

Methods and Instruments for the Evaluation and Monitoring of VET Systems

Integrating VET into Other Policy Domains: Some Thoughts

About Monitoring and Evaluation

Noela Eddington and Ian Eddington¹

Department of Education and Training,
Queensland, P.O. Box, City East, Brisbane, Qld 4001

University of Southern Queensland,
P.O. Darling Heights, Toowoomba, Qld, 4350

Summary: For two decades there have been calls for the Australian VET system to be more efficient, responsive, industry-driven, and simplified. The responses from governments of all political persuasions have generally been incremental and within the traditional VET rubric of supplying skills to the labour market.

In 2002, the State of Queensland began experimenting with different models of interaction with the VET system and its stakeholders. Since then a range of alternative industry engagement mechanisms has been trialled within an integrated approach to skills formation spanning a number of policy areas. In general, and in speculation about possible future VET systems, each of these mechanisms was initially predicated on tracking of emerging economic, social and environmental challenges faced by western democracies. From these initial experiments, Queensland is now developing an alternative holistic VET system model for 2020 which hopefully will be more able to cope with the changing nature of occupations, work, and the requirements of a carbon-constrained economy. Two early drafts of some tools and techniques being considered for managing and monitoring the system are discussed: (i) Monitoring and Performance Framework, (ii) Capability Scales

Keywords: Contextualising VET, Policy Integration, VET 2020

Introduction

Since 2002, Queensland, Australia, has been questioning the assumption that a highly qualified workforce alone is sufficient to increase profitability, productivity and economic growth. It is contended that *the full contribution of a skilled workforce to the economy, industry sectors and individual firms is not realised unless employers cogently address demand-side factors. Such demand-side activity on the part of employers must include responsibility for integrating attraction, development, effective utilisation and retention of skills into their people management practices within the context of a sustainable business strategy.*

¹ This paper represents the views of the authors: affiliations are provided for identification purposes only.

In trialling this contention, skills, work and industry development policies are being integrated in a pilot program in the manufacturing sector. This policy integration is, in effect, relying on collaborative governance which is actively testing the capability of the bureaucracy to operate in networks.

The pilot is considering how industry, work and skills policy might be designed to support a 'high skill equilibrium' capable of providing decent and sustainable work within a just transition under conditions of carbon-constraint.

Over the seven years from 2002, Queensland has been experimenting with skill ecosystems, and other new forms of industry responsibility for skills, and has also piloted public policy integration of various kinds. Some policy thinkers now believe that VET 2020 must be closely integrated with sectoral and regional responses to changing economic conditions. The Industry Skills Policy framework must encourage all industry sectors and regions to manage sustainable skill ecosystems. Skills, as lower order issues, must be aligned to sustainable industry strategies and good workplace management practices.

The current stage of the Queensland collaborative experiments involves demonstrating effective translation of skills into productive outcomes, and identifying roles, responsibilities, systems and processes that underpin sustainable production and good jobs. The monitoring and evaluation process has provided insights for questioning the rationale and practice of traditional skills policy. We are now seeking to monitor the impact of integrated interventions on business outcomes, as opposed to measurements based solely on individual program outputs such as qualifications.

As a result of these experiments, Queensland is on the verge of adopting a Dual Skills Policy Framework with two distinct strands: Industry Skills Policy and Skills Policy for Individuals. This paper is primarily about the former, and more specifically about Industry and Government Capability Scales and a Monitoring and Reporting Framework for Industry Skills Policy in a carbon-constrained economy. The term 'industry' in the context of the emerging Industry Skills Policy also refers to and incorporates regions and communities, as it applies equally to the skill ecosystems in these contexts.

Targeted Problem

The targeted problems of the on-going Queensland research and action learning processes are (i) *elimination of wastage in a supply-driven VET system* and (ii) *optimising the value of skills to industry and the economy*. We believe that, within the Queensland context: (i) centralised processes based on workforce planning, forecasting and identifying future skills needs alone are unreliable and insufficient, and (ii) skills supply focused systems abrogate industry responsibility to maintain skill attraction, development, effective utilisation and retention processes (Queensland Department of Education, Training and the Arts 2008).

Queensland's developing Industry Skills Policy is aimed at leveraging industry ownership and responsibility for sustainable skill ecosystems within sustainable businesses. Monitoring and evaluation within this context is complex and difficult for VET agencies because it requires a different set of indicators. In addition to measuring quantitative data on skills supply, we are assessing the impact of multiple programs on productivity, profitability and employment issues in a people and planet context. We contend that qualification levels alone are not a sufficient indicator of the value of skills to an economy (Scottish Government, 2007; UK Commission for Employment and Skills, 2009).

Methodology

Queensland operates within a complex Australian VET system which incorporates (i) shared responsibility between the national and state governments; (ii) regulated public VET systems; (iii) a national qualifications framework; (iv) competency based training with some 1400 national qualifications; (v) registered training organisations operating in a 'training market' and (vi) regulated occupations in the trades.

Effecting significant change quickly within the entrenched VET system is well nigh impossible in Australia because of the deliverables imposed on the states in return for part funding of training initiatives. Accordingly, Queensland has been addressing this impasse by making small changes to components of the VET System on an incremental and politically acceptable basis. At the same time, policy strategists have been developing a new holistic mental model for VET to guide the general direction of incremental action learning based initiatives over time. Without this holistic vision for VET 2020, there is a tendency for subsequent administrators to continually meddle at the edges of the existing system. (And, as noted by Keep 2009, all the worthwhile changes at the edges have been made to the existing System.)

The holistic model for VET 2020 covers the following components of the VET System: role and purpose of VET, VET institutions, training product, pedagogy and professionalism, linkages, pathways, governance, funding, culture, regulation, accountability and impacts. The focus is on designing each of these components and combining them into a VET System 'jigsaw' in such a way so as to ensure that the integrated drivers of the System support the stated role and purpose of the VET program². This holistic model is being researched and framed incrementally in line with the outcomes of a Ministerial Forum on VET of the Future held in Queensland in 2008 (ibid, 2008). It is also heavily influenced by the authors' involvement with international researchers working in a range of other contemporary economic, social and environmental issues such as education, sustainability, climate change, workforce development, consumption, production, and equity.

In relation to action research initiatives related to Queensland's emerging Industry Skills Policy, we now have the benefit of experience with excess of fifty-two (52) skill ecosystems, and sixteen (16) industry centres of excellence and other industry/government alliances and arrangements linking skills to workplace management and sustainable strategic business directions. These integrated policy regimes are increasingly removing the need for forecasting and planning for skills in a labour market context where supply and demand dominate the rhetoric. Instead, the State's new forms of industry engagement allow the contextualization of skills within a sustainable business development debate. That is, skills can be contextualized and managed in a realistic context where they are utilized, influenced and owned by industry, regions or communities (all of which can develop sustainable skill ecosystems able to respond as economic and social issues vary.) We (the authors) also believe that this industry development approach is the key to stimulating employer demand for quality jobs, thereby creating a demand-pull for skills. As industry capacity develops in this regard, skills are more likely to be available where they are needed and be more effectively utilised.

Queensland's current action research is exploring policy coordination in the manufacturing sector. It is known as the Workplace Partnership and Productivity (WP&P) pilot. Three agencies have combined their industry development programs

² We would argue that the role and purpose of VET should be measured at four levels, namely the economy, industry, enterprises and individuals but within the general context of sustainable development.

to support a sustainable manufacturing sector. Industry development, work and skills policies are being coordinated to deliver an holistic action plan that industry undertakes to implement. Business reviews, sustainable business strategies, efficient operating systems and effective people management in safe and decent 'green jobs' are being encouraged through 'partnership' negotiating processes. The Australian industrial relations environment has a recent history of excluding unions from workplace negotiations. This heritage of exclusion is currently being dismantled and one aim of the current WP&P pilot is to demonstrate improved business performance and productivity through partnerships as reported by Black and Lynch (2003).

The integrated government activity in the WP&P pilot is challenging to public agencies which are generally inexperienced in operating within client driven networks. Our research suggests that government agencies are accustomed to working in *state* and *market* modes of governance where the drivers focus on numbers/quantity and efficiency. However, *network* modes of governance in coordinated policy scenarios are difficult for government agencies (Keast et al, 2004). Networks are based on relationships, a collective sense of mutual responsibility, trust and power sharing: consequently, agency accountability in networks needs careful mentoring and attention. We (as authors) go so far as to suggest that government and industry capability to operate effectively in networks needs to be developed, and Capability Scales to identify behaviours requisite to operating within networks are being constructed.

In addition, the action research being undertaken in the WP&P pilot also seeks to refine (i) a Monitoring and Performance Framework for the holistic 'industry development' process and (ii) Industry and Government Capability Scales. These are discussed in the next section.

Results and Perspectives for Further Development

For the Described Instruments

- Monitoring and Evaluation Framework

The draft Monitoring and Evaluation framework presented here is intended to provide a starting point for negotiations on a specific framework for the industry, region or community involved. It attempts to provide indicators that are acceptable across all three governance modes for baseline activity, facilitative activities and program effect data. The *baseline data* (see Table 1) will support the graphing of trend lines in *facilitative* and *effect* data as the pilot progresses. The *facilitative data* is intended to measure a range of context, process and learnings dimensions such as (i) how well the stakeholders are collaborating, (ii) their developing capability levels and (iii) learnings from the processes. *Effect* data will enable the development of trend lines resulting from the integrated service delivery process on outputs, outcomes, impacts and business performance. Table 1 contains examples only of the type of indicators and measures that might be agreed upon by stakeholders in the Manufacturing WP&P pilot.

Table 1: Monitoring & Performance Framework Concept for Manufacturing

	Indicator Type	Function	Indicator Example	Measures
STATUS	Baseline Data	Starting point variable: <i>Economic</i>		
		(i) Gross product	(i) Gross product: the amount of revenue produced by the Queensland manufacturing and engineering sector	(i) \$ contributed to GSP by the manufacturing sector.
		<i>People</i>		
		(ii) Labour productivity	(ii) Revenue per full time equivalent (FTE) in the sector	(ii) \$ revenue per FTE in the sector.
		(iii) Utilisation	(iii) People Indicators: • Employee turnover • Extent of use of skills (employer and employee perspective) • Job quality • Inclusiveness / partnerships	(iii) People measures: • Turnover rate per calendar year. • Story: Describing how the sector creates 'decent' work, inclusive processes, utilises knowledge and skills to enhance competitive advantage, and skill usage perspective of employers and employees.
(iv) Qualifications	(iv) Qualifications • Managers, professionals • Skilled trades • Intermediate skilled workers • Elementary skilled workers	(iv) Qualification profile for • Managers, professionals • Skilled trades • Intermediate skilled workers • Elementary skilled workers		
<i>Planet</i>				
(v) Emissions	(v) Carbon footprint	(v) Primary carbon footprint trends, adaptation / mitigation strategies		
FACILITATIVE	Context	• To identify the existence of industry <u>support systems</u>	• Existence of industry support programs for: (i) Productivity, new technologies, systems and processes (ii) Business management (iii) Sustainability and eco-efficiency (iv) Capabilities and options for diversification, trade etc	• Existence of government publication identifying all industry support programs for the production sector
		• To monitor change in policy context	• Demonstration of agency policy coordination.	• Story: Describing the experience with collaborative governance
		• To monitor clarity of role and responsibility	• Roles, responsibilities, expectations, partnerships defined for all partners including unions, industry, government, intermediaries, TAFE colleges and the like.	• Negotiated agreement on these issues.
	Process	To identify if: (i) adequate analysis of skills issues and workforce issues has been undertaken	(i) People and Leadership workplace development plan (with milestones) to support operational and business plans, covering issues such as partnership approach, work/life balance, health and safety, formal and informal skill formation, job design; clear identification of leveraging activity and links to existing services.	(i) People and Leadership Plan (with milestones) integrated with operational and business plan.
		(ii) sustainable workplace management practices have been implemented using partnership principles to deal with attraction, development, effective utilisation and retention.	(ii) The 'will' of the enterprise/sector to <u>develop and effectively manage</u> a sustainable workplace and skill ecosystem in order to achieve its long term business plans.	(ii) Evidence of implementation of workplace development plan e.g Record of Training Product and Delivery, stories of partnership processes, culture and just transitions to green jobs.
			(iii) The 'will' of the sector to foster a collaborative culture and <u>effectively utilise</u> the skills of its employees to achieve its long term business plans.	(iii) Story: outlining partnership processes for industrial agreements covering attraction, development, effective utilisation and retention workplace strategies – to include health and safety, work/life balance.
				(iv) Story: outlining how skills are utilised to achieve competitive advantage.
Learning	To promote learning and reflection	Lessons learned in managing a process involving capability development around partnerships, individual enterprises and networks of SMEs, suppliers etc.	(i) Story re lessons learned (ii) Action Plan re process improvement i. Implementation of process improvement	

	Indicator Type	Function	Indicator Example	Measures
EFFECT	Output	To assess outputs such as workforce management tools, number of qualifications, number of awareness sessions, and number of firms committed.	(i) Work policies that support attraction and retention (participation) e.g. work/life balance, career paths, health and safety, negotiated pay scales, job redesign, high performing work practices such as commitment to learning, open-mindedness and shared vision.	(i) Specific 'demand-side' workplace management practices in place e.g. partnerships process that delivers improvement in attraction, development, effective utilisation and retention of workers e.g work/life balance, career paths, health and safety, negotiated pay scales, job redesign, high performing work practices such as commitment to learning, open-mindedness and shared vision.
			(ii) Skill utilisation status	(ii) (a) Story: outlining how the sector creates and uses knowledge to enhance competitive advantage. (b) Employee/Employer surveys: Opinion of % skill utilisation (c) QMI utilisation measures
			(iii) Employees with a Certificate III	(iii) % of staff with a Cert III or above in the following categories: <ul style="list-style-type: none"> • Professional / managers • Skilled Trades • Intermediate skilled workers • Elementary skilled workers
	Outcome	<ul style="list-style-type: none"> • To assess outcomes related to trends in changes or improvements that result from interventions • To define a key outcome: Enterprise bargaining agreement developed through partnership process 	(i) Industry adopts sustainable business practices – people, profit, planet (ii) Industry utilising the social partnership process.	(i) Evidence of industry capability improving (see thermometer chart) (ii) QMI measures re productivity (iii) Negotiated agreement around improved workplace management practices aligned to strategic and operational needs of the firm or network.
	Impact	To assess 'sustainable' impacts that result from interventions	Trends in industry profits, labour productivity, people management and carbon footprints	(i)Trends in: <ul style="list-style-type: none"> • Business viability or profits, labour productivity • Employee satisfaction • Labour utilisation • Improved WH&S performance • Retention/ staff turnover • Primary carbon footprint/ reduced waste/ emissions (i) Story: Outline how the sector supports participation of disadvantaged groups and how VET Investment has supported this participation (iii) Stories: Case studies of how VET Investment is supporting good workplace practices that impact on individual firm or industry performance across profit, people and planet issues.
Performance	To assess the capability of the manufacturing sector to remain sustainable in variable economic cycles.	Capability of the manufacturing firms/ sector to align strategy, operations and workplace strategies, including operating effectively in an Industry-led Industry-driven ecosystem through variable economic cycles.	Story: summarising the original context, what happened, what worked /did not work, industry performance in managing industry-led, industry-driven government interventions (industry development, work, skills) geared to support sustainable profit, workforces and skills. Comment should be made on a range of economic, social and environmental indicators e.g. technology diffusion, improved business processes, labour productivity, total factor productivity, workplace practices, and waste / carbon management, adaptation / mitigation strategies, trends in competitive advantage, how employer responses to changing business environments are shaping labour demand, contribution to formal and informal training etc	

Notes:

Firms / clusters must commit to providing the agreed business data. This needs to be a funding requirement.

The Most Significant Change story telling process, or an adaptation of it, provides rich data on changes that occur. Stories are sometimes considered more useful in reporting some indicators than other measures

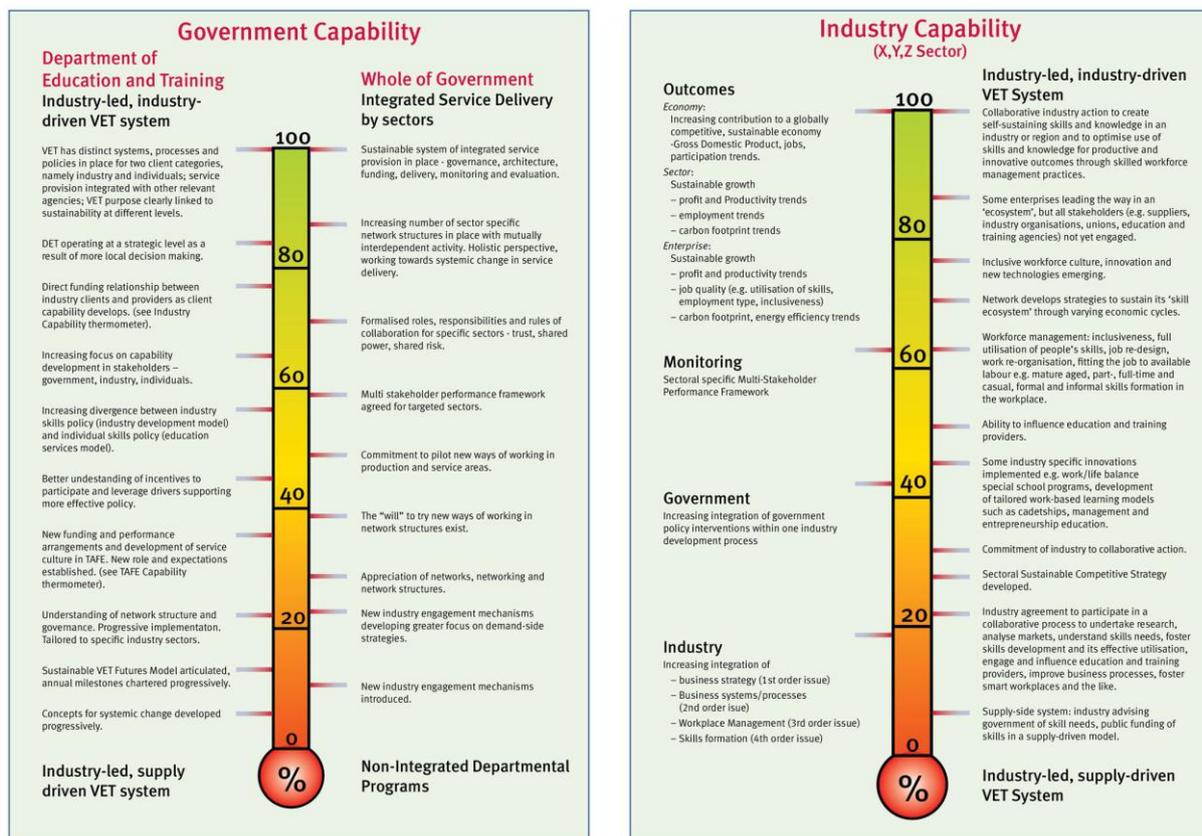
The Framework is being trialled in 2010 - 2011 in the WP&P pilot. Industry, government and unions will negotiate a set of indicators in each of the three categories that is relevant to the specific skill ecosystem. Quantitative data and qualitative data in the form of stories will be mixed and matched to provide both industry and government with rich information on baseline, facilitative and impact data. Specific indicators will be developed through the 'partnership' process being used in this pilot but could equally be developed using alliancing principles or some other form of collaborative arrangement.

The indicators will generally reflect the issues for improvement identified in business and people management diagnostic processes (please see Table 1).

- Industry and Government Capability Scales

The Industry and Government Capability scale tools (Figure 1) will also be refined in the WP&P project. They articulate the types of behaviours that need to be developed incrementally by these specific stakeholders in order to optimise value from integrated policy designed to support economic, social and environmental outcomes.

Figure 1: Capability Scales



Our experience is that, unless the 'capability' issue is addressed, stakeholders tend to follow 'business as usual protocols' and collaborative networks are 'business as unusual' (for both government and industry) from multiple perspectives: governance, roles, responsibilities, accountability, monitoring and reporting, employment and just transition goals and a high skill sustainable production function. These capability scales could be used to guide funding directly to industry as its ability to manage demand for and utilisation of skill increases. Funding could be conditional upon the development of demand-side factors.

Potentials and challenges for the use in/for international comparisons

The potential for the use of the tools outlined above relies on the underpinning philosophy of the role and purpose of VET in defining country specific skills policy. They would only be of value in regimes that subscribed to industry ownership and responsibility for their own skill ecosystems, where integrated policy environments leveraged demand-side support for attraction, development, effective utilisation and retention of skills through good leadership and people management practices, and where skills policy was clearly linked to higher order sustainability goals.

Internationally, some countries are moving towards this skills policy scenario, particularly where large investments in skills in recent decades have lead to little or no improvement in comparative labour productivity. For example, the UK, the OECD Local Employment and Economic Development program, New Zealand and Australia generally recognise that skills alone are not enough; skills need to be effectively utilised in order to transform their value into economic benefit. Integrated Industry Development Skills Policy has the potential to create a demand-pull for skills which in turn supports employment policies.

The Global Financial Crisis has also prompted some countries to consider the value to their economies of traditional supply-driven skills policy. There is growing recognition of the complexities that circumscribe and potentially restrict the value of skills in workplaces. There is growing popularity of 'workforce development' strategies being used in conjunction with traditional skill supply policies. However, the limitations of the latter used in isolation, generally in the context of labour market rhetoric, are increasingly being recognised. The more contemporary context for skills policy is in workplaces, regions and communities where the influences on skills can be more effectively managed.

References

- Black, S.E. and Lynch, L.M. 2003, 'The new economy and the organization of work' in The Handbook of the New Economy, ed. Jones, D. New York: Academic Press.
- Black, S.E. and Lynch, L. M. 2004, 'What's driving the new economy? The benefits of workplace innovation', Economic Journal, February.
- Keep, E. 2009, Workforce improvement strategies in the UK presented at Workforce Development Forum, Department of Employment, Economic Development and Innovation, Brisbane.
- Keep, E, Mayhew, K, and Payne, J, 2006, From skills revolution to productivity miracle – not as easy as it sounds? Oxford Review of Economic Policy vol.22 no. 4.
- Queensland Department of Education Training and the Arts, 2008, The role and purpose of VET, VET of the Future Ministerial Forum, Brisbane, May.
- The Scottish Government, 2007, Skills for Scotland, a lifelong skills strategy, Edunburgh.
- United Kingdom Commission for Employment and Skills, 2009, Ambition 2020: world class skills and jobs for the UK.