

Submission

by the National Centre for Vocational Education Research (NCVER)

To

Rural & Regional Committee, Parliament of Victoria

Parliamentary inquiry into farm sector workforce capacity

RESPONSE TO TERMS OF REFERENCE

The National Centre for Vocational Education Research (NCVER) is an independent body responsible for collecting, managing, analysing, evaluating and communicating research and statistics about tertiary education and training. This submission provides statistics and research findings relevant to the inquiry into Victoria's farm sector workforce capacity.

Statistics

Data are provided from three collections in this submission:

- National VET Provider Collection (also referred to as Students and Courses)
- Apprentice and Trainees – covering contracts of training nationally
- Student Outcomes Survey – an annual survey of graduates and module completers who have participated in publically funded vocational education and training.

The Australian VET system offers a variety of accredited courses in the agricultural sector. NCVER collects information on VET students and apprentices and trainees in training for farming relating occupations for each of the states and territories. In regard to training in the field of education 'Agriculture, environmental and related studies' data can be obtained for Victorian Statistical Local Areas (and those elsewhere in Australia) on students, their characteristics, courses and apprentices and trainees. These data can be downloaded from NCVER's VET Atlas located on the NCVER website at <http://www.ncver.edu.au/resources/atlas/Vic.html>

An example of the type of information available at two SLA levels (Goulburn and East Gippsland) is contained in Table 1. Information at this level is compared with the state of Victoria and the whole of Australia.

Table 1: VET students trained in field of occupation 'Agricultural, environmental and related studies' in selected agricultural regions in Victoria in 2010

	Goulburn	East Gippsland	Victoria	Australia
Agriculture, environmental and related studies	2,050	1,070	20,120	77,240
Total number of students	24,080	12,550	520,000	1,798,990

Note: Data have been rounded to the nearest ten.

Source: NCVER Australian vocational education and training statistics: Students and courses 2010.

NCVER also presents statistical information about VET students in specific industry areas and brings together industry data at a national level from NCVER's three main data collections (i.e. Students and Courses, Apprentices and Trainees, and Student Outcomes) in another online tool – VET industry statistics. This can be accessed at:

www.ncver.edu.au/resources/vsi.html.

Using this tool data can be sourced from three main classifications:

- Training package (and qualifications within training packages)
- Industry skills council, Occupation (ANZSCO)
- Field of education.

Of relevance to your review, information on intended occupation of VET students and apprentices and trainees is available for a number of farming related occupations (as classified by the Australian Bureau of Statistics in ANZSCO). For example, data can be obtained about students training in courses which lead to work as 'Crop Farmers', 'Livestock Farmers', 'Farm, Forestry and Garden Workers', 'Agricultural Technicians' and a number of other farming related occupations.

Table 2 serves as an example outlining various characteristics over time for the occupational group 'Farmers and Farm Managers'.

Victoria and New South Wales are the states with the highest number of VET students enrolled in courses on these farming related occupations. The number of students enrolled in courses in Victoria has been more or less steady over the last four years with numbers staying close to around 4,000 students. On a national level, the number of young people aged 19 years and younger training for occupations as a Farmer or Farm Manager is slowly increasing. However, these are a small group, with the majority of those training in this field aged over 25 years. Approximately half of students training in qualifications which lead to jobs as 'Farmers and Farm Managers' are enrolled in Certificate III qualifications, and the majority study part time.

Table 2: VET students enrolled by selected characteristics in occupations ANSZCO code 121 - Farmers and Farm Managers, 2007-101

Characteristics	2007	2008	2009	2010
State/territory				
New South Wales	4,552	4,751	4,038	4,660
Victoria	3,917	4,333	3,460	3,836
Queensland	1,507	1,292	1,433	1,659
South Australia	238	278	500	577
Western Australia	544	813	868	896
Tasmania	645	699	650	713
Northern Territory	148	156	234	172
Australian Capital Territory	0	0	0	0
Age				
19 years and under	1,882	1,855	2,030	2,199
20 to 24 years	1,261	1,208	1,211	1,257
25 to 44 years	4,443	4,735	4,276	4,631
45 years and over	3,798	4,397	3,577	4,370
Not known	167	127	89	56
Sex				
Male	8,493	9,083	8,124	9,346
Female	3,056	3,164	3,050	3,134
Not known	2	75	9	33
AQF qualification level				

Characteristics	2007	2008	2009	2010
Grad. diploma or professional specialist (grad. diploma level)	1	3	3	0
Grad. certificate or professional specialist (grad. certificate level)	0	0	0	0
Bachelor degree (pass and honours)	0	0	0	0
Advanced diploma	256	282	281	364
Associate degree	0	0	0	0
Diploma	2,495	2,622	2,217	2,398
Certificate IV	1,953	1,689	1,645	1,603
Certificate III	4,633	4,889	5,162	5,733
Certificate II	0	4	1	14
Certificate I	0	13	0	0
Non-AQF qualifications	2,213	2,820	1,874	2,401
Subject only - no qualification	0	0	0	0
Study mode²				
Full-time	1,718	1,763	2,228	2,658
Part-time	9,833	10,559	8,955	9,855
Apprentice/trainee status³				
Apprentices and trainees undertaking off-the-job training	1,193	1,166	1,509	1,737
Not apprentices and trainees	10,358	11,156	9,674	10,776
Total	11,551	12,322	11,183	12,513

Source: National VET Provider Collection, 2006-10.

Notes: 1. ANZSCO: Australian and New Zealand Standard Classification of Occupations (ANZSCO 2006) was not collected pre 2007 in the National VET Provider Collection.

2. Full-time and part-time study modes are based on hours of delivery. For 2005 and 2006, this excluded hours associated with continuing enrolments in all states and territories, except Victoria. From 2007 onwards, continuing enrolments are excluded for all states and territories.

3. Apprentices and trainees enrolled in the public VET system for off-the-job training. For further information: refer to the most recent Students and courses publication and supporting documents at <http://www.ncver.edu.au/statistic/31252.html>.

Students and apprentices enrolled in courses from agricultural training packages provides a different way of looking at skill development for farm workers.

A training package is an integrated set of nationally endorsed standards, guidelines and qualifications such as certificates and diplomas for training, assessing and recognising people's skills, developed by industry to meet the training needs of an industry or group of industries. The following tables provide numbers of VET students and apprentices enrolled in publically funded training in agricultural training packages in Victoria over the last four years.

The number of Victorian students enrolled in publically funded agricultural courses over the last four years has been relatively steady ranging from 24, 712 in 2006, to 24,773 in 2010. This accounts for approximately 28% of all publically funded agricultural students in Australia. The most popular courses are those from the Food Processing and Rural Production training packages.

Table 3a: VET students enrolled in selected farming related training packages managed by the 'Agri-Food' Industry Skills Council. Data for Victoria, 2006-101

	2006	2007	2008	2009	2010
Food Processing Industry (FDF)	6,265	6,875	5,394	3,650	3,658
Australian Meat Industry (MTM)	3,347	2,634	3,363	3,530	3,084
Conservation & Land Management (RTD)	1,403	1,696	1,596	1,788	1,939
Rural Production (RTE, RUA)	5,458	5,270	6,012	6,210	6,560
Sugar Milling (SUG)	-	-	-	-	-
Seafood (SFI)	120	161	165	156	187
Racing (RGR)	536	518	501	935	1,578
Amenity Horticulture (RTF, RUH)	6,437	6,307	5,550	5,301	5,941
Animal Care and Management (ACM, RUV)	1,146	1,321	1,414	1,422	1,826
Agrifood training packages Victoria	24,712	24,782	23,995	22,992	24,773
<i>Agrifood training packages Australia</i>	<i>84,085</i>	<i>82,410</i>	<i>80,867</i>	<i>83,497</i>	<i>87,751</i>

Source: National VET Provider Collection, 2006-10.

Notes: Significant declines and increases may be due to a training package qualification being superseded by another training package qualification.

The total number of apprentices and trainees in-training in agricultural courses over the last four years has remained at around 8,000, though this declined following the economic downturn in 2009. Again, this accounts for approximately 28% of all agricultural apprentices and trainees in Australia. The most popular training courses undertaken by these apprentices and trainees are from the Food Processing and Amenity Horticulture training packages.

Table 3b: Apprentices & Trainees in-training enrolled in selected farming managed by the 'Agri-Food' Industry Skills Council 'Agri-Food'. Data for Victoria, 2006-101

	2006	2007	2008	2009	2010
Food Processing Industry (FDF)	2,902	2,940	2,589	2,271	2,447
Australian Meat Industry (MTM)	1,564	1,500	1,913	1,543	1,394
Conservation & Land Management (RTD)	95	110	81	77	97
Sugar Milling (SUG)	-	-	-	-	-
Seafood (SFI)	84	47	54	34	27
Racing (RGR)	156	154	145	139	179
Rural Production (RTE, RUA)	1,108	1,006	1,247	1,033	1,057
Amenity Horticulture (RTF, RUH)	2,000	2,002	2,142	2,150	2,380
Animal Care and Management (ACM, RUV)	181	180	191	180	196
Agrifood training packages VIC	8,090	7,939	8,362	7,427	7,779
<i>Agrifood training packages Australia</i>	<i>27,487</i>	<i>26,624</i>	<i>27,272</i>	<i>26,738</i>	<i>27,691</i>

Source: Apprentice and trainees Collection, 2006-10.

Notes: Significant declines and increases may be due to a training package qualification being superseded by another training package qualification.

Table 4 is sourced from the Student Outcomes Survey, which focuses on students' employment outcomes and satisfaction with VET. Information from this survey can be accessed through an online resource found at: http://www.ncver.edu.au/resources/sos_online.html. This resource provides detailed information on the outcomes of graduates approximately six months after they completed their vocational education and training (VET).

The information can be selected by field of education and qualification level. Table 4 presents the outcomes from students who studied courses in the Agriculture, environment and related studies field of education, at Certificates III & IV. This includes courses such in Forest and Forest Products, Horticulture (Landscape, Parks and Gardens, Production, Turf Management, Nursery), and Agriculture (Dairy, Poultry).

The employment outcomes, average salaries, and top three occupations and industries are shown for graduates by their field of education and qualification level. Information on the proportion going on to further study is provided and comparisons are also made between the students who were and were not employed before training.

This table highlights that agricultural students who studied in a Certificate III or IV achieved high employment outcomes in 2009, with the majority working full time and earning an average salary of \$46,700. However, only 33% of graduates worked in the same occupation group as the course in which they trained. Over 92% of all graduates reported satisfaction with the training and recommended training to others, which is higher than all graduates in all courses (89%). Data for table 4 and for other fields of occupation and qualifications can be sourced at http://www.ncver.edu.au/resources/sos_online.html

Table 4: Outcomes of graduates six months after completing their training for Certificates III and IV in Agriculture, environment and related studies, 2009

Destinations after training (of all graduates)¹	
Employed or in further study after training	92.7%
Employment outcomes (of all graduates)¹	
Employed	86.8%
Full-time	71.7%
Part-time	14.3%
Average salary (of those employed full-time) ²	\$ 46,700
In same occupation group as training course (of those employed after training) ³	33%
Top 3 Occupations (of those employed after training)⁴	
Technicians and Trades Workers	28.4%
Labourers	24.1%
Managers	21%
Top 3 Industries (of those employed after training)⁵	
Agriculture, Forestry & Fishing	36.4%
Construction	13.6%
Administrative and Support Services	12%
Further study outcomes (of all graduates)	
Enrolled at	
University	2.9%
TAFE	15.4%

Other provider	5.2%
Total	23.9%
Qualification level enrolled in	
Bachelor or above	2.5%
Diploma or Advanced Diploma	5.5%
Certificate III-IV	8%
Certificate I-II	1.9%*
Other	5.8%
Total	23.9%
Satisfaction with training (of all graduates)	
Satisfied with the training	90.6%
Received job-related benefits from the training	70.8%
Received personal benefits from the training	93.8%
Achieved main reason for undertaking training	92.9%
Recommend the training to others	95.8%
Of those employed before training	
Employed after training	93.5%
Average salary of those employed full-time	\$ 47,400
Enrolled in further study	22.1%
Satisfied with the training	91.7%
Achieved main reason for undertaking training	94.2%
Of those not employed before training	
Employed after training	45.7%
Average salary of those employed full-time	\$36,000
Enrolled in further study	36.4%
Satisfied with the training	83.1%
Achieved main reason for undertaking training	85%

Source: Student Outcome Survey 2009

Notes: * The estimate has a relative standard error greater than 25% and therefore should be used with caution.

** NCVER does not report on estimates based on less than 5 respondents because the estimates are unreliable.

1. Destinations after training are as at 29 May 2009.

2. All salary estimates are based on the average salary for graduates employed full-time after study. Mean salary has been determined by taking mid-point values as the question is answered in categories.

3. Occupation is defined by the Australian and New Zealand Classification of Occupations (ANZSCO 2006). This is an Australian Bureau of Statistics classification that identifies occupations according to their primary purpose. Matching between intended and destination occupation occurs at the ANZSCO sub-major group level. Matching only occurs for those employed after training who have a known intended occupation and known occupation after training.

4. Most common occupation for graduates in the qualification and field of education named 6 months after training. Occupation is defined by the Australian and New Zealand Classification of Occupations (ANZSCO 2006).

5. Most common industry for graduates in the qualification and field of education named 6 months after training. Industry is defined by the Australian and New Zealand Standard Industry Classification (ANZSIC 2006). This is an Australian Bureau of Statistics classification that identifies the industry or principal activity in which an employer is engaged.

Research

NCVER also undertakes and commissions research relating to vocational education and training. Research conducted in the last decade pertinent to agricultural students and retaining and attracting young people to rural and/or farming relating occupations is covered in the following reports:

Woods A, 2011, Moving the fence posts: learning preferences of part-time agricultural students, NCVER, Adelaide, accessed July 2011 at: <http://www.ncver.edu.au/publications/2361.html>

This study comprised a focus group with current part-time students, which was followed by a survey of current and immediate past students to elicit their views on the teaching and delivery of the agriculture program. The study found that the ability for providers to offer students flexible attendance patterns and hands-on practical training allied with a balance of alternative course delivery options can improve access and increase student numbers.

Ferrier F, 2008, Vocational education and training providers in competitive training markets, NCVER, Adelaide, accessed July 2011 at: <http://www.ncver.edu.au/publications/2025.html>

This study explores the experiences and initiatives of vocational education and training (VET) providers in three areas: income sources and mixes, 'thin markets' in VET, and research and development. Practices and policies are evolving in these three areas. The report contributes to a deeper understanding of the scope and range of VET activities in a competitive environment and the factors that shape them.

NCVER, 2008, Industry & training 2007: Agriculture, forestry and fishing, NCVER, Adelaide, accessed July 2011 at: <http://www.ncver.edu.au/publications/1808.html>

This report provides a snapshot of agriculture, forest and fishing employer' attitudes to vocational education and training (VET), drawing on findings from the 2007 Survey of Employer Use and Views of the VET System and other sources. It includes contextual information about the industry, a profile of training within the industry, and employers' use of the VET system and their satisfaction with the training provided. Supporting information is available online, including further detail about the employer survey.

NCVER, 2007, Regional partnerships at a glance, NCVER, Adelaide, accessed July 2011 at: <http://www.ncver.edu.au/publications/1938.html>

Vocational education and training (VET) has a key role in facilitating regional economic development. One way that VET can do this is by forming partnerships with other organisations, such as other training providers, business/industry, schools and local government. This 'at a glance' publication gives an overview of recent research exploring how partnerships can address regional needs.

Stokes H, Stacey K, Lake M, 2006, Capacity building in rural and regional communities, NCVER, Adelaide, accessed July 2011 at: <http://www.ncver.edu.au/publications/1686.html>

Using case studies from seven rural and regional areas including Mansfield Secondary College and Bairnsdale Secondary College in Victoria, this report found that communities have developed different models to organise school-VET partnerships. Successful partnerships are those that respond to community issues, including the need to keep young people at school, as well as providing a skills base for the local area. School-VET partnerships can provide a positive way of keeping students engaged in school, as community work placement can refocus students' understandings of why they are at school. Furthermore, they can assist rural and regional communities to keep more young people in the community, preventing their moving to metropolitan or larger regional areas. The report also highlights that providers of VET programs to small and isolated rural/remote communities must demonstrate flexibility in content, delivery and policies, in terms of class sizes and curriculum content, to ensure that the needs of young people have priority over administrative convenience.

Kilpatrick, S, Bound H, 2005, Skilling a seasonal workforce: A way forward for rural regions, NCVER, Adelaide, accessed July 2011 at:

<http://www.ncver.edu.au/publications/1567.html>

This report finds seasonal workers are crucial for the many rural regions reliant on seasonal industries such as agriculture, forestry, aquaculture and tourism. It notes that seasonal workers have difficulty accessing formal training and having their informal learning properly recognised. Barriers for employers to formal training include lack of suitable customised training programs, a lack of awareness of available training, cost, complex funding arrangements, and a low value placed on such training.

Johns S, Kilpatrick S, Loechel B, Prescott L, 2004, Pathways from rural schools: Does school VET make a difference?, NCVER, Adelaide, accessed July 2011 at:

<http://www.ncver.edu.au/publications/1437.html>

This report investigates the medium-term outcomes of vocational education and training (VET) programs delivered by rural schools. It finds school-based VET programs successfully retain students who may have left school and assist students' transition from school to work. Work placements are particularly valuable to assist the transition from school to local jobs and apprenticeships, thereby increasing youth retention in the community. These findings suggest school-based VET programs in rural areas have the potential to develop skills and pathways for the future workforce of rural Australia. The vast majority of the agricultural school students were employed in agriculture, many as farmers or farm hands—probably on their family property. This is consistent with selection to the school being based, to a certain extent, on the student's demonstrated desire for a career in agriculture. Those from the agricultural school not going back on the land as farmers or farmhands were often successful gaining an apprenticeship in a traditional trade or going into some other area of agriculture. Although only a small number of respondents from the agricultural school went on to university, they all studied agribusiness.

Clayton C, Blom K, Bateman A, Carden P, 2004, What works where you are? The implementation of training packages in rural Australia, NCVER, Adelaide, accessed July 2011 at:

<http://www.ncver.edu.au/publications/1475.html>

This report finds that vocational education and training (VET) can assist rural communities develop the necessary skills to survive and prosper in changing social and economic environments. This report investigates the implementation of training packages, including agricultural and horticultural training packages in five rural communities (including Ellis in North Western Victoria), and the strategies providers, community and industry stakeholders use to achieve positive outcomes. Flexibility is the key to successful training for providers in rural communities, with some funding and delivery policies/regulations hindering their efforts. The authors find that policies and incentives that support collaboration assist training diversity in non-metropolitan Australia.

Forthcoming research

The Centre for the Economics of Education and Training, Monash University has been contracted by NCVER to undertake a three year program of research from 2011 to 2013 examining the role of training in social inclusion: geographical and regional aspects

This research program comprises a series of projects that will examine disadvantage, focusing on the geographical and regional variation in the dispositions and capabilities of individuals and groups to make transitions through learning, training and work and across geographical locations on the principle of equity.

A survey-based choice experiment will investigate various factors affecting an individual's willingness-to-move, including the monetary value, from an area of high unemployment to an area of skills shortage. The various factors include, but are not limited to, lack of information on opportunities, insufficient wages, participation in the local community and the type of contracts being offered. The study will focus on people who have just finished VET. Follow-up qualitative research will explore the differences in social capital (e.g. access to quality education and training and other community infrastructure etc.) between regions of high social disadvantage and low social disadvantage. At least one of the sites will be in regional Victoria. Interviewees will include migrants, permanent and temporary. This study will explore the underutilisation of skills of migrant women in regional areas and the possible role of education and training in removing barriers to their participation in the labour force. Research findings will be release progressively from late 2011.

The NSW TAFE Training and Education Support Unit, in collaboration with the Western Research Institute and Kaye Bowman Consulting have been contracted by NCVER to undertake a research project examining workforce skills development and engagement in training through skill sets.

This research project will focus on skill sets (defined as a grouping of one or more units of competency less than those needed to achieve a qualification) in the Agrifood Industry.

The research team will examine what roles skill sets have in meeting the skills development needs of the Agrifood industries workforce; what role they play in encouraging engagement and completion by students; and how these skill sets meet industry needs for post-initial qualification skills development. The study relies primarily on TAFE NSW data.

The research report is likely to be released late 2012.