# Submission

by the National Centre for Vocational Education Research (NCVER)

to

Standing References Committee on Education, Employment and Workplace Relations

## **Industry Skills Councils**

The Standing References Committee on Education, Employment and Workplace Relations is seeking submissions for the inquiry into Industry Skills Councils. The Committee is particularly interested in matters outlined in the terms of reference including related matters believed to be relevant. The National Centre for Vocational Education Research (NCVER) is responding to this inquiry with matters we believe to be relevant to this inquiry by highlighting key messages from evidence based research on the importance of Industry Skills Councils particularly in the area of development and continuous improvement of training packages.

NCVER is a not-for-profit company owned by the Commonwealth, state and territory ministers who are responsible for training. Our responsibility is to collect, manage, analyse, evaluate and communicate research and statistics about vocational education and training. We are contracted to manage the National VET Provider Collections which collect data on programs of publicly funded training, including nationally recognized training. NCVER use these data to provide the basis for research and analysis to inform and measure performance of the VET system. In addition NCVER undertakes a strategic program of research which addresses the national research priorities for tertiary education and training specified by the Ministerial Council for Tertiary Education and Employment.

#### GENERAL RESPONSE

NCVER does not wish to comment directly on the terms of reference. However, we thought that it would be useful to provide some data on the training associated with the various Industry Skills Councils and some relevant research.

#### **Statistics**

Tables 1-3 below give a detailed analysis of the student participation in training packages assigned to Industry Skills Councils. These data are derived from the Australian vocational education and training students and courses and apprentice and trainee statistical collections.

Table 1 shows current and historical activity on training packages assigned to industry skills councils. It indicates that in 2009, 1.7 million students were enrolled in publicly funded VET and of that total, 1.13 million students enrolled in training packages assigned to Industry Skills Councils. The mapping between training packages and Industry Skills Councils is at Appendix A.

Table 1 Students ('000) by industry skills councils<sup>16</sup>, 2005–09

Industry skills council <sup>16</sup>	2005	2006	2007	2008	2009
Agri-Food	83.0	84.1	82.4	80.9	83.5
Community Services and Health	96.8	103.4	111.3	137.6	172.2
Construction and Property Services	54.5	65.1	72.2	84.1	97.8
Electrocomms and Energy Utilities	28.0	33.4	37.8	41.5	44.7
ForestWorks	5.8	4.9	4.1	5.1	5.1
Government	8.7	9.4	11.4	11.6	9.2
Innovation and Business	269.9	282.1	292.6	296.2	304.7
Manufacturing Skills Australia <sup>17</sup>	101.1	117.2	117.7	121.1	119.8
Service Skills Australia	173.2	202.9	208.6	228.7	236.9
SkillsDMC	10.6	12.7	14.1	16.4	15.0
Transport and Logistics	34.9	41.1	33.5	35.9	41.1
Total training packages assigned to industry skills councils	866.5	956.2	985.7	1059.1	1130.0
Total training packages not assigned to industry skills councils <sup>17</sup>	0.0	-	0.0	-	-
Total training packages	866.6	956.2	985.7	1059.1	1130.0
Total non-training packages	784.2	719.8	679.3	640.6	576.7
Total students	1650.8	1676.0	1665.0	1699.7	1706.7

A dash (-) represents a true zero figure, with no data reported in this category.

For notes on tables, see <a href="http://www.ncver.edu.au/statistics/vet/ann09/table\_notes.pdf">http://www.ncver.edu.au/statistics/vet/ann09/table\_notes.pdf</a>.

Source: NCVER National VET provider collection 2009 http://www.ncver.edu.au/statistic/publications/2264.html

In Table 2 the data show that in 2009 a total of 351,600 qualifications were completed of which 295,600 were qualifications attached to training packages assigned to Industry Skills Councils.

Qualification completions 18,19,20,21 ('000) by industry skills councils 6, 2005–08 Table 2

Industry skills council <sup>16</sup>	2005	2006	2007	2008
Agri-Food	18.4	18.8	20.1	20.8
Community Services and Health	32.2	35.7	38.6	44.6
Construction and Property Services	12.7	14.1	15.2	19.5
Electrocomms and Energy Utilities	4.2	5.1	6.3	7.3
ForestWorks	0.6	0.4	0.3	0.4
Government	3.2	2.6	3.0	4.2
Innovation and Business	84.6	77.4	90.1	97.5
Manufacturing Skills Australia <sup>17</sup>	20.7	25.4	26.3	28.9
Service Skills Australia	48.8	47.9	53.2	60.6
SkillsDMC	1.3	1.4	1.9	3.9
Transport and Logistics	8.6	6.3	7.3	8.1
Total training packages assigned to industry skills councils	235.4	235.2	262.2	295.6
Total training packages not assigned to industry skills councils <sup>17</sup>	-	-	0.0	-
Total training packages	235.4	235.2	262.3	295.6
Total non-training packages	61.0	57.0	56.9	55.9
Total qualification completions	296.4	292.1	319.2	351.6

A dash (-) represents a true zero figure, with no data reported in this category. For notes on tables, http://www.ncver.edu.au/statistics/vet/ann09/table\_notes.pdf Source: Australian vocational education and training statistics: Students and courses 2009

http://www.ncver.edu.au/statistic/publications/2264.html

**Table 3** is a breakdown of the 2009 apprentice and trainee student participation in training packages assigned to Industry Skills Councils. Each training package is also assigned an occupation. We see that the councils tend to have training packages that cut across a number of occupational groups.

Table 3 Apprentice and trainee commencements, trade and non-trade occupations, <sup>6,7</sup> by industry skills councils <sup>17</sup> and selected training characteristics, 2009 ('000) (Revised 19/7/10)

	Trades	Non-trades						
	Technicians and trades workers	Managers	Professionals	Community and personal service workers	Clerical and administrative workers	Sales workers	Machinery operators and drivers	Labourers
Existing worker								
Existing worker	10.9	3.3	6.5	8.8	28.4	11.6	14.6	4.3
Newly commencing worker	60.6	3.1	1.1	34.5	28.0	28.6	10.3	16.8
School-based status								
School-based	4.6	0.1	0.1	3.8	2.2	3.9	0.2	1.8
Not school-based	66.9	6.2	7.5	39.5	54.2	36.3	24.8	19.3
Industry skills councils <sup>17</sup>								
Agri-food	7.8	1.2	0.2	0.0		0.3	0.1	10.7
Community services and health	1.8	3.2	0.0	16.4	1.3	0.0		
Construction and	15.8	0.0		0.3	0.1	1.1	0.0	5.6
property services Electrocomms and energy utilities	9.2		0.0					0.1
ForestWorks	0.0		0.0			0.1	0.2	0.3
Government		0.1	0.0	0.4	0.9		0.6	0.0
Innovation and business	2.8	0.6	0.8	0.0	49.4	1.7	0.0	0.2
Manufacturing	21.0	0.7	6.3		0.1	1.4	3.0	2.3
Services	11.6	0.2		25.4	1.9	35.5		0.8
SkillsDMC	0.5			0.0			4.4	0.6
Transport and logistics		0.2	0.0	0.0	2.5		16.6	0.3
Training packages not assigned to industry skills councils <sup>17</sup>								
Training package	70.5	6.3	7.4	42.6	56.3	40.1	24.9	21.1
Non-training package	1.1	0.1	0.2	0.7	0.1	0.1	0.0	0.0
Total	71.5	6.3	7.6	43.3	56.4	40.2	24.9	21.1

Blanks represent a true zero figure, with no contracts reported in these categories.

For notes on tables, see <a href="http://www.ncver.edu.au/statistics/vet/ann09/table\_notes.pdf">http://www.ncver.edu.au/statistics/vet/ann09/table\_notes.pdf</a>

Industry skills councils represent particular industries and groups of training packages. For more information on how training packages are grouped by industry skills council, see the supporting documents at <a href="http://www.ncver.edu.au/publications/2263.html">http://www.ncver.edu.au/publications/2263.html</a>.

Source: NCVER Australian vocational education and training statistics: Apprentices and trainees - Annual 2009 <a href="http://www.ncver.edu.au/statistic/publications/2263.html">http://www.ncver.edu.au/statistic/publications/2263.html</a>

#### Relevant research

We conclude this submission by highlighting recent research that may be of interest to this inquiry.

Responding to changing skill demands: Training Packages and Accredited Courses forthcoming, Misko J, This research is based around how Industry Skills Councils are responding to workplace change. The research is still in progress, but a draft working version is attached as a separate file.

The project takes a look at workplace changes experienced by enterprise and how Industry Skills Councils are responsive to such changes through the development and review of Training Packages and engagement with stakeholders. We analyse the coverage and content of accredited courses, skill sets and new units of competency, and detail content analyses of selected units of competency.

The findings indicate that:

- Regulation and business needs drive changes in the way the competency-based training system operates.
- The system has strong mechanisms for identifying the needs of specific industries and occupations and formulating units of competency in Training Packages and Accredited Courses. However, too much bureaucratic red tape and unnecessary detail makes the system sluggish in responding to emerging needs in a timely fashion.
- Having strong mechanisms for the development and review of Training Packages and accredited courses is only part of the picture. These must be complemented by effective teaching and rigorous assessment practice, as well as up-to-date materials and technology for learning.

#### In training we trust: Communicating regional training need and demand to VET providers 2008, Rushbrook P, Pickersgill R. NCVER:

http://www.ncver.edu.au/vetcontext/publications/2082.html

One of the challenges for VET providers is to be able to communicate effectively with industry. They must be able to gather market intelligence. While the report has mainly a regional focus it does examine the methods of communication between VET providers, and industry. Formal communication methods include client partnerships and advice from industries bodies, while informal methods include friendships and networks between employers, communities and VET providers.

#### Competence and competency-based training: What the literature says 2009, Guthrie H. NCVER: <a href="http://www.ncver.edu.au/teaching/publications/2153.html">http://www.ncver.edu.au/teaching/publications/2153.html</a>

The most important role of the Industry Skills Councils is to develop training packages which are based on the specification of competencies relating to the tasks that workers undertake. Thus the concept of competency is central to the whole raison d'etre of Industry Skills Councils. This literature review provides an historical account of the development of competency-based (CBT) training in Australia and summarises the issues arising from a number of reviews conducted on elements of the national training system. It also explores the variety of ways in which competence is conceived both in Australia and overseas.

The literature suggests that:

- competence can be conceptualised in two broad ways. One takes a view that competence is a personal construct, while the other grounds competence in the context of an occupation and even a particular workplace. It suggests that a balance needs to be struck between these two constructs
- support for CBT and training packages remains strong, but that attention needs to be given to the quality of both delivery and assessment. The literature also suggests that training packages could be better understood and used, and that some refining of the underpinning concepts, processes and products is required
- the professionalism of vocational education and training teachers and trainers needs to be reemphasised and enhanced. The literature also suggests that perhaps it is time to revisit the nature and level of training for VET's professional staff.

# **Training skilled workers: Lessons from the oil and gas industry 2005,** Figgis J, Standen A. NCVER: <a href="http://www.ncver.edu.au/teaching/publications/1597.html">http://www.ncver.edu.au/teaching/publications/1597.html</a>

This report explores ways existing workers develop advanced skills in a technically demanding industry. The underpinning rationale is 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. It is also important to understand whether the policies and practices of the formal vocational education and training (VET) sector—which have, in recent years, emphasised entrylevel training—are equally applicable to advancing the skills of already skilled workers employed in their industry of choice. The hydrocarbons industry is a technically demanding global industry that takes training seriously. Large companies spend many millions of dollars each year on the capability of their workforces and even the smallest companies now regularly review and update their work practices. This training has, however, been dealt with as a private, even proprietary, matter but it has recently developed a new interest in connecting with the formal VET sector through its response to the Chemical, Hydrocarbons and Oil Refining Training Package PMA02. The oil and gas industry has shown particular interest in the package's well-defined process operation competencies, and its new incident response and emergency management competencies (which have not been available in such a systematic and rigorous form before). Competencies, not qualifications, are what enterprises in this industry care about both in recruiting and advancing their workforces.

For training at the advanced skills end of the spectrum, the technical equipment and expertise required are likely to exceed the resources of most non-enterprise-based registered training organisations. The solution is to develop partnerships where careful attention is given to the VET sector's potential contribution. The general trend observed in this study is that organisations in industries subject to conditions similar to the oil and gas industry will face new challenges in developing the skills of their workforce. In particular, assessments must be more thorough, job specifications and selection criteria must be strengthened, and more realistic linkages between job profiles and competency standards introduced.

## **Inter-firm cooperation in training** 2008, Cooney R, Long M.

NCVER: http://www.ncver.edu.au/industry/projects/10324.html

This research investigates cooperation amongst Australian manufacturing organisations with regard to training. It identifies the characteristics of organisations that cooperate, the business practices that support such cooperation, the type of training delivered jointly and the benefits that arise. Organisations more likely to cooperate with other organisations to provide joint training are in a strong business position in competitive markets. They are profitable medium-sized and larger organisations with a growing workforce. These organisations see the skills of their workforce as a source of competitive advantage, and joint training is only one part of their total training effort. The research indicates that there is scope for more cooperation between organisations in training their employees and there are benefits to be gained in doing so. It found that some organisations that did not currently have cooperative training arrangements with other organisations indicated that assistance from government, industry or employer organisations would encourage them to seek out cooperative arrangements. The research concluded that without policy and program support, cooperative training arrangements will continue to be the province of a small number of organisations who independently initiate their own joint training activities.

# Appendix A: training packages grouped by industry skills councils

Industry skills council	Training packages
Agri–Food	MTM – Australian Meat Industry
	FDF – Food Processing Industry
	RTF – Amenity Horticulture
	RUH – Horticulture (superseded by RTF)
	RTE – Rural Production
	RUA – Agriculture (superseded by RTE)
	AGF – Agri-Food
	AGR – Conditionally endorsed Agri-Food (superseded by AGF)
	RGR – Racing Industry
	RTD – Conservation and Land Management
	RUV – Animal Care and Management
	SFI – Seafood Industry
	SUG – Sugar Milling
Community Services and Health	CHC – Community Services
	HLT – Health
	ZBS – Australasian Red Cross Blood Services (confidential)
Construction and Property Services	PRM – Asset Maintenance
	PRS – Asset Security (superseded by CPP)
	BCG – General Construction (superseded by CPC)
	BCF – Off-site Construction (superseded by CPC)
	BCP – Plumbing and Services (superseded by CPC)
	PRD – Property Development and Management (superseded by CPP)
	CPP – Property Services
	CPC – Construction, Plumbing & Services Integrated Framework
Electocomms and Energy Utilities	UET – Transmission, Distribution and Rail
	UTT – Electricity Supply Industry – Transmission and Distribution (superseded by UET)
	UEE – Electrotechnology Industry
	UTE – Electrotechnology Industry (superseded by UEE)
	UEG – Gas Industry
	UTG – Gas Industry (superseded by UEG)
	UEP – Electricity Supply Industry – Generation Sector
	UTL – Lifts Industry (superseded by and included in UEE)

	UTP – Electricity Supply Industry – Generation (superseded by UEP)
ForestWorks	FPI – Forest and Forest Products Industry
	FPP – Pulp and Paper Manufacturing Industries
Government	CSC – Correctional Services
	LGA – Local Government
	PSP – Public Sector
	NWP – Water Industry
	UTW – Water Industry (superseded by NWP)
	PUA - Public Safety (confidential)
Innovation and Business	BSA – Administration (superseded by BSB)
	BSB – Business Services
	FNA – Finance (superseded by FNB)
	FNB – Financial Services (superseded by FNS)
	FNS – Financial Services
	ICA – Information and Communications Technology
	ICT – Telecommunications
	BSZ – Assessment and Workplace Training (superseded by TAA)
	CUE – Entertainment Industry
	CUF – Screen and Media
	CUL – Museum and Library/Information Services
	CUS - Music
	CUV - Visual Arts, Craft and Design
	ICP – Printing and Graphic Arts
	TAA – Training and Assessment
	TAE - Training and Education
Manufacturing	MEM – Metal and Engineering Industry
	PMB – Plastics, Rubber and Cablemaking
	AUM – Automotive Industry Manufacturing
	AUR - Automotive Industry Retail, Service and Repair
	LMF – Furnishing Industry
	LMT – Textiles, Clothing and Footwear
	MCM – Competitive Manufacturing (superseded by MSA)
	MEA – Aeroskills
	MSA – Manufacturing
	MSL – Laboratory Operations
	PMA – Chemical, Hydrocarbons and Oil Refining
	PMC – Manufactured Mineral Products
	PML – Laboratory Operations (superseded by MSL)
	ZCA – Service Technician – Portable Fire Equipment (Chubb Fire)
Service	WRB – Beauty

	WRH – Hairdressing	
	THH – Hospitality (superseded by SIT)	
	SIT – Tourism, Hospitality and Events	
	SIR – Retail Services	
	WRR – Retail (superseded by SIR)	
	SIF – Funeral Services	
	SRC - Community Recreation Industry	
	SRF – Fitness Industry	
	SRO – Outdoor Recreation Industry	
	SRS – Sport Industry	
	THC – Caravan Industry	
	THT – Tourism (superseded by SIT)	
	WFS – Funeral Services (superseded by SIF)	
	WRF – Floristry	
	WRP - Community Pharmacy (superseded by SIR)	
	WRW – Wholesale (superseded by SIR)	
	ZWA – Woolworths (confidential)	
SkillsDMC	BCC – Civil Construction	
	RII – Resources and Infrastructure	
	MNQ – Extractive Industry	
	MNM – Metalliferous Mining	
	DRT – Drilling Industry	
	MNC - Coal	
Transport and Logistics	TDT – Transport and Distribution (superseded by TLI)	
	TDA – Aviation (superseded by AVI)	
	AVI – Aviation	
	TDM - Maritime	
	TLI – Transport and Logistics	
	ZPO – P & O Ports	
	ZQF – Qantas (confidential) (superseded by AVI)	
	ZQR – Queensland Rail – Civil Infrastructure (confidential)	
No industry skills council	TAL – Transport and Logistics (conditionally endorsed)	
	ZBE – Boral Interior Lining (confidential)	
	ZKO – Kodak Australasia (confidential)	
	ZRG – Ricegrowers Co-operative Limited (confidential)	
	ZWV - Humanitarian (confidential)	