12 February 2008

Ms Karen Ellingford
Executive Officer
Education and Training Committee
Parliament House
Spring Street
East Melbourne  VIC  3002

Dear Ms Ellingford

Parliamentary inquiry into geographical differences in the rate in which Victorian students participate in higher education

I refer to the request from Mr Geoff Howard MP seeking submissions into the above parliamentary inquiry.

NCVER's focus is on the vocational education and training (VET) sector and consequently we have relatively little information relevant to the inquiry. However, I can offer modest assistance in respect of c) in the terms of reference which speaks about the influence of other post-school pathways on participation in higher education.

Prima facie, one would think that participation in higher education and VET must be related, simply because individuals can choose between the sectors and rarely attend both (at least at the same time). However, the evidence relating to whether participation in higher education and VET are related is scant.

Stevenson, Maclachlan and Karmel (1999) is the most relevant report I am aware of in terms of the relationship between higher education and VET. It looks at regional participation for young people, with the region defined as where they lived five years earlier, thus overcoming the problem of misclassification which occurs when people leave the country to go to the city for their education. While the report concentrates on inequality of higher education, which in itself will be of interest to the Inquiry, it also correlates higher education and VET participation. In Victoria, this correlation is -0.4 indicating that higher education and VET are substitutes. This contrasts with other states in which the correlation is either positive or near zero. I would point out that this study is quite dated, being based on 1996 Census data.

Stevenson, S, Maclechan, M. Karmel, T (1999) Regional participation in higher education and the distribution of higher education resources across regions, Occasional paper series 99-8, Higher Education Division, Department of Education, Training and Youth Affairs

There are a couple of other reports that might be of some interest:

Foley (2007, page 19) shows that higher education participation tends to more concentrated in higher socio economic regions (SES) while VET participation tends to be more concentrated in lower socio-economic regions. This finding is for Australia rather than Victoria in particular, and does not really tell us whether participation in VET is affecting participation in higher education.

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Foley, P 2007, The socio-economic status of vocational education and training students in Australia, NCVER, Adelaide

Karmel (2000, page 12) finds that across Adelaide regions higher education and VET are substitutes for year 12 school leavers, such that the school leavers tend to go on to higher education in the higher SES regions and to VET in the lower SES regions. By contrast, no such relationship was observed for non-metropolitan South Australia.

Karmel, T 2004, Young people and vocational education and training in South Australia, NCVER, Adelaide

NCVER has considerable data on the distribution of VET students and apprentices across regions. If this is of interest to you, or if there is anything else we can help you with, please contact me.

I have also attached a list of research reports that have some relevance to the enquiry. These reports have either been published by NCVER or use data from the Longitudinal Survey of Australian Youth (LSAY), the research program of which is currently managed by NCVER.

Yours sincerely

Tom Karmel
Managing Director

enc. Selected papers relevant to participation in higher education

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Selected papers relevant to participation in higher education

Note: these papers have been published by NCVER or drawn on the Longitudinal Survey of Australian Youth (LSAY), the research program of which is currently managed by NCVER.

Harris, Roger; Rainey, Linda; Sumner, Robert
Crazy paving or stepping stones?: learning pathways within and between vocational education and training and higher education.
One of the significant issues in vocational education and training (VET) is student pathways and how students use them to achieve their personal goals. These pathways can be within or across sectors, as well as into and out of paid work. This study examines patterns of pathways between and within VET and higher education and compares the notion of straightforward pathways with what is actually happening. The researchers interviewed 49 students in South Australia who had participated in VET and/or higher education and who had been through more than one transition between VET and higher education. The study found that patterns of movements are quite complex within and across different fields of study and were overlaid with a range of barriers along the learning journey, including finance, juggling work, other commitments, transportation and institutional location, as well as a range of other personal and provider issues. The study reveals the richness and complexity of ways individual learners use and exploit available options and is not only of interest to those in policy, but also to staff involved in teaching and counselling students in both the higher education and VET sectors. It concludes that pathways, while not necessarily seamless or straightforward, do work for the students interviewed.
This report and supporting documents may be viewed on the NCVER website at: http://www.ncver.edu.au/publications/1722.html (viewed November 2007)

Thomson, Sue
Pathways from school to further education or work: examining the consequences of Year 12 course choices.
The subjects that students choose to study for their Year 12 certificate have a major impact on the educational and career options open to them after finishing school. Some subjects or combinations of subjects are traditionally more likely to act as gateways to higher education or to vocational education and training (VET), while others are more likely to lead to the workforce or to unemployment. This study looks at the following research questions: (1) What are the typical clusters of subjects or course types studied by Year 12 students and have these changed since prior analyses as a result of the increased participation in VET subjects and with the apparent broadening of subject choices across the Key Learning Areas? (2) What are the profiles of students enrolled in particular course types in Year 12 and are there particular courses that are more likely to be studied by males or females, or those from different social backgrounds? (3) What field of study area or work do students from particular course types tend to move into? (4) What area of work do students from particular course types tend to move into and are there particular course types that appear to lead more often to unemployment or other poor outcomes? Findings indicate that: the course areas of business studies, sciences other than advanced mathematics-physical sciences, and technical vocational courses provide some alternative pathways for a broad range of students, both in terms of ability and social status, language background and gender; the course that provided the poorest pathway to further education and training of any type were the service-clerical vocational, mixed eclectic and visual and performing arts courses; and most students who left school immediately after completing Year 12 moved into low-level positions, mainly in the areas of retail trades, accommodation, hospitality and manufacturing. The contents are: Executive summary; Introduction; Deriving the courses of study; Profiles of participation in Year 12 courses; Participation in further education and training; Moving into the workforce; Discussion. Included as appendices are: Sample and measures; Subject groupings; Notes on methods of analysis; Estimation of the impact of various factors on participation in Year 12 subjects; Interpreting odds ratios; Participation in higher education broad fields of study.
This document may be found on the NCVER website at: http://www.ncver.edu.au/lsay_pubs/research/LSAY_Lsay42.pdf (viewed February 2008)
Rothman, Sheldon

Post-school education and training pathways to age 20.
Australian Council for Educational Research (ACER)
This briefing examines: participation in post-school study; pathways through higher education; pathways through non-apprenticeship vocational education and training (VET); and pathways through New Apprenticeships. Findings include: 80% of young people have undertaken some form of post-school study by age 20; more than 75% of young people have completed or are continuing in the course of study commenced after school; those that change courses do so within the first year; young people who are working are more likely than those not working to withdraw from post-school study; and young people tend to stop post-school study because the course was not what they had expected or because personal interests had changed.
This document may be found on the NCVET web site at: http://www.ncvet.edu.au/lsay_pubs/briefing/LSAY_BriefingReport12.pdf (viewed February 2008)

Beavis, Adrian; Murphy, Martin; Bryce, Jennifer; Corrigan, Matthew

Post-school plans: aspirations, expectations and implementation: a report prepared for The Smith Family.
This report investigates the relationship between post-school plans, family background and having a lifelong learning orientation. It highlights the important role of vocational education and training such as TAFE as an alternative for students with no plans to study at university. Data was drawn from the Longitudinal Study of Australian Youth (LSAY) and the OECD Program for International Student Assessment (PISA). The study investigated the post-school plans of young people, with a particular interest in those from families of low socioeconomic background, the factors associated with the development of these plans, and the association between types of post-school plans and predispositions towards lifelong learning. The study suggests that the most important factors for predicting post-school plans are gender, ability and the vocational orientation of the student. An orientation to lifelong learning also has an effect but, according to the LSAY data, only a small one. According to the findings, financial disadvantage is not a barrier to post-school study when students choose to study at TAFE or to pursue other vocational options. Students from low socioeconomic backgrounds were found to be more likely to realise their plans for tertiary education when those plans do not initially involve attending university. Four guiding principles for policy development are proposed: (1) the establishment of a national youth mentoring strategy to enhance support provided to young people by families, communities and schools to enable them to make successful choices about their future employment and/or study; (2) government funding to support schools to develop more diverse and flexible pathways into work and/or post-school education to improve outcomes for all students; (3) incentives for businesses to work with schools and tertiary institutions to provide increased opportunities for mentoring and more effective career counselling to ensure that students are better prepared to make choices about post-school work and study; and (4) improved family and community support systems to better support students' transition from school to work and the development of positive attitudes towards lifelong learning. This document may be found on The Smith Family web site at: http://www.smithfamily.com.au/documents/tsx_postschoolplans_2004_29DBF.pdf (viewed August 2006)

Vickers, Margaret; Lamb, Stephen; Hinkley, John

Student workers in high school and beyond: the effects of part-time employment on participation in education, training and work.
This report, based on data collected in the Y95 cohort of the Longitudinal Surveys of Australian Youth (LSAY-Y95), analyses the effects of part-time work on participation and attrition in secondary school and in tertiary study as well as on the post school activities of young people. It is structured as follows: chapter one contains the introduction; chapter two presents an analysis of the impact of part-time work on Year 12 completion; chapter three focuses on the main activities of students after they leave school; chapter four covers tertiary study; chapter five examines the impact of work on dropout from tertiary study; and the final chapter provides a summary of the main findings and considers the nature of the impact of work on the lives and progress of the students. The main findings include: working one to five hours per week during Year 9 does not make any difference to the likelihood of completing Year 12, although working more than five hours a week increases the likelihood of dropping out before completing Year 12, especially for males; the greater the number of hours students work, the greater their likelihood of dropping out; Year 9

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female students who work part-time are much more likely to complete Year 12 than their male counterparts; and, Year 9 male students who work more than 15 hours a week are approximately 60% less likely to complete Year 12.

This document may be found on the NCVET web site at: http://www.ncver.edu.au/lsay_pubs/research/LSAY_lsay30.pdf (viewed February 2008).

McMillan, Julie; Marks, Gary N.  
**School leavers in Australia: profiles and pathways.**  
This report, based upon data from the Longitudinal Surveys of Australian Youth (LSAY) program, examines the process of school leaving and the transition from school to postcompulsory education, training and the labour market. Young people who do not stay on to complete senior secondary school and are perceived as 'at risk' of experiencing a problematic transition are a major focus of the study. Three research questions are asked: (1) What are the influences on school non-completion, and have these influences changed over the past two decades? (2) What are the post-school experiences of school non-completers, and how do these differ from young people who complete Year 12? (3) How do sociodemographic and human capital factors influence the labour market activities of young people? The study found that the same sociodemographic factors that influenced school non-completion in the early 1980s were still in operation by the late 1990s. However, the influence of some factors (socioeconomic background for example) declined while representation among non-completers of young people with Australian-born parents and those living in non-metropolitan areas increased. A majority of non-completers reported that they left school for positive, work-related reasons such as getting a job or an apprenticeship. Analysis of the post-school activities of non-completers revealed that approximately half the non-completers were engaged in some form of education or training. Approximately half the non-completers who entered full-time work immediately or soon after leaving school, combined work with education or training. However, non-completers are less likely than completers to engage in postcompulsory education or training, and non-completers experienced less successful transitions than completers. The evidence presented here suggests that females, especially non-completers, face greater difficulties than males in the early post-school years. The report concludes that it is important to ensure that alternative educational and training pathways are available to all groups of young people.  

Lamb, Stephen  
**The pathways from school to further study and work for Australian graduates.**  
The Longitudinal Surveys of Australian Youth (LSAY) project studies the progress of several groups of young Australians as they move from school into post-secondary education and/or work. The oldest group in the project was born in 1961 while the youngest were in Year 9 in 1998. Data is collected through the Australian Youth Survey, a major longitudinal survey of youth that interviews a group of young Australians annually about their school experiences, post-school education and training participation, and employment activities. This report investigates the pathways from school to further education and work for graduates of diploma and degree courses. Around 40 per cent of young Australians enrol for a university degree or a TAFE diploma course as they leave school and the labour market experiences of this group were mapped during their first seven years after leaving school. Comparisons are made between groups to identify the pathways of those who make a successful transition to stable, full-time work and those who do not. The sample group was in Year 10 in the late 1980s and the findings indicated that most graduates were able to make successful transitions to full-time employment and in comparison with other school leavers, graduates do well in the labour market.  

Fullarton, Sue  
**VET in schools: participation and pathways.**  
Vocational education and training (VET) programs in secondary schools in Australia are intended to broaden the range of curriculum offerings and provide young people with another pathway to work...
and tertiary education. This report analyses the levels of participation in VET in schools, the characteristics of the young people who take VET programs and their work and study activities after leaving Year 12. The report examined outcomes in the first two years after completion of secondary school and pathways between the main post-school activities for separate groups of students. The findings of the study highlight the importance of monitoring participation and outcomes of participation in VET in schools.

This document may be found on the NCVER website at:

Marks, Gary N.; McMillan, Julie; Hillman, Kylie

Tertiary entrance performance: the role of student background and school factors.
The first part of this report examines the tertiary entrance performance of students in Year 12 in 1998 using data from the LSAY project to address a variety of demographic, socioeconomic, educational and psychological factors. These include literacy and numeracy achievement, gender, socioeconomic background, school sector, region, ethnicity and indigenous status. The second part of the report focuses on individual schools, examining the impact of schools on student performance.

This document may be found on the NCVER website at:

Lamb, Stephen; McKenzie, Phillip

Patterns of success and failure in the transition from school to work in Australia.
Camberwell, Vic. ACER, 2001. 67 p. (LSAY research report no.18)
The Longitudinal Surveys of Australian Youth (LSAY) project studies the progress of several groups of young Australians as they move from school into post-secondary education and/or work. The oldest group in the project was born in 1961 while the youngest were in Year 9 in 1998. Data is collected through the Australian Youth Survey, a major longitudinal survey of youth that interviews a group of young Australians annually about their school experiences, post-school education and training participation, and employment activities. Approximately 60 per cent of school leavers in Australia do not enrol for either a university degree or TAFE associate diploma when they leave school, but make alternative choices such as seeking employment or starting an apprenticeship or traineeship. This report traces the pathways followed by this group during the seven years after leaving school and provides a detailed analysis of their labour market experiences. The analysis is based on the outcomes of a sample of Year 10 students in the late 1980s and measures their post-school education, training and employment experiences over the first seven post-school years. A second sample of Year 10 students from the mid-1990s is also used and their transition experiences are measured over three years. The aim is to identify the pathways of those who make successful transitions to stable, full-time employment and those who do not, and to highlight the implications for policy formation.

This document may be found on the NCVER website at:

Collins, Cherry; Kenway, Jane; McLeod, Julie

Factors influencing the educational performance of males and females in school and their initial destinations after leaving school.

This report set out to investigate the patterns of males' and females' educational participation and performance at school and their initial destinations after leaving school, the key influencing factors and the disadvantages that arise from them. While gender was the major factor under consideration, the research brief also required an examination of the relative impact of other independent variables on participation, performance and post-school destinations including geographic, demographic and socio-economic factors. The research comprised several inter-related elements: compilation and analysis of statistical data on participation and performance in schools and on patterns of participation in post-school destinations, including higher education, vocational education and training (VET) and the labour force; a review of the relevant research literature and production of an annotated bibliography; extensive consultations with experts and key figures in related fields with regard to interpretations of the data and the related research literature; and the preparation of this report drawing together the findings from the above elements. The report indicates that there are indeed major gender differences in educational participation, performance and outcomes. However, it also shows that these do not necessarily translate into disadvantage in straightforward ways. Research indicates that differences in performance need to be examined...
according to differences both between and within gender groups. The emphasis in the report is on analysing which trends and which differences matter and why. This document may be found on the DEST web site at: http://www.dest.gov.au/NR/rdonlyres/F0270F6E-B2C3-4CF4-833D-4C8029EA7D6E/4093/Gender_Report.pdf (viewed February 2008).

Anlezark, A, Karmel, T & Ong, K 2006
Have school vocational education and training programs been successful?
NCVER, Adelaide, viewed February 2006

Abstract: The issue addressed in the research study reported here is whether school vocational education and training (VET) programs have been successful. The study focused on two aspects: Year 12 retention (and its vocational equivalent) and post-school pathways. The data set for the analysis is young people who were in Year 9 in 1998, surveyed for the Longitudinal Surveys of Australian Youth (LSAY). These data are ideal for this purpose because of their richness in capturing demographic, attitudinal and student outcomes information. The analysis is extended by linking these data with unpublished NCVER National VET Provider Collection data (2000-2003), enabling a more thorough examination of school and post-school VET activity and offering a comparison between VET in Schools courses and VET courses undertaken post-school. This report first provides some context and looks at the characteristics of those students most likely to participate in school VET programs in Year 11. It then looks at the impact of VET on student retention to Year 12 (or its vocational equivalent). The next section examines whether participation in school VET programs plays a role in successful post-school outcomes, defined as engagement with learning or employment one year out from Year 12, or within the same time frame for those who leave school before Year 12. Then there is an assessment of whether school VET programs establish post-school VET pathways, in particular, whether there is a relationship between the VET courses studied at school and those studied subsequently. Outcomes were looked at in terms of retention to Year 12 and post-school engagement with learning and employment. It was found that VET at school is undoubtedly a clear pathway for some students. In particular, a reasonable number of boys continue in the same field with their post-school vocational studies. However, the fields of education offered at school do not line up particularly well with those offered outside school that are more likely to reflect labour market demands, and girls tend to shy away from the VET subjects they studied at school. In comparing VET offerings inside and outside school, one note of discord is that the school VET subjects are at a lower level, even for the same age groups.

URL: This report and supporting documents may be found on the NCVER web site at: <http://www.ncver.edu.au/publications/1654.html> (viewed February 2006).