates the nature of a number of the larger and more commercial VET industry-provider training partnerships in Australia. Specifically, the study examined the nature of the training partnerships; the training model being used, including the extent to which training models vary in their levels of flexibility, customisation, administrative arrangements, and formality of the training relationship; what people skills VET providers need to build and maintain these partnerships; what partners are learning and needing to improve; and what some of the practical guidelines are that VET professionals can use in establishing and managing successful industry-provider training partnerships.

Has the flexibility from the introduction of user choice increased the willingness to provide training?

The principal of this study is to evaluate, from a national perspective, the impact and outcomes of market reform in VET, particularly competitive tendering and user choice. It examines the structure, composition and dynamics of contestable or ‘quasi-markets’ for VET; assesses the impact and effects of market reform on providers and clients; and evaluates the outcomes, both intended and unintended, of market reform in VET. It also attempts to identify how existing market arrangements could be improved to produce more effective outcomes.

What sort of relationships between employers, training providers and funding bodies could assist the availability of trained staff into the future?

This study focuses on mechanisms that share the responsibility for the increasing resources required to fund lifelong learning – and in particular mechanisms for individual contributions. It identifies, describes and evaluates the range of mechanisms that attract individual investment in VET and other post-compulsory education in Australia and overseas. It draws on international examples, and presents available findings about the effectiveness of these mechanisms in the Australian context.
includes chapters on allocation of funding by state training authorities, the effects of market reform in the VET sector and funding for various disadvantaged groups. Financing, referring to how money is raised, is discussed in the second half of the book. In this section, the various contributions to costs of VET by government, employers and individuals are discussed, as are various methods of attracting funds to the sector.

Available at: http://www.ncver.edu.au/publications/1489.html

This study identifies and discusses policy options for increasing employer contributions to their employees’ training and development. A range of policy goals are identified which have the potential to be met through an enhanced commitment by enterprises to training.

Available at: http://www.ncver.edu.au/vetcontext/publications/855.html

This study investigates the development of a cross-sectoral funding model for post-compulsory education and training in Australia. It identifies issues arising from differences in the funding arrangements for the four sectors (senior secondary schooling, VET, higher education, and adult community education) and discusses whether a cross-sectoral funding model would address any of the issues.

5. Capacity of training system to provide training required over the next 20 years

Q. The Tribunal invites views on the level of decentralisation of the current training system, including:
- Who determines which type of training is provided?
- Will VET be more responsive to changing patterns of demand if there is more decentralisation to allow for local initiatives within an overall policy framework determined by the State and Commonwealth governments?

NCVER has not commissioned any research that provides answers to these questions.

Q. The Tribunal invites comments on other factors affecting the capacity and flexibility of the training system. What changes in employment conditions and any other changes might improve the flexibility of the VET system to respond to changing demands?

Some recent research reports that focus on the capacity of VET providers are:

Available at: http://www.ncver.edu.au/publications/1591.html

Within TAFE institutes, in which the teaching workforce is older than the overall national labour force, the imminent departure of many teachers endangers its skill and knowledge base. This study examines the approaches managers and leaders in 16 TAFE institutes have undertaken to sustain, develop and renew their workforce and build their organisation’s knowledge. Findings are presented together with implications for TAFE to develop approaches to sustain itself in the longer term.
Future workforce planning in private and public enterprise requires reliable information on which projections are made. Limited information exists about VET professionals. This report consolidates two national studies on the TAFE workforce, and on VET professionals in private and public registered training organisations. The findings have important implications for workforce planning.

Q. The Tribunal invites comments on impacts of the reforms over the last decade. In particular, has the shift towards an ‘industry-led system’ resulted in an over-emphasis on job-specific skills at a risk to later adaptability?

While not answering the specific component of this question, the following recent reports provide perspectives on the impacts of reform in VET.

Available at: http://www.ncver.edu.au/publications/1641.html

Previously referenced on page 21, this study evaluates the impact and outcomes of market reform in VET.

Available at: http://www.ncver.edu.au/vetsystem/publications/1524.html

This study analyses VET practitioners’ perceptions of, and reactions to, the changes brought about by reforms to the Australian VET sector. Impacts on external relationships is also included.

Available at: http://www.ncver.edu.au/vetsystem/publications/1521.html

Previously referenced on page 15, this publication provides a perspective on the impact of reforms in VET over the past 10 years in relation to the effects of this impact on the vocational education and training workforce.

Q. The Tribunal seeks comments on the impacts of suggested changes and improvements.

- What are the risks to the VET system if a large part of TAFE funding is contestable and many staff are part-time casuals (given that TAFE is often seen as providing the necessary reserve capacity for the VET system)?
- What can be done to ameliorate these risks?

There are two recent reports that shed some light on the issue of risk to TAFEs and VET providers as a whole:

Available at: http://www.ncver.edu.au/vetsystem/publications/1591.html

This report identifies the risks of change facing those teaching in the VET sector in Australia, and presents the findings of a study designed to find out how TAFE institutes are responding to the challenges, and how TAFE institutes are sustaining their skill bases. This report is also referenced on page 22 of this document.
Referring to the previous page, this study explores how the changing environment is impacting on practitioners’ work and the implications these changes have for the quality of VET provision and the role of the new VET professionals. It provides perspectives on the drivers of change, personal reactions to these changes, and the effects of changes.