

The double helix of vocational
education and training
and regional development:
Literature review and
case studies—Support document

PETER KEARNS
KAYE BOWMAN
STEVE GARLICK

GLOBAL LEARNING SERVICES

This document was produced by the authors based on their research for the report *The double helix of vocational education and training and regional development*, and is an added resource for further information. The report is available on NCVER's website: <<http://www.ncver.edu.au/publications/1989.html>>

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Preface

This support document sets out the literature review undertaken as a component in a study examining the question of matching VET provision with regional development skill needs. The report of this study titled *The double helix of vocational education and training and regional development* draws on evidence from this review as well as from five case studies undertaken in selected regions. The review was undertaken as three papers on key aspects of the relevant literature.

A focus on regions is a relatively new strategic direction for VET research which has evolved in response to an objective included in the 2004-2010 National VET Strategy which states that VET works for communities as well as industry and individuals.

This vision states that:

Integrated learning and employment solutions will support regional economic, social, and cultural and environmental development and sustainability. VET will stimulate interest in learning. It will strengthen the capacity of TAFE and other providers and brokers to partner with local government and non-government agencies, businesses and industry clusters. It will encourage local planning and innovation and help communities deal with changes and take advantages of opportunities.

Objective 3 and its related vision statement suggest a focus on local or internal development strategies whereby region specific resources, know how, and locational advantages are encouraged.

Garlick covers the ground of approaches to regional development and factors for success in his component of the literature review for this project. He also looks at universities and regional development in Australia.

Bowman looks at Australian literature to determine what we know about business needs for VET skills versus VET skills supply, particularly at the regional (below state) level and what strategies have been suggested to obtain a better match between regional level VET skills demand and supply, including through partnerships or social capital development for better human capital VET outcomes.

Kearns looks at the international literature identifying and reporting on themes relevant to the subject of VET and regional development in his section of the literature review for this project. The themes include localisation, sustainable development, partnership, integration and coordination, the learning region and learning economy concepts, and the need for a holistic approach which integrates social and economic objectives and which builds social, human and identity capital.

Overall, the literature review contributes to the conclusions drawn from the case studies and supports our conclusion that links between VET and regional development need to be strengthened in more interactive systems. We termed this the double helix of vocational education and training and regional development. The literature review was directed at the following research questions:

Question 1: *How well does the range of VET offerings meet local skills needs based on realistic economic opportunities?*

Question 2: *In what ways can VET become more mobile/flexible to meet local and regional needs?*

Question 3: *What contribution can local community frameworks, such as learning community initiatives, make to meeting skill needs, fostering innovation and building social and human capital in communities?*

Success factors in regional growth and competitiveness

Professor Steve Garlick

1. Introduction

In this discussion paper the literature over the past two decades is briefly reviewed to identify factors that have been argued to contribute to driving regional growth and competitiveness. The paper is not a critique of that literature but simply a summary presentation of concepts and theories. A detailed critique may be found in Garlick, Taylor and Plummer (2007).

Three broad sets of factors are highlighted as determinants of regional development success are discussed. The first of these are structural in nature, seen in the proximate presence in the region of competitive business firms and supportive institutions. It is argued that the best performing regions will be those with a critical mass of high-tech business firms, knowledge-based enterprises with active R&D programs, and a highly skilled workforce supported by institutional intervention through technology diffusion programs, university innovation, a supportive regulatory framework, support for new business start up, and network building initiatives.

The second approach says that the presence of business and institutional entities per se is not sufficient as it doesn't take into account actions that result from corporate and institutional culture and behaviour in a generally mistrustful global competitive environment. According to this approach, regions will be successful in their growth and competitiveness if they have sufficient firms and institutions that advocate collaborative arrangements built on trust and reciprocity, take on social and environmental responsibility, build social capital in the regional community, facilitate learning and knowledge exchange, and other 'untraded' interdependencies (Storper 1997) like regional community leadership.

Whereas the first two approaches rely on the actions of business and institutional entities for regional success (so-called embedded institutionalism), the third approach sees regions being much more than a set of 'atomised' firms and institutions operating within global market constraints. It sees regional success resulting from a much wider spectrum of regional attributes. It recognises that each region is a unique mix of endogenous economic, social, cultural, natural and historical attributes, all of which are important in determining a region's growth and competitiveness. In particular, this approach does not take an 'embedded' entity approach to regional development as the main driver, but an approach that is based on taking a broad and enterprising approach to a region's human capital. The approach argues that the most successful regions will be those that can best utilise its human capital in enterprising ways, and not let it remain significantly underutilised or have it leached out to benefit other places, in concert with other regional attributes. It advocates that regions develop a human capital strategy that embraces education institutions as well as other regional organisations, that focuses on the translation of creative ideas, outside of entity strictures, into meaningful outcomes of regional significance.

Finally the paper briefly discusses the role that higher education has played in regional development as an indicator of ways VET may similarly enhance its role in this area. The focus in this area is deliberately directed towards the teaching and learning, rather than the research and innovation, aspects of university activity to ensure greater relevance for discussion about the role of VET in regional development.

2. Structural determinants

The structural or entity-based approach to determinants of regional growth and competitiveness suggests business enterprise structures and institutional support processes put in place at the top are important for kick-starting a region's development. Under this approach, bottom-up regional processes and local leadership take the facilitating programs of higher level institutions and try to make them fit with local circumstances. According to this approach to regional development, business enterprise agglomeration, regional innovation systems, and institutional thickness are the means by which business utilise regional proximity to generate competitive outcomes.

The concept of structural agglomeration at the regional scale is where firms join together in some form of networking to share knowledge and to reduce costs. Three broad approaches to this are discussed in the literature; agglomeration to take advantage of certain structural characteristics of the region itself (Porter 1998, 2000; Porter and Kretzschmar 2003), agglomeration of entities in the region around an existing globally competitive business enterprise (Reich 1991; Kanter 1995), and agglomeration around a system of regional innovation (Lundvall and Johnson 1994).

2.1 *Business agglomeration*

The clustering approach advocated by Porter and others suggests that business enterprises will share information and skills; undertake joint marketing programs; exchange knowledge; engage in buyer/ seller agreements and so on where there are certain structural considerations in the region. These processes will positively impact on business enterprise productivity levels and hence regional competitiveness. Those endogenous factors aiding the clustering process in the region are said to include the size of local market demand for business output, the size and nature of available factors such as skills and knowledge, the ability of local firms to form upstream and downstream regional business enterprise connections, and the flexibility in businesses themselves to readily implement change when required.

2.2 *The globally competitive core business enterprise*

The second regional business enterprise networking model appearing in the literature is based around an existing globally competitive business enterprise (Kanter 1995). The network is seen as a way of increasing the skills and ideas of local people through transfers from the key enterprise, to enable the region to develop a critical mass of globally competitive enterprises.

According to Kanter it is not enough to simply build a local industry cluster in the Porter sense, there needs to be global links through so-called foundation organisations with core capabilities or 'magnets', that reinforce local skill levels and attract others, and there needs to be the infrastructure, the quality of life, or the 'glue' to hold it all together.

"Cities will thrive as international centres to the extent that the businesses and the people in them can learn more and develop better by being there, in communication with each other, rather than somewhere else" (p354). And:

"The infrastructure for collaboration consists of the pathways by which people and organisations come together to exchange ideas, solve problems or forge partnerships". (p.363).

2.3 *The regional innovation system*

The third form of business networking that is seen as a regional development driver is where businesses come together around processes of R&D and innovation and where business success reflects the ability of firms to learn new practices and competencies (Lundvall and Johnson 1994). The regional innovation system (Braczyk, Cooke & Heidenreich 1998) is seen as a facilitating innovation environment that brings together a number of regional characteristics that lead to greater take up of technology (eg R&D, ICT, e-commerce, etc) by business firms at the regional

scale. Universities, science and technology parks and other R&D institutions are often seen as being part of the regional fabric to provide this facilitating innovation environment. They are arguments based around proximity and embeddedness of innovation. Examples such as Silicon Valley, Boston's Route 128, Cambridge research park, the North Carolina Research Triangle, Baden Württemberg, and the new Oresund Science Region (Sweden/Denmark) are generally put forward as the case examples where such systems are demonstrating success.

Lundvall (1994) stresses the importance of interactive learning as the basis for innovation and change in modern developed economies. He defines the learning economy where success reflects the capability to learn (and forget old practices); where change is rapid and old skills get obsolete and new skills are in demand; where learning includes skills and the building of competencies, not just increased access to information; where learning is going on in all parts of society, not just high-tech sectors; and where net job creation is in knowledge intensive sectors.

2.4 *Institutional thickness*

Institutional thickness is another structural concept that has been coined to refer to the region that is able to embed the strengths of local institutions in the regional development process. Institutions in this sense include both public and private institutions with some local presence and with external affiliations. According to Amin and Thrift (1994, p.16), the economic success of a locality is heavily dependent on its 'proven institutional capacity'. This capacity or 'thickness' is said to derive from having numerous and diverse institutions frequently interacting and collaborating to share knowledge and a common agenda.

The role of institutions in a region's economic development prospects arises from the influence of their culture of decision making on the social dynamic of the region. According to Hodgson (1989):

"Institutions are regarded not merely as rigidities or constraints, but as structures and routinized activities which affect the dispersal and cognition of data and mould individual preferences and actions in many other ways." (p. 244). And:

"Institutions are regarded as imposing form and social coherence upon human activity partly through the continuing production and reproduction of habits of thought and action." (Hodgson 1998, p. 180).

2.5 *Learning and knowledge*

According to Druker (1993), productivity in the economy is rapidly becoming dependent on the generation and application of new knowledge. Knowledge creation and transfer more than at any other time has become the single most important ingredient for regions being competitive in the modern global economy.

"This adds a new entry to the list of currently important location factors influencing the geographical pattern of industry: the knowledge assets and learning abilities of particular local, regional or national milieus." (Maskell et al 1998, p. 21).

What is the process by which knowledge and learning are actually converted into better regional development outcomes? It is too simplistic to say it is merely absorbed into the decision making process of the business firm as Porter might argue. It's too simple to say it requires high-end research institutions as demonstrated in cases like Silicon Valley, Boston's Route 128 and the Oresund Science Region. It has to be linked to the innovation process, opportunity recognition, skill development, and a business venture. More than that, there needs to be a milieu in the region that facilitates these processes.

There are two factors that influence regional specificity in this regard - the nature of the knowledge creation and transfer process itself and the attributes of the region in which the knowledge is being applied, including the relationships between its various actors and agencies. To better relate the contribution of knowledge to economic activity outcomes, as opposed to it being an abstract concept, Lundvall and Johnson (1994) identified four types of economically relevant knowledge:

"Know-what refers to the knowledge about 'facts'... close to what is normally called information... Know-why refers to scientific knowledge of principles and laws of motion in nature, in the human mind and in society... Know-who refers to specific and selective social relations... to know who knows what and can do what... Know-how refers to skills - ie. the capability to do different kinds of things on a practical level." (pp. 27-28).

According to Lundvall and Johnson (1994), 'know-what' and 'know-why' can be marketable commodities, while 'know-who' and 'know-how' generally cannot be removed from their social and human context (i.e. region), except where parts of it can be codified and transacted via patents, etc. (p. 38).

Gibbons et. al. (1994) distinguishes between Mode 1 knowledge, which is scientific and cognitive-based and embodied in patents, agreements, producer accreditation, quality control standards, etc, and Mode 2 knowledge which is characterised more by the context of its application and has a wide range of stakeholder interests. There is therefore greater use made of Mode 2 knowledge as a regional development driver. It is also characterised by transient cross-disciplinary research teams who are prepared to relinquish control of the knowledge to stakeholders for the greater public good.

Malmberg et. al. (1996) and Malmberg and Solvell (1997) have described the process where there are three important regional characteristics that help build knowledge accumulation locally:

- lower costs and time associated with knowledge transfer in a local context and a socialising process which tends to reinforce the local innovation process
- knowledge leakage from a regional milieu will be sluggish - whereas knowledge embedded in physical and human capital outside of a regional framework can move quickly across large distances in a global economy, the social capital embedded in the regionalised innovation process, tends to remain historically tied to a particular 'place' through local circumstances, and
- the region attracts knowledge, through the social capital of local actors and agents interacting with particular segments of the external environment.

3. 'Untraded' regional interdependencies

The second set of approaches in the literature that identify the determinants of regional growth and competitiveness suggests that there are deeper organisational behaviour issues, management values, reciprocity, and cultural norms of business enterprises and institutions that influence the degree to which firms and institutions will be embedded in endogenous regional development processes. It is argued that the simple presence of competitive business and institutional structures are an insufficient determinant and that there are softer regional milieu 'atmospherics' or 'dynamics' (Maillat 1995) such as 'social capital', 'trust', 'loyalty', 'learning regions', and other cultures and norms that are important in determining the actual actions of business and institutional entities. Storper (1997) has labelled these 'untraded' interdependencies.

The discussion in the literature on regional development theory about this socialising behaviour and networking of agencies and agents through regional proximity and association includes:

- Trust as a stimulus for local social capital and regional organisation (Fukuyama 1999; OECD 2001; World Bank 2001; Putnam 1993, 2000).
- Unequal power relationships and organisational control (Taylor and Thrift 1982; Clegg 1989; Dicken and Thrift 1992; Taylor and Conti 1997).
- Institutional culture (Hodgson 1996; Amin 1999).
- Learning exchange at the firm level (Malmberg et al 1998; Asheim 1997; Maskell et al 1998).
- Institutionally supported local governance (Halkier 1992).

3.1 *Social capital*

This refers to the more intangible but distinctive qualities of “place” that make it worthwhile for those in the community and in business enterprises and institutions to invest their money, time, energy and knowledge in collaborative ways to enhance the efficiency and quality of local and regional society. It seeks to underpin a region's development with trust, the sharing of understandings and coordinated actions (Bolton 1992, Putnam 1993 and 2000, Etzioni 1994, OECD 2001).

Social capital relates essentially to networked social and business relationships in a place that are based on trust, reciprocity and loyalty. It has been defined by Putnam (2000) as the, “connections among individuals – social networks and the norms of reciprocity and trustworthiness that arise from them.” (p.19). According to the World Bank (2002), “social capital refers to the institutions, relations and norms that shape the quantity and quality of a society’s social interactions”. For Bowles and Gintis (2002), “social capital generally refers to trust, concerns for one’s associates, a willingness to live by the norms of one’s community and to punish those who do not” (p.1).

“Voluntary cooperation is easier in a community that has inherited a substantial stock of social capital, in the form of norms of reciprocity and networks of civic engagement. Social capital here refers to features of social organisation, such as trust, norms, and networks that can improve the efficiency of society by facilitating coordinated actions.” (Putnam 1993, p.167).

3.2 *Organisational control*

Important among the behavioural influences to regional growth outcomes are the internal machinations of organisations – particularly those with head offices located elsewhere.

In contrast to the notions of trust, co-operation, and reciprocity that underpin such concepts as social capital, clustering, learning regions and so on, the enterprise-segmentation model, first proposed by Taylor & Thrift (1982 and 1983), offers a different interpretation of business enterprise interrelationships and their impact on regional dynamics. This approach begins with the proposition that relationships between business enterprises are normally asymmetric. They display elements of dominance and subordination. Power is ascribed to the control of resources, with the most powerful firms acting as centres of control and of strategic decision-making, and this serves to draw other enterprises into functional networks (Taylor, 1995). As it was put by Dicken & Thrift (1992, p. 287):

“Production is organised primarily by business enterprises operating within extremely complex, dynamic networks of internalised and externalised transactional relationships of power and influence ... co-ordinated and effectively controlled by ‘centres of strategic decision-making’... . Business organizations, therefore, organise production system ... but are themselves produced through complex historical processes of embedding.”

Taylor & Thrift (1983) elaborate a typology of business enterprises and the nature of the positions they might occupy within a generalised network structure. What is suggested is that position within power networks endows enterprises (and thus the regions and communities within which they are embedded) with distinctive operational characteristics and growth potentials. Network peripherality of business enterprises and institutions in a region, for example, is associated with: (1) local market exploitation and not export-oriented growth; (2) the provision of unskilled, ephemeral jobs and little labour training; (3) the slow or late acquisition of new technologies coupled with the loss of local inventions; and (4) a tendency toward geographical centralisation (Taylor, 1987). Those same characteristics and potentials, in turn, affect local society; its local mode of social regulation and its ability locally to generate and attract further enterprise, investment and employment. As such, there is a dialectical relationship between enterprise and place based on inequality and differential power that affects the dynamic of change in both business enterprises and localities. The spatial placement of an organisation’s research and development, production and distribution elements, for example, follows this pattern.

The reverse situation occurs where there is centrality in a business or institutional network. It is therefore more useful for successful regional development to ensure such network centrality rather than having a collection of peripheral business and institutional entities.

Under this approach to regional development there are three principal drivers. First, there is local control of technology, endowing particular places with competitive advantage. Second, there is the impact of large corporations, diminishing growth in localities from which they extract surplus value while enhancing growth in those from which they exercise control. Third, there are the growth benefits that derive from the network relationships of the locational integration of smaller firms created by historical processes of embedding.

3.3 *Learning regions*

The concept of the 'learning region' has been used to capture the socialisation process inherent in knowledge creation and transfer locally. According to the 'learning region' model, all of a region's elements (institutions, business firms and individuals) are constantly in a collaborative learning mode to build their competencies and skills in a way that relates to 'place' objectives (Lundvall and Johnson 1994). It adds a behavioural and cultural perspective to the structural determinants of regional development discussed earlier as seen through the regional innovation system.

In this regard, Florida (1995) says:

*"In effect, regions are increasingly defined by the same criteria and elements which comprise a knowledge intensive firm - continuous improvement; new ideas; knowledge creation and organisational learning. Regions must adopt the principles of knowledge creation and continuous learning; they must in effect become **learning regions**."* (p. 532).

At the heart of the regional learning process is the concept of social capital; as Putnam(1993) observed:

"By analogy with notions of physical capital and human capital – tools and training that enhance individual productivity – social capital refers to features of social organisation, such as networks, norms and trust, that facilitate co-ordination and co-operation for mutual benefit. Social capital enhances the benefits of investment in physical and human capital and is coming to be seen as a vital ingredient in economic development around the world"

Ashiem (1997) argues that the regional milieu provides an ideal context to enable the necessary fusion of the economy with society and that the 'learning region' can transcend the usual contradictions that have always existed between functional (or sectoral) priorities and territorial (or spatial) priorities by integrating industry, global and regional knowledge and innovation.

Learning and the mobilisation of knowledge are seen as the well-spring of innovation that transforms 'learning regions' into regional innovation systems (Braczyk, et al, 1998). Innovation, in turn, leads to the creation of new businesses and the constant revitalisation of existing businesses that allows them to remain internationally competitive. According to Malmberg and Solvell (1997), such an innovative milieu is a place with common behavioural practices and a technical culture within which knowledge can be developed, stored and disseminated. These milieus are argued to have four basic characteristics:

1. A group of actors (firms and institutions) that are relatively autonomous in decision-making and strategy formulation.
2. A specific set of material, immaterial, and institutional elements combining firms, infrastructure, knowledge, know-how, authorities, and legal frameworks.
3. Interaction between actors based on cooperation.
4. A self-regulating dynamic that leads to learning.

3.4 Regional organisation and leadership

Bottom-up organisation and leadership for regional development has been a feature of the regional community landscape in Australia for 20 years and potentially have a significant planning and facilitation role. To date their role has been constrained by the requirements of the government programs that support their existence, and while they have been active in designing strategic plans it may be argued that they have been less effective as long term facilitating/ supporting agents to bring about actual change through processes of knowledge exchange, learning and enterprising (Garlick, Taylor & Plummer forthcoming). Regional development driven from within requires an environment of free-flowing ideas and enthusiasm for enterprising outcomes and leadership that can facilitate the mobilisation of endogenous attributes across a diverse spectrum to enable them to better work together.

4. Enterprising human capital

The enterprising human capital approach to regional development starts by making a distinction between a region's human resources and its human capital. The latter is concerned with the creation, refinement and enhancement of human resources through education, *not* through training. In this regard education is about equipping people to work where they will have some influence in shaping the nature of future economic, social, cultural and environmental activity (Le Heron & McDermott, 2001; Cohen Wesley & Goe, 1994; Patchell & Eastham, 2001). It is about providing individuals with an understanding of the facets of the economy and society they live in, the processes of change that run through them (Cooke, 1996; Hudson, 1994; Nijkamp & Mouwen, 1987; Saxenian, 1994), and how they might play an effective role influencing change.

On the other hand, training equips people for what is known now. It is about providing people to meet the labour needs of existing local employers as a mechanism to promote local firm growth within existing structures of business and institution (Leonard, 2001). It is about conforming to and supporting winners that others have picked.

It is argued (Garlick, Taylor and Plummer, 2007) that in the context of achieving meaningful regional development in a competitive global environment, human capital comprises two elements:

- (a) 'Creative human capital'
- (b) 'Enterprising human capital'

By creative human capital we are referring to the capacity within a region to generate new ideas and the non-linear thinking needed to identify new directions that respond to regional needs (Florida 1995 and 2002, Maskell et al 1999, White 2002). According to Florida (2002):

"I define the Creative Class to include people in science and engineering; architecture and design, education, arts, music, and entertainment whose economic function is to create new ideas, new technology, and/ or new creative content. Around the core, the Creative Class also includes a broader group of creative professionals in business and finance, law, health care and related fields. These people engage in complex problem solving..."
(p.8).

According to Florida (1995, 2002), and others, the region with the highest concentration of these creative folk will prosper. The answer to regional development is simple. Spend public money to ensure there are strong connections between the city/region and a university or similar institutional presence, to have public authorities provide trendy sidewalks and an upbeat entertainment culture and to put in place other incentives to attract bohemians and an eclectic array of minorities so as to push a region's ranking up against the so-called 'Creativity Index' (pp. 283-314).

There are a number of concerns with this 'ready made' and naive approach to regional development which miss the point of being in a competitive and increasingly corporatised world. Prime among the concerns is that it is not the generation of the idea that actually creates regional development outcomes, but the *transmission and the translation* of the idea into outcomes through a process of being 'enterprising'. Associated with this concern is that the Florida argument is 'elitist',

suggesting the engines of regional growth are those in the arts, entrepreneurs, investment angels and other professionals. In reality however the tacit knowledge and 'ideas' that might create growth and change at the regional level are something that is far more pervasive across many areas of regional society, occupations and ages, and not isolated to a small group of elite occupations in central locations.

'Enterprising' people in the regional development context is defined as those that take an idea and turn it into an outcome using the regional attributes at their disposal (Garlick, Taylor & Plummer, 2007). They are not only people that some might call 'can do', they are not reckless with other people's money, as they understand the way markets operate, can access finance, can see an opportunity, understand risk management, without necessarily being risk takers, and can mobilise resources, particularly teams, to good effect. They are ostensibly outcome-oriented people, and they are an undeveloped resource that exists across demographic groups in most communities.

It is argued that these ubiquitous but generally latent abilities can be activated at the regional scale through the facilitation of temporary coalitions where ideas, energy and resources come together to generate convergent regional directions. These temporary, but idea-focused, coalitions also have energy and the capacity to turn their ideas into enterprising outcomes in the regional community. These coalitions of interest form and disband depending on the idea and enterprise formation processes being pursued at the time (Plummer and Taylor 2001).

"...it is not the setting up of a business that is the 'enterprise culture'. Rather, the 'culture' is what brings people together in the first place to create, re-create, mould and extend coalitions that seek to exploit business opportunities."...It is not picking winners and subsidising them. It is about creating forums where potential coalition members might meet and generate ideas - people from the small firms sector, the corporate sector, the public sector, and the local community." (Plummer and Taylor 2001a, p.12).

It is important to draw out the non-trivial distinction between what often is called an *enterprise culture* for business generation and an *enterprising community* in the regional context. The distinction between the two concepts is at the root of the main argument that sees a difference in regional development determinants on the one hand between the structural and behavioural entity-based approaches described in sections two and three, and a community engagement approach focused on enterprising human capital. One is about organizational structures and processes with rules, norms and behaviour, and the other is about the potential of endogenous human capital to achieve regional outcomes through various mutual partnerships. One is formal and inflexible, the other is informal and made up of groups that change depending on need.

5. The role of higher education in regional development

Tertiary education institutions are potentially key players in building the knowledge, learning, and enterprising capability of the regional community in which they are located. Their role in this however has only recently been recognised (Goddard 1997, Charles & Goddard 1997, Garlick 1998, 2000, Chatterton & Goddard 2000, OECD 2000, Charles et al 2001, OECD 2006). Because of their regional presence and their prime focus on learning, together with their independence, networks, and research and teaching capabilities, tertiary education institutions ought to be well placed to take the lead in fostering innovation and enterprise at the regional scale.

In Australia the role of the university as a tool for regional development through knowledge creation and distribution, as opposed to simple transactions impacts, is relatively new and still relatively patchy (Garlick 2000, 2002, 2003, Garlick & Pryor 2002). There are some encouraging developments however. Many Australian universities now have regional and community engagement strategic plans, agreements in place with their regional communities, senior officers with coordinating roles, and initiatives of recognition and reward to encourage greater staff involvement. The peak group the Australian Universities Communities Engagement Alliance (AUCEA) has 35 member universities, runs an annual conference and has a major initiative on benchmarking region and community engagement by its member organisations.

6. The human capital pyramid

The key issue for regional communities seems to be that the efforts by HEIs are mainly directed at the top end of the human capital pyramid, targeting those groups which bring quick economic benefits rather than assisting with the broader process of community change at all levels and across all sectors. Consequently, good activities in the community are not achieving a *transformatory* effect, reaching out into community and inspiring those to respond to the new opportunities of the knowledge economy. HEI core business tends not to have the depth or breadth in its reach-out to the community.

In relation to depth, HEIs tend to concentrate their vertical reach to a particular segment of the region's human capital that has high level technical academic exposure (i.e. science, engineering, medicine, etc) and an enthusiasm and direction for advancement. These are generally a small cohort of the younger population. It generally tends not to extend to other areas of available community human resources such as those in primary and secondary education, those in older age categories, and those in the 'non-innovative areas' of regional society (e.g. humanities).

In relation to breadth, HEIs have concentrated their actions in their horizontal reach to the process of idea generation and its conversion into products and processes but there is limited transmittal or translation into outcomes of meaningful usefulness for society and the environment locally or globally (i.e. market penetration and growth). This connotes the need for skills in business strategy, product development, risk assessment, accessing business finance, human resource management and so on. Such an approach requires complementary comprehension of the way society works and how it can be a supportive milieu for sustainable development, and a focus on outcomes that is timely in this regard.

The solution is for the HEI to reach out and reach down into the human capital pyramid to ensure a breadth and depth in its connectivity with all aspects of the community's human capital. There are a variety of strategies the HEI can use to facilitate this, including learning pathways with other education sectors, lifelong learning, upskilling programs, internships, IBL, community problem solving, entrepreneurship, and so on.

7. The engaged university

A much stronger engaged connection by universities, with a focus on outcomes not just process, is needed. Universities can establish this by:

- tailoring teaching and learning programs to areas of regional skill need, and building in course elements that will facilitate an enterprising culture among the students
- introducing initiatives such as business incubators, practicums, scholarships and awareness-raising programs to maximise undergraduate attendance and retain graduates locally
- targeting local research in partnership with local community groups, and
- contributing through leadership and strategic focus, marketing and promotion, and the provision of infrastructure.

8. Entrepreneurship and an enterprising education

Entrepreneurism has been defined as 'the ability to perceive opportunities and to tap the resources necessary for exploiting them' (Volkman 2004). Universities argue this 'ability' is something that can be learned and taught and involves two skills:

- the ability to detect or perceive an opportunity, and
- the ability to work out what resources are needed, and how they can be obtained, to realise the opportunity.

It is argued that the ability to recognise and operationalise opportunities does not occur equally in all people, and that learning can enhance both the depth and spread of this ability. Hence, many

universities now have such entrepreneurship programs in place. Invariably they are business-firm oriented programs with little in the way of broad-based regional connectivity.

'Focused' entrepreneurship programs in universities are generally attached to business and engineering schools, incubators and science and technology parks (Streeter et al. 2002). However, university-wide entrepreneurship programs need to target students outside the fields of business and engineering. They need to encourage the spread of entrepreneurial teaching to non-business students in non-business disciplines of the university. As Streeter et al. (2002) explain, 'The aim is to produce graduates who are capable of being innovative and who can recognise and create opportunities, take risks, make decisions, analyse and solve problems, and communicate clearly and effectively'; in other words, a generalised teaching and learning approach to encourage students to think and behave in an enterprising way. Course content can include dialogue, arbitrage, problem-solving, team work, finance, legal issues, management, networking, business planning, and market research.

When there is engagement between university teaching and learning and the objectives of the community, we believe this university-wide or 'radiated' approach to entrepreneurship can add value to a community's human capital and outcomes generally.

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Selected Australian literature

Dr Kaye Bowman

Introduction

This section of our literature review examines recent Australian research relevant to the general topic 'Matching VET offerings to regional development skills needs and particularly to our research projects specific questions. For five regions of Australia, our project seeks answers to three questions:

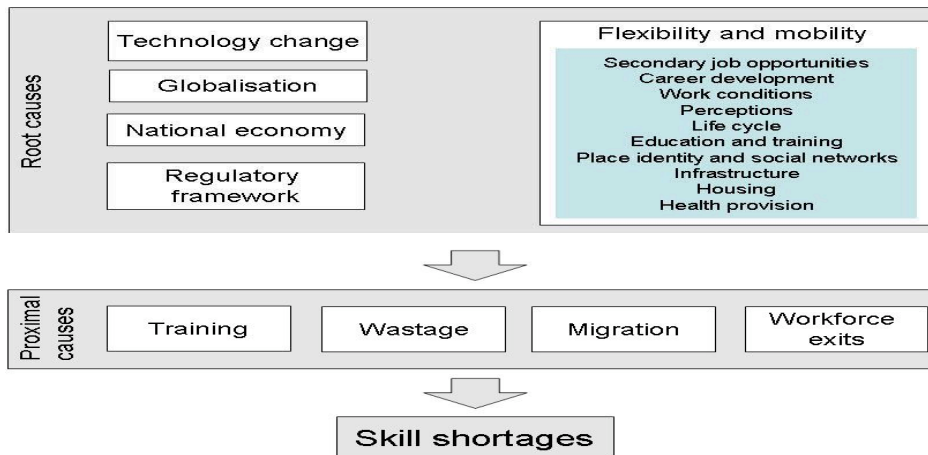
- How well does the range of VET offerings meet local skills needs based on realistic economic opportunities?
- In what ways can VET become more mobile/flexible to meet local and regional needs?
- What contribution can local community frameworks make to meeting skill needs, fostering innovation and building social and human capital in communities?

Streams of relevant Australian research include on tailoring VET supply to demand, flexible and responsive VET and VET regions partnering.

Tailoring VET skills supply to demand

A report on Australian regions and skills shortages by the Bureau of Transport and Regional Economics (2006) provides a framework for considering skills demand and supply (Figure 1). The framework identifies drivers of skill needs at two levels-the macro or national level and the regional or proximal level- as well as key factors that influence where people choose to live.

Figure 1 Factors affecting skills demand and supply



Source BTRE, 2006, p x.

The four key drivers of demand for skills at the macroeconomic or national level are:

- Technology change
- Globalisation
- National economy, and
- Regulatory framework.

The proximal or local causes or drivers of overall skills levels include:

- Training—the number of people entering training
- Wastage—the number of people trained in a skill, but are not working in that occupation
- Migration—the impacts of the global labour market, and
- Workforce exits—the number of people permanently leaving the workforce.

Key determinants of where people choose to live and work include: the availability health services, education and training, housing, jobs and career opportunities and infrastructure, and people's perceptions of lifestyle and community (shown in the box on the right hand side of figure 1).

Determining demand for VET skills at the macro level

Research about VET skills demand forecasting is included in the major program of work of the NILS/CPELL research consortium, commissioned by the NCVER. Consortium members have looked into how best to tailor VET to the emerging labour market to achieve a well skilled future for Australia. Some of the work has been at the regional level.

Richardson and Tan (2007) of the NILS/CPELL consortium have examined VET skills demand forecasting to determine its usefulness. They explain that the complexity of the economy is such that that it is not possible to make accurate projections of future skill needs in any detail. It is extremely difficult to forecast how demand is going to evolve based on the macro-level drivers. Given all the factors involved in determining industry demand for skills, inaccuracy is not surprising; it is a reflection of the difficulty of the task.

These researchers note that the VET sector in Australia is oriented towards an industrial training model. An industry by occupation focus is taken to aid the identification of drivers of skills needs, that is, different industry growth and decline patterns, technological change etc. However, because most specific skills are found widely dispersed among the different industries, it is the occupation that is used as a proxy for determining demand for VET skills. As a first level of analysis, demand for VET skills is inferred from the number of people who are employed in occupations that are deemed to require those skills. How occupations relate to the Australian Qualifications Framework is shown in Table 1. AQF levels 2 to 5 are VET related.

The shortcomings of statistical labour market forecasting are well illustrated by evaluations of the robustness of the MONASH (industry by occupation) model that is the most widely used skills forecasting model in Australia and one of the best of its kind in the world. An evaluation by Access Economics for the Victorian Office of Training and Tertiary Education, (as reported by Richardson and Tan) found:

- The projections of the levels of employment were reasonably reliable at an aggregate (Australia-wide) level.
- Reliability fell as projections were provided at a more detailed level, disaggregating by region, by occupation and by qualification level.
- Reliability was too low for projections to be valuable for planning VET capacity at specific skills or regional level.
- Reliability fell as the length of the forecast period rose.

Table 1 How occupation groups link to the Australian Qualification Framework

Code	Major Occupational group	AQF level	Commensurate levels of qualifications
1	Managers and Administrators	1	Bachelor degree or higher qualification
2	Professionals		
3	Associate Professionals	2	Diploma or Advanced Diploma
4	Tradespersons and Related Workers	3	Certificate III or IV
5	Advanced Clerical and Service Workers		
6	Intermediate Clerical, Sales & Service Workers	4	
7	Intermediate Production & Transport Workers		Certificate II
8	Elementary Clerical, Sales & Service Workers	5	Certificate I or completion of compulsory 2ndary education
9	Labourers and Related Workers		

Source: Australian Standard Classification of Occupations (ASCO), second edition. ABS cat. no. 1220.0.30.001.

Richardson and Tan’s own evaluation of the projections from the MONASH model compared with actual outcomes was that even at the major occupational group level, the *direction* of change sometimes was incorrect—projecting growth when there was decline and vice versa.

In the light of the virtual impossibility of reliable projections of demand for skills, Richardson and Tan suggest that the best strategy for obtaining a broad picture of future VET demand within an economy involves a combination of “top down” and “bottom up” tasks. Their suggested steps are:

- use the best available model of the economy to project the expected growth or decline of occupations, at a fairly broad level
- check these projections against other sources of information, such as those contained in the DEWR job prospects
- confine the projections to around five years and update them regularly with the latest information
- retain an Australia-wide focus but disaggregate by skill level or type, if and where more detail is required
- distinguish skills that are in growing demand from those in declining demand, and skills that take a long time to learn and so gear up to teach
- undertake separate, bottom-up studies of skills demands for those major skills that take a long time to learn—it is for these that the ability to make accurate projections is of most importance, and
- use local information from employers’ associations and like sources to refine the broad projections, where a regional labour market is important, and adjust broad-level forecasts in the light of local information to make them more useful.

The apparent match between VET supply and demand at the regional level

- To further test the quantitative approach to VET demand supply matching, members of CPELL have compared regional VET participation data provided by the NCVER (that is, the number of people in training) with regional demand for VET, as predicted by the region's industry and population bases, using regression analysis (Walstab & Lamb, 2007).
- The regions considered were the ABS Statistical Divisions (Labour Force Regions) regions in non-metropolitan area, and Statistical Subdivisions regions in the capital cities.
- The 2004 NCVER VET student data was analysed including by qualification level-to relate it to occupations (refer to table1).
- The apparent demand for VET skills model was made up of two sets of factors.
- Demographic factors- that included population size, language background, indigenous status, educational attainment levels, and remoteness (based on ARIA).
- Economic factors that included levels of unemployment, and the regional industry by employment profile (main ANZIC categories).

Walstab & Lamb (2007) found that regional VET participation rates are influenced to a large degree and mainly by economic factors-or the industry and occupational mix. The demographic or social factors are only significant regarding participation in higher level VET, at the diploma and above levels. However there were several instances where these variables did not explain very well the actual VET participation levels.

To better understand what was going in those regions where the regression analyses did not explain very well the results, members of CPELL undertook three case studies Walstab and Clarke (2007). They found the local context acts on either promoting or constraining the responsiveness of VET. They observed three models:

- a market based model, in a region with higher than predicted levels of VET participation. In the region there were a range of providers competing, all of whom had established industry/businesses links to ensure relevance of their training programs (i.e. involving skills assessment procedures etc) and that they delivered flexibly
- a community partnership model in another region with higher than predicted levels of VET participation. This region had strong partnerships between providers and industry and community member clients and the providers worked collaboratively and cross-referring clients to each other as need be. This arrangement was driven by the local government, and
- a no apparent model, in a region with lower than predicted levels of VET participation. This has no model because of issues such as large distances and low population density, narrow industry base, VET staff attraction issues and limited apparent linkages between education providers themselves.

Walstab and Clarke (2007) concluded the common critical elements important to the extension of either the competitive or the collaborative model to other regions were providers:

- understanding needs through information from the community to identify potential learners and their training needs and business to identify training needs, skills gaps and changing skills demand
- responding to need through flexibility-in course design, multiple delivery modes and locations, and staffing arrangements
- working in partnership to maximise the value of resources-across the community, between sectors, within and between providers, and
- improving through evaluation-assessing outcomes, understanding destinations, seeking feedback.

Demands for VET skills that are not easily quantified

Other members of the NILS/CPELL research consortium, Lowry, Molloy & McGlennon (2007), caution us against relying entirely on occupations and ‘qualifications as proxies for skills’. They have observed that the way skill is defined has important consequences for the way future skill requirements may be identified. Qualifications do not always capture the actual skill requirements of jobs. Skills can usefully be thought of as a heterogeneous concept comprised of cognitive, interactive and motor skill dimensions. Table 3 outlines these three skills types and the tasks and scale for each skill dimension in descending order of complexity (ie. the less complicated have higher numbers).

Table 3: Scale of complexity for skill categories

Cognitive Skills ('Data')	Interactive Skills ('People')	Motor Skills ('Things')
0 Synthesising	0 Mentoring	0 Setting Up
1 Coordinating	1 Negotiating	1 Precision Working
2 Analysing	2 Instructing	2 Operating –Controlling
3 Compiling	3 Supervising	3 Driving-operating
4 Computing	4 Diverting	4 Manipulating
5 Copying	5 Persuading	5 Tending
6 Comparing	6 Speaking -Signalling	6 Feeding -Off bearing
	7 Serving	7 Handling
	8 Taking Instructions	

Note: A complete list of definitions of the workers’ functions against the scale in Table 3 can be found at <http://www.oalj.dol.gov/public/dot/refrnc/dotappb.htm> (USDOL, 2000).

Source: Lowry et. al., 2007

Using the above US Department of Labour’s Dictionary of Occupational Titles Framework skills typology, Lowry et al interviewed employers who unanimously agreed that interactive skills followed by cognitive skills would be the skill dimensions in highest demand over the coming decade. This is not to down-play the requirement for motor skills, there are still obvious requirements for these but it is clear that the changing nature of the workplace and terms of technological and social changes has led to an increased emphasis on interactive and cognitive skills. Lowry et al note that previous research conducted in Australia in the 1990’s also shows that interactive skills and cognitive skills have taken precedence over motor skills. How best to teach interactive skills surfaces as a key challenge for the VET sector.

Shah & Burke (2003) reinforce this last point. They note that macroeconomic studies reveal a high degree of complementarity between skill and technology but not between trade and skills. Recent technological change, especially the intensification of information and communications technologies (ICT) in the economy, is changing the composition of skills in a number of different ways. People skills (or interactive skills) are crucial to this process. ICTs allow organisational structures to vary from traditional hierarchical forms; they enable lateral communication and coordination and a degree of increased autonomy and a changed mode of supervision which requires different skills.

Proximal or local causes or drivers of overall skills levels

Regarding more training as a solution to an apparent unmet demand for VET skills, Richardson et al point out, that it is a misunderstanding to assume that determined demand for skills, based on the number of people employed in occupations that require such skills, equates to the number of new VET graduates that will be required. There are many ways that the labour market matches skills supply to demand. New VET graduates play only a modest part in filling skilled vacancies. Other sources of VET supply are people who learn the required skills on the job and people who already have the required skills, but are working in other jobs (wastage), out of the labourforce (workforce exits), unemployed (wastage) or migrants. In other words, we need to take into account the proximal factors at the local level of the BTRE model provided in Figure 1:

- Training—the number of people entering training
- Wastage—the number of people trained in a skill, but are not working in that occupation
- Migration—the impacts of the global labour market
- Workforce exits—the number of people permanently leaving the workforce.

On training as a strategy, Richardson (2007) suggests that only shortages at level 1 of her four level schema for classifying skills “shortages” (Table 4) represent a severe obstacle to the expansion of firms and require longer term planning by the VET system.

Table 4 Four different types of skills shortages: Richardson’s schema

Level 1 shortage	There are few people who have the essential technical skills who are not already using them AND there is a long training time to develop the skills. <i>Only these skills require long term planning by the VET system</i>
Level 2 shortage	There are few people who have the essential technical skills who are not already using them BUT there is a short training time to develop the skills
Skills mismatch	There are sufficient people who have the essential technical skills who are not already using them, but they are not willing to apply for the vacancies under current conditions
Skills quality gap	There are sufficient people with the essential technical skills, not already using them, who are willing to apply for the vacancies, but who lack some qualities that employers think are important.

On wastage, a limited synthetic cohort analysis of occupational pathways shows that skill utilisation is quite different amongst men compared to women. Of note particularly is that there is a steady outflow of skilled males from trades occupations. In relation to women, many in clerical, sales and service occupations leave their jobs (or, probably, reduce their hours) at prime childbearing ages, and then re-enter these jobs at older ages (Tan & Richardson, 2007). Wage incentives, work conditions such as flexibility of hours and management practices influence skilled workers decisions to stay in an industry as do poor perception of the industry and a lack of appropriate training

- With regard to *migration*, the BTRE suggests encouraging the migration of domestic workers can reduce some local shortages, but “poaching” workers from one region may create shortages elsewhere.

Workforce exits—the number of people permanently leaving the workforce-tare anticipated to increase in future given the ageing of Australia’s population and is giving rise to a growing interest in worker retention strategies among employers.

In summary, BTRE suggests that regions need to look at all of the proximal drivers of skills levels as these are the most relevant when attempting to address skills needs/shortages in a particular area. Local employers and regional groups can have influence on these drivers as opposed to the other more macro set of drivers (see figure 1).

Other factors- Key determinants of where people choose to live and work

As the BTRE model identifies (see figure1), there is also a range of location factors that affect patterns of skills demand and supply. BTRE found many regions are experiencing difficulties in recruiting and retaining professionals (particularly in health and allied services) and some trades-people (including in electrical trades, transport and logistics and trained drivers, automotive workers and builders). Some communities are unable to obtain the services of trades people and professionals regardless of incentives offered. They may not meet skilled workers' requirements on factors such as lifestyle, and infrastructure and social services.

Implications for our study of the above review of literature

In relation to our first research question-*how well does the range of VET offerings meet local skills needs based on realistic economic opportunities*—the above literature review leads to the emergence of five important themes or messages:

- Determining demand for VET skills is a complex undertaking. It is likely to require gaining access to unconventional or local sources of data and knowledge and information.
- Considering demand for VET skills involves not only in terms of type of occupation and qualification level but also by type of skills-motor, cognitive and interactive.
- Not all identified demand for VET skills requires new VET skills supply solutions. Other responses may include improving workforce planning, workforce conditions and/or local services and infrastructure and so perceptions of place and lifestyle.
- The local context matters also in terms of how VET institutions operate, in isolation or through partnerships with other education providers and also other economic and social agencies in the community.
- Overall, it can be said that matching VET skills offerings to demand is not a science, it requires judgment.

Flexible VET

The second question we are asking in our project in relation to five regions in Australia is- In what ways can VET become more mobile/flexible to meet local and regional needs?

VET strategies to become more flexible and responsive

Training packages are a systemic response by VET introduced in 1998 to achieve more flexible and responsiveness to industry's VET skills needs. They are dependent on the expertise of the VET workforce to undertake learning design and implementation within an environment of finite funding. Research by Down (2003) showed there were success stories demonstrating that the flexibility claimed as an advantage of training packages does in fact exist but that it still varied from individual to individual VET workforce person. In 2007 there appears to be wide acceptance and use of Training Packages as a positive flexible response to industries skills needs.

Developing an individual client focus has been another common response asked of VET providers in order that the individual's socioeconomic circumstances and learning styles are taken into account (ANTA,2003). Strategies here include operating flexibly in terms of:

- timing of VET delivery e.g. at night, in the day, on weekends, in blocks etc)
- location of VET delivery eg on campus, online or by distance education and/or in the workplaces or other community locations that suit, and
- teaching and assessment styles e.g. practical versus theory, facilitating learning versus “teaching,” situational versus sit-down exams etc.

Attending to apparent systemic blockages has also been raised as important towards enabling VET organisations to become more flexible. *VET funding arrangements* have sometimes been criticised as stifling innovation within VET. Also, VET staff awards arrangements and the way that VET planners make purchasing decisions have been suggested to stifle flexibility and responsiveness.

The culture of VET organisations has also received attention. Callan (2004) identified nine characteristics of innovative enterprises. These enterprises create learning cultures, make innovation a core capability, identify their innovators and reward people for bringing forward innovative ideas. They also use partnerships to bring in new knowledge which drives further innovation, have leaders who are risk-tolerant, develop teams and cross-functional teams, create communities of practice which meet regularly to discuss common interests, and provide places to be innovative.

After examining VET organisations against these nine characteristics, Callan contends that the development of innovation in training providers can be described at best as ‘uneven’. Some exceptional individuals and teams within VET institutions are leading the way in developing more responsive and flexible training for industry. While no single VET institution is regarded by Callan as an ‘innovative organisation’ that has innovation as a core capability, many have begun the journey. He argues that innovation in the strategic planning process would strengthen this capability across the whole organisation.

On Flexibility in VET-Implications for our study

Over the past three years a research consortium commissioned by the NCVET has been looking at capability building of the VET workforce. The consortium will be pulling together key points identified across the whole its nine part research program in August/September 2007. The consortium is illuminating the notion of organisational capability and finding learning solutions rather than training solutions. Critical success factors for individual VET practitioners include adopting new work roles such as learning manager, facilitator, mediator broker or strategist. Additionally, the consortium is suggesting that VET organisations need to develop an agile, creative and innovative culture balanced, but not dominated, by the need to comply with systemic quality requirements, (see *Quality is the key: critical success factors in teaching, learning and assessment in VET* at www.consortiumresearchprogram.net.au).

VET-regions partnering

The vision statement related to VET strengthening regions and communities (ANTA, 2003) calls for VET providers to broker and partner with businesses and industry clusters and local government and non-government agencies to develop integrated learning and employment solutions to deal with changes and take advantages of opportunities. Thus we thought to explore what kinds of VET partnerships are happening, how well VET is doing at partnering to meet regional development VET skills and what roles VET might play in community based frameworks for regional development drawing mainly on a suite of research commissioned by the NCVET.

What kinds of VET partnerships are happening?

Industry-VET partnerships

To be relevant to industry, VET providers need to work closely with industry groups and individual firms. This has been the catch cry for years and further developing relations between VET providers and industry is one of the areas the Council of Australian Governments (2006) has identified for further action. Research tells us the number and variety of industry-provider training partnerships in the vocational education and training (VET) sector is growing considerably and there has been a shift in focus from small one-to-one enterprise to VET provider partnerships to many linked-enterprises to VET provider networks. The latter, “whole skills ecosystems” and whole of workforce planning partnerships look to be the preferred future approach.

Callan et. al. (2004) have studied the nature of industry VET provider partnerships and found that as of 2003 they were:

- ❖ mostly multiple smaller partnerships worth less than \$200 000 gross annually, with a small percentage generating a million dollars or more in gross income annually. Overall, there was a 'break-even' attitude about many partnerships
- ❖ one industry partner and one provider partnership in the vast majority of cases, but in a small number of cases, multiple players were involved, sometimes as consortia
- ❖ predominantly a local industry partner and provider situated within close geographic proximity to each other, although some partnerships were interstate and others were based off shore
- ❖ ongoing relationships, often involving more than just direct delivery of training and, as a result, often had no defined end date
- ❖ set up and/or managed in the VET sector by senior managers, heads of school, and business development managers/partnership development managers or persons of similar title. The advisory committee, comprised of representatives from industry and the training provider, was a major device used to manage the partnership and to maintain high levels of communication
- ❖ involved a core group of provider and industry staff who managed the partnership or multiple partnerships to generate additional revenue, to provide staff with stronger links with industry, and to build additional capabilities in their staff
- ❖ often driven by State government support packages. In a number of instances, VET providers were less clear about the strategic objectives. For industry and employers, financial benefits included access to a range of funds which allowed support for specific training, and
- ❖ successful. The training involved high levels of customisation. As a result of the substantial levels of flexibility and the use of a variety of modes of delivery, many industry respondents rated the level of training as world class.

However, industry partners also identified a number of barriers to partnering. These barriers included procedures, structures and accountability mechanisms within training organisations which slowed down the establishment of partnerships, as well as their day-to-day management.

Whole industry supply chains working with the one VET organisation is a newer form of partnership emerging. Loble and Williams (in Dawe, 2005) discuss the development of this new skills policy framework. "Skillecosystems" are independent clusters of skills within regions or industries shaped by the nature and networks of firms, products and processes, markets and market regulations, key institutions, policies and regulatory authorities. According to these authors, simply increasing the supply side—the quality and quantity of skills regardless of what those skills are—will not in itself create more or better employment or lead to economic growth. The challenge of reconciling supply with demand is broader and requires increasing all aspects of the demand side. They note that innovation is not an entirely random process and can be promoted by specific policies, especially skillecosystems (see also, Windsor 2006 and Buchanan 2006).

VET-social groups partnerships.

Volkoff, Clarke & Walstab, 2007 (part of the NILS/CPELL consortium) have looked at TAFES (the public VET providers) and their strategies for including marginalised or disadvantaged community members as part of the VET student body. They identified three approaches to inclusiveness, and that most TAFES are not currently being very entrepreneurial in this regard:

- a compliance model (8 institutes) whereby the TAFE engages only if/because they are measured on this element
- an existing cohort approach (32 institutes) whereby the TAFE focuses only on individuals who have presented themselves at the institute, and
- a community obligation model (18 institutes) whereby the TAFE seeks actively to be client-centred and engage their local community.

VET-other education sectors partnerships

Stokes et al (2006) have looked at successful VET in school-local partnerships. They found three different partnership models evident. The three models were: a regional cluster mode whereby schools within the region establish a formal agreement and are serviced by a central VET coordinating body, a specialised program model in which a dedicated effort is being made for a targeted population and/or industry within a local area, and a whole-of-community model in which an active and persistent effort is being made to engage, as far as possible, a broad spectrum of community members in a joint approach to respond to the broad range of young people's needs. These researchers concluded that adopting a model for a community's school-VET partnership is a strategic process. The partnership members need to customise the model so that it responds directly to the distinct issues that a community faces—it must achieve community 'fit'. It needs to be a process that is driven by the community rather than by a VET program.

Gelade, Stehlik & Willis (2006) have studied some successful local adult community education ACE-VET provider relationships. The reason given for their formation included; to further promote VET and mutual profile raising, to broaden community capacity to offer a range of courses to clients not previously available, to enable a geographical presence of one provider in the others area where costs and/or logistics would otherwise exclude them from operating, to achieve greater clients numbers through articulations of clients from ones programs to the others, to increase interest in lifelong learning for both personal and economic outcomes, to meet local industry skills needs and, for inclusion purposes of those on the margins of the mainstream, and to change culture and create bonds between ACE and VET providers.

VET-whole of region partnerships

Allison, Gorringe & Lacey (2004) and Waterhouse, Virgona & Brown (2006) have looked at whole of community-VET partnerships involving all of businesses, VET providers, non- government agencies, local governments and others.

Waterhouse et al examined four learning community partnerships, led by local governments in the state of Victoria. They suggest local governments are interested in the broad concept of a learning community as a response to a set of interrelated local concerns and needs and the policy context.

"We saw how each of the stakeholder groups, education providers, local government and business/industry reflected a concern for the locality—a sense that the issues (including the problems) needed to be addressed locally as much as possible with the people and resources in place. This is not to suggest that external resources were not welcomed. However, in each case, the focus was on local initiatives and the potential for prosperity to grow through the development of skills, knowledge, resources, networks and socio-commercial relationships rooted in the local community. Hence local socioeconomic problems and skills shortages were dominant drivers for these projects".

Conceived in such a context, Waterhouse et al suggest that education far exceeds the boundaries of the schoolyard or educational institution. Education becomes a mechanism for social change and can potentially influence and contribute to change through community institutions, industry and government at all levels. Education therefore has a key role to play in local initiatives that seek to build social and economic capital. Because of its vocational and employment focus, its flexibility and recognition of informal and work-based learning processes, VET in particular has a great deal to offer in these endeavours.

Allison et. al. (2004) suggest that a shift towards learning communities represents both a pragmatic and creative response to the needs of regional Australia.

The concept of learning communities is pragmatic, because it involves both people and institutions with the knowledge and skills necessary for effective regional development in a knowledge economy and learning society. It thus provides a fundamental and sound approach for regional development in the current global context. Yet the concept also affords opportunities for creative

associations and ways of responding to change. It suggests that the VET sector and VET partnerships can play a critical role in the development of these kinds of learning infrastructures and processes. (p5).

Allison et al found two good examples of good community frameworks within her 10 region study, in the Cradle Coast, Tasmania and Orange, NSW. They provide other examples as well, such as the Regional Catchment Planning processes funded by the National Heritage Trust, which might provide models on how to proceed. An inspection of the Cradle Coast Strategic Plan shows education and training to be highly intertwined in all aspects of the Strategy.

How well is VET doing at partnering to meet regional development VET skills needs?

All of the above mentioned VET partnership studies had a focus on determining critical factors for successful partnerships. Their findings have many points in common, that can be summarised against the five dimensions of effective partnership work developed by Billet et al (2005) for the NCVER: cultural scoping work and the development of shared goals and purposes based on community need; connection building work through mutual respect, good communications and the building of trust and commitment; capacity building work involving sharing of resources; collective work through distributed leadership arrangements or collective stewardship; and trust building work through keeping people informed and encouraging co-operation.

Waterhouse et al suggest that partnership work represents new hybrid forms of professional practice, ways of working which recombine traditionally separate and discrete forms of work in fresh new ways. Such practice is not yet well understood, theorised or researched. Allison also points to the need for and the role to be played by leadership programs to nurture the emerging new leadership roles and skills of VET personnel required for doing business through partnerships. Allison concurs and suggests the Australian Rural leaders program provide an example of what might be introduced as a new VET staff professional development program

Of particular interest to our study however, was what the above reports had to say about the role that VET organisations were playing or could play in the partnerships. Waterhouse et al and Allison et al had the most to say on this topic.

Waterhouse et al note that none of the VET provider-whole of community partnership projects they studied had been initiated or led by VET institutions. These case studies reveal VET as a passive and sometimes a reluctant player. Schools, neighbourhood centres and private VET providers were more often supporting partnerships more than were TAFE's, perhaps because TAFE's are encumbered with procedures, hierarchies and defined domains of authority. Overall Waterhouse et al concluded that the VET system has been a useful tool in assisting other more proactive partners.

The study of Allison et al also reveals that many of the VET providers, for a range of reasons, but often related to the need to stay competitive, have not fully understood or engaged with the multiple roles of regional landscapes. There is not necessarily a full understanding of the economic base by VET providers and therefore there is little alignment of local social and economic needs to training and skills development, although there are exceptions to this. There is a plethora of good stories illustrating how VET and VET partnerships have developed relevant and innovative learning environments. However in general, VET and VET partnerships are not full participants in regional development plans and strategies. They have not developed their capacity.

Quite literally, hundreds of inspiring 'learning fires' have been lit across regional Australia. It is time now to consolidate VET activities to more explicitly benefit and complement regional development.

What roles might VET play in community based regional development?

Waterhouse suggests that in order for VET to be more effective in regional partnerships there is a need for the following:

- ✧ reconceptualising VET as the 'tool' in others' hands

- ✧ providing leadership: that is, to be more proactive in building capacity for the ‘new work’ required
- ✧ appreciating the need for a ‘demand’ not supply-driven system
- ✧ recognising that it’s not just ‘industry’ (traditionally defined) which experiences needs or articulates ‘demand’
- ✧ focusing more substantially on community, locality and regionality in VET policy
- ✧ recognising the legitimacy of work which does not look (or feel) like traditional VET practice, and
- ✧ recognising and appreciating alternative values, priorities and world views (which are not necessarily qualifications or training-driven).

Alison et al suggests the following roles for VET:

- knowledge and skills transfer
- enterprise development
- value-adding to local supply chains
- mobilising social and other forms of capital, and
- civic engagement.

A 2006 report by Howard for the Business Council of Australia on innovation in Australian businesses concluded that the need existed for change in innovation paradigms and to rethink innovation policies, practices, and programs and that this included creating a culture of innovation (Howard, p.33) and that VET should be part of this rethinking of the innovation paradigm.

The role of VET in innovation a book of research readings was compiled by the NCVET in 2004 to enable a better understanding of the past, present and future role of the Australian vocational education and training (VET) sector in business innovation. The key message therein is that Australian Government policy needs to move from this ‘scientific discovery’ notion of innovation to one which sees it as a continuous learning process. It is in this area that the VET sector has played, and will continue to play, an important role. The book suggests and illustrates at least five roles that VET can play in the innovation process:

- monitoring innovations and assessing their impact and relevance for VET programs
- developing appropriate relationships with suppliers of new equipment and technology and customising programs to meet the specific training needs of their customers
- assisting, through skills development, the successful transfer and adoption of new innovations in industries, companies etc
- fostering and building innovation skills, especially problem-solving, creativity, entrepreneurship, initiative and drive in its students, and
- working collaboratively with industry or research and development organisations, particularly focusing on processes and development rather than pure research, and supporting small and medium-sized enterprises. (Dawe, p.15)

The Business Council of Australia (2006) followed up on the Howard report with a discussion paper that supports the general lines of his analysis and which asserted that businesses are concerned that technical skills provided by education and training systems are not meeting their need for skills relating to creativity, initiative, oral business communication and problem solving, and entrepreneurial skills generally in the workforce.

Garlick, Taylor and Plummer (2007) find through an eleven (11) regions study, that VET and specifically the E in VET, is underdone. The analysis of Garlick et al leads them to conclude that VET can contribute to regional development in two main ways, by developing enterprising skills through education and fostering an enterprising culture on a broad front, and facilitating greater local engagement through forming regional coalitions of expertise.

Allison et al found that VET has responded well to a growing consolidation of larger regional service centres, where the ‘higher order’ skills associated with new technologies and electronics are often required. Less well resolved is the role of VET in smaller centres. There is a need for effective regional delivery models which link these service centres. Some suggested that VET, as a response to increased competition, has been too focused on big business.

Buchanan (2006) offers a program idea to make VET integral to economic and social renewal, based on a Skills ecosystems approach:

- ✧ a new role for VET providers as catalysts for change, in the form of a new, semi-autonomous section of TAFE that was not caught up in the current ‘sausage machine’ logic of ASCH. It would aim to make TAFE integral to economic and social renewal, but not have a monopoly on the catalyst role. Arguably the most important issue for reform in this area is the character of the jobs created, and the learning strategies adopted to support such jobs
- ✧ core of funding from VET, but also funding from across a range of portfolios relating to industry innovation and regional development
- ✧ a guiding coalition with representation from the Australian and State governments, employers and unions, TAFE and other RTOs, and governance arrangements that reflect local circumstances
- ✧ support, preferably by a new ‘extension service’ similar to those that operate in many agricultural industries. Such a service would help brokers working for intermediaries at the local level to build new networks that better integrate employment and learning. (Buchanan 2006)

Implications for our study

Our third research question is - *What contribution can local community frameworks make to meeting skill needs, fostering innovation and building social and human capital in communities?*

From reviewing the above literature least five key messages emerge:

- ✧ Regions are looking for integrated solutions to multi-dimensional issues and appear to favour or respond well to an “all capitals’ development framework and approach.
- ✧ VET providers are engaging in partnerships but few are whole of community partnerships. Industry-VET partnerships dominate.
- ✧ Partnerships work best if placed within the context of local possibilities and constraints but operate according to a set of best practice principles or characteristics.
- ✧ As there is a diversity of VET providers as a result of an active competition policy in the national VET system, it is potentially useful to consider VET partnering by provider type. VET in schools providers and private VET providers apparently are doing better at partnering than are TAFEs overall. However each type of VET provider has a different set of contextual circumstances that might affect their ability/interest in partnering.
- ✧ Roles for VET in regional development, beyond as providers of skills training, are emerging but this is an area that is still developing overall.

In Summary

The GLS/NCVER project team will need to be cognisant that matching VET offerings to regional development skills needs is a complex undertaking. A simple comparison of statistical data on VET demand and supply will not be sufficient. Consideration will need to be given to a wide range of local factors and the potential for the strengths of each particular type of VET provider to be developed versus expecting all VET providers to be all things to all stakeholders. The team will need to be mindful that the kinds of VET-region partnerships arrangements can differ by place and look at how particular configurations might be enhanced to build whole of community frameworks and expanded roles for VET.

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Some key themes in selected international literature

Peter Kearns

Introduction

This paper aims to contribute to the literature review for this project by drawing on selected international sources to identify some key themes in the literature relevant to the subject of VET and regional development.

The themes discussed are localisation, partnership, integration and co-ordination, the learning region and learning economy concepts, the implications for VET of sustainable development, and the need for a holistic approach which integrates social and economic objectives and which builds social, human, and identify capital.

I draw on the work of OECD, the European Union's CEDEFOP research centre, a range of UK sources including the Government's 2003 Skills White Paper, and the PASCAL (Place Management, Social Capital and Learning Regions) Observatory. Some possible implications of these themes for this project are identified.

The localisation theme: the renewed significance of place

Somewhat paradoxically, the impact of globalisation has led to a resurgence of interest in local strategies which both drive local and regional development, and which meet the distinctive needs of local and regional communities. A useful statement on strategies for "thriving locally in the global economy" is given by Kanter in her book *World Class* which provides an analysis of characteristics which make a region world class in the global economy (Kanter 1995). Her analysis is based on the need for the three Cs (concepts, competence, and connections) and suggests the need for "magnets and glue" to attract resources to a region and to bond resources for economic success.

A variant on this theme of a world class region may be seen in the work of Florida on the creative class (Florida 2002). Florida argues the growing significance of the creative class as a response to the economic need for creativity in the global knowledge economy. He argues the holistic case that "every aspect and every manifestation of creativity – technological, cultural, and economic- is interlinked and inseparable (Florida, p.8). The applications of his creative index in his analysis of "the geography of creativity" points to the significance of diversity in fostering creativity ("creative places are multidimensional and diverse", p.7) This analysis suggests a particular challenge for many rural communities which are not multidimensional and diverse in responding to changing conditions in creative and innovative ways.

Florida also applied his creativity indexes to European countries (Euro- Creativity Index). The results showed the strong performance of the Nordic countries ahead of the traditional leading European economies (Germany, France, UK). This poses the question as to whether there is a relationship in the Nordic commitment to lifelong learning and their strong performance on various creativity, innovation, literacy, and school achievement assessments (Kearns 2005, pp.138-146).

The global challenge

A good overview of the global competitive challenge confronting countries such as the United States and Australia, and regional communities within these countries, is provided by the report *Tough Choices or Tough Times* prepared by the American National Center on Education and the Economy through the work of its New Commission on the Skills of the American Workforce (National Center on Education and the Economy 2006).

This report discusses the increased intensity of the global competitive challenge produced by the educational and economic development of China and India in particular, leading to a new competitive environment with tougher success factors. With large numbers of educated skill workers in these countries willing to work for lower wages than the workforce of the United States (and Australia), the temptation for industry to export jobs off-shore to such countries raises a considerable threat to jobs in America. The vulnerability of the American workforce to offshoring and automation is seen by the National Center as a significant threat requiring urgent action and responses through raising the educational and skill level of the workforce (NCED 2006, pp.28-32).

The seriousness of this threat to jobs and well being is conveyed vividly in the assessment by the Commission of the number of jobs at risk through offshoring. Using the Department of Labor O*NET data base the Commission concluded that 16 per cent of the American workforce was vulnerable to losing their jobs through offshoring (NCEE, p.28). When the number at risk from on-going automation of jobs is added, a considerably larger number of jobs at risk is obtained (NCEE, p.28).

The conclusions of the report from its analysis of how the global economy is evolving have implications that are as relevant for the workforce in regional Australia as they are for the American workforce:

- A very large proportion of the workforce—much larger than at present—will need to have a foundation level of literacy much deeper and broader than was thought necessary in the past.
- There will need to be access to a continuing, if intermittent, stream of technical education programs that enables the workforce to adapt to the demands of the dynamically evolving economic environment.
- The almost constant infusion of new skills and abilities will have to take place in a flexible, accessible way.
- Dealing with this challenge will involve rethinking the whole approach to the education and job training of the people in the workforce.
- The isolation of adult education and job training from the people in communities responsible for economic development needs to be addressed.

(NCEE, pp. 41-46)

These conclusions have considerable relevance for approaches to meeting the learning and skill needs of regional Australia where the vulnerability of the workforce to global pressures and trends is even greater than in the cities because of the narrow industry and employment base in most in most regional communities, and the difficulties of achieving sustainable diversification and broadening of the employment base.

One of the key conclusions of the Commission report is particularly relevant to the question of aligning VET offerings with regional development learning and skill needs.

It is time to change the organisation of the adult education and public job training functions to better align them with the forces and institutions of economic development.

(NCEE, p.46).

This argument for the need for a new approach to adult learning and training has much in common with OECD work on the need for a more holistic and integrated approach to adult learning.

OECD work

OECD work on skill and regional development over the past decade has reflected the major themes in OECD work on lifelong learning, partnership, and economic development. In the area of lifelong learning and the learning economy, these themes are set out in the report of the 1996 Meeting of Education Ministers on Lifelong Learning (OECD 1996).

OECD then explicitly addressed the question of skills and regional development in its 1997 report on *Regional Competitiveness and Skills* (OECD 1997). This report argued for a new lifelong approach to training and skill formation and maintenance, and for partnership and policy integration. The learning region concept was applied as a framework to “enable regions to better help themselves.”

Key principles in this report included :

- use regional policies for HRD
- give a demand-driven focus to HRD
- base competitiveness on the development of partnerships
- re-enforce economic efficiency by equity policies, and
- develop regional governance to consolidate national policies

(OECD 1997, p.180)

The notion of a demand-driven focus to HRD challenges the supply-driven policies that have largely characterised VET activity despite reports such as the Allen review of the VET reform agenda. The partnership and local networks theme aligns with NCVET work on partnership and social capital.

OECD then took up the learning region theme in its 2001 report *Cities and Regions in the New Learning Economy* following empirical analysis and case studies in five regions across Europe (OECD 2001). This report adopted the perspective of a regional learning economy. The study concluded that learning does influence regional economic performance but that organisational learning mattered more than individual learning. The implications of this finding for our project are worth considering. Learning was seen as an interactive organic process with learning regions seen as regional systems of innovation. The report argued for co-ordination of individual, firm, and regional levels. The importance of social capital was recognised (p.119). Ten policy principles for creating learning cities and regions were given in the report, divided into inputs to the learning process and mechanisms for the learning process.

In addition to the strands discussed above, relevant OECD work also includes initiatives in the area of rural development and work on innovation in the knowledge economy with implications for education and training.

Policies for rural development were taken up at a high level meeting of the Group of the OECD Council on Rural Development. The report of this meeting provides information on policies adopted in a range of OECD countries (OECD 1996). Themes emerging from this work included:

- the diversity of rural contexts—a typology of types of region was developed (p.98) which distinguished predominantly rural and significantly rural
- the need for a strategic vision to concert partnership action
- the impact of globalisation which introduces a continuous process of adjustment, and
- rural development requires multi-sectoral policy. (OECD, 1996)

These themes have been reflected in subsequent OECD work.

A further strand of relevant OECD work has involved innovation in the knowledge economy. This work was taken forward in a 2004 report on this subject which examined the implications for education and training (OECD 2004). While this report is not specifically oriented to regional development, the general analysis has implications for regional development and for the VET role as a partner in regional communities. The report identifies four sources of innovation (pumps) and examines implications for the role of the education sectors. Aspects such as building a horizontal

system of innovation and the role of ICT as an agent for innovation are relevant to the VET role in regional development (OECD 2004, pp.61-70).

OECD work on adult learning includes the thematic review of adult learning which has produced a series of country reports and several overview reports. Country reports produced for England, Canada, Denmark, United States, and Germany provide a valuable source of information on new approaches to adult learning in many contexts emerging in these countries.

OECD in its 2003 overview report on this work summed up what the organisation saw as a shift from the traditional sector divided approach to adult education and training to a more holistic and systemic approach.

These developments have stimulated a shift from the concept of adult education towards that of adult learning, in a more systematic adult-centred view.

(OECD 2003, p.74)

This OECD overview report on adult learning also argued for a refocussing of public financing towards the demand side and the needs of learners, and for the development of locally based systems. This conclusion is highly relevant to the question of VET meeting the learning and skill needs of communities and regions.

It is necessary to place those seeking training at the centre of a locally based system. It is only by building the local base in cooperation with all partners that vocational training can be made less complex and accessible to everyone, and that each individual will be empowered to determine his/her own training.

(OECD 2003, p.213)

These conclusions pose a considerable challenge to Australian VET systems where traditionally VET has been provided through state systems coupled with market driven reforms of recent years. Whether locally based systems exist sufficiently in Australian communities and regions, closely linked to economic development structures, was a key issue that emerged in this study, and where international trends provide a framework for consideration of the Australian situation.

Other OECD work relevant to regional development includes the work of IMHE on the role of universities in regional development. This work has involved a series of regional studies (which have included the Sunshine Coast Fraser region in Australia). Conclusions from this work will be considered at a conference in Spain later in 2007. Much would be gained from consideration of the implications of this work for the role of VET (especially TAFE) in regions.

CEDEFOP and the learning region concept

The European Union's VET research agency, CEDEFOP, has also taken up the concept of the learning region. CEDEFOP in 2001 convened a conference on the learning region approach (CEDEFOP 2003). This followed an earlier study of education and regional innovation in Europe and the United States in 1999 which was seen as a broad trend towards the learning region approach. Like OECD work, CEDEFOP viewed the learning region as a regional system of innovation with a strong community role.

Some key points from the 2003 report were:

- the region and locality should be seen as a focal point for the renewal and sustaining of social and economic life
- social capital is best developed at a local or regional level to drive collaboration and partnership
- interactive learning as a non-linear process is emphasised
- open dialogue as a generative mechanism is required, and
- networks need to be brought together to build regional structures.

(CEDEFOP 2003)

Overall, the general argument is for integration, flexibility, partnership, and interactive learning.

Local frameworks and building a learning and training culture

Mechanisms to build a learning and training culture in communities were examined in a 2000 report by Kearns and Papadopoulos for NCVET. This study in five OECD countries (Sweden, Germany, UK, USA, and Netherlands) emphasised the importance of building a learning culture (best seen in the Nordic countries), and the significance of local frameworks for partnership and collaboration in this process (Kearns & Papadopoulos 2000). The need to link learning and skill strategies, as in UK development, was a key conclusion, along with a demand-side orientation in policy and strengthened incentives for stakeholders. The study concluded that comprehensive local frameworks for partnership were less well developed in Australia than in the countries studied.

Strengthening demand-side policies and strategies

A recurring theme in the literature on skill and regional development has been the need to move away from a supply side orientation and to strengthen demand side policies. This was a major theme in the 2003 UK Skills White Paper, which is discussed below, and in the Allen Group review of the Australian VET reform in the 1990s which concluded that the reforms should be refocused on the demand side. The skill ecosystem model may also be seen as a response to this need.

A useful overview of policies and strategies to raise employer demand for skill is provided in a report by Ashton, Sung, and Raddon commissioned by the UK Department of Trade and Industry (Ashton, Sung, & Raddon 2003). This report reviewed policies adopted in five countries (USA, Germany, Singapore, France, Finland).

Points of interest in the report included:

- the Integrated Workforce Development System developed by Singapore which involves an integrated and cumulative approach (Ashton et. al. pp.21-30)
- Finland's Workplace Development Program which incorporates national learning networks
- the benchmarking approach widely adopted in America as developed by the American Society for Training and Development, and
- national frameworks take a long time to develop and are slow to adapt, local and regional frameworks can adapt more quickly to change.

These broad approaches illustrate attempts to strengthen employer and individual demand for training and skill, and to link with supply side strategies in more integrated approaches.

The learning economy concept

The concept of a learning region reflects ideas developed in theoretical writings on the so called learning economy. This analysis of the new economic context has been developed in the work of Lundvall and Johnson (1994), Lundvall and Borras (1998) and others as a framework for understanding the dynamics of the contemporary global economy. Implications for such aspects as innovation and technology policy and equity strategies are discussed in Archibugi and Lundvall (ed 2001). Lundvall's work aligns with OECD and CEDEFOP interest in the concept of a learning region, and in the links between learning strategies and innovation.

VET and sustainable development

A significant theme in international discussion of VET since the late 1990s has been the relationship of VET activity to sustainable development.¹ This theme has been developed in the

¹ International usage of the VET concept varies between contexts with TVET (Technical and Vocational Education and Training) and TVE (Technical Vocational Education) also common. These terms are comparable to the Australian VET concept and I have used the term VET throughout this paper. UNEVOC, based in Bonn is the UNESCO International Centre for Vocational Education and Training.

work of the UNESCO UNEVOC Centre, and has been given prominence by the United Nations Decade of Education for Sustainable Development inaugurated in 2005.

In this context, sustainable development is seen as a triple bottom line approach to the economic, environmental, and social dimensions of sustainability (UNEVOC 2006). The contribution of VET to sustainable development was taken up at UNESCO's Second International Congress on Technical and Vocational Education held at Seoul in 1999 leading to an agreed statement on the need for a new development paradigm with sustainable development at its centre (UNESCO 1999).

Social and economic trends predict the need for a new development paradigm which builds a culture of peace and environmentally sound sustainable development as its central features.

Accordingly, the values, attitudes, policies and practices of TVE must have their foundations in this paradigm.

(UNESCO 1999)

The conclusions on the need for a new VET paradigm were taken further in a Joint Recommendation on Technical and Vocational Education and Training for the Twenty-first Century adopted by UNESCO and ILO in 2001, and through the convening by UNESCO in 2004 of an International Experts Meeting on Learning for Work, Citizenship and Sustainability (UNEVOC 2004).

The Joint UNESCO/ILO Recommendation gave effect to the principles emerging from the 1999 International Congress on TVET with its call for a broadening of the TVET paradigm, and for close links to sustainable development. The links to lifelong learning and building a learning culture in communities was fundamental to the philosophy of the Recommendation.

Given the necessity for new relationships between education, the world of work and the community as a whole, technical and further education should exist as part of a system of lifelong learning adapted to the needs of each particular country and to worldwide technological development.

(UNESCO/ILO 2001, p.9)

In addition to the link to lifelong learning, the Joint UNESCO/ILO Recommendation also recognises the need to build a learning culture in society as a framework to enable individuals to continuing developing throughout life (UNESCO/ILO 2001, p.10).

Other aspects of the Recommendation relevant to this study included the need for close relationships between TVET and general education, and the role of values, and responsible citizenship (UNESCO/ILO 2001, p.10).

The notion that sustainable development required a paradigm shift in VET, enunciated at the Second International Congress on TVET and given shape in the 2001 Joint UNESCO/ILO Recommendation on TVET, was taken further at an International Experts Meeting on Learning for Work, Citizenship, and Sustainability convened by UNESCO in Bonn in 2004 (UNEVOC 2004).

It was noted at this meeting that a paradigm shift was taking place in TVET with its philosophy, vision, mission, goals and objectives, policies, and practices undergoing transformation (UNESCO 2004, p.36). The concept of a paradigm shift in VET directed to a broader and more holistic role supporting sustainable development was expressed in a number of ways—including the concept of integrated learning outcomes that ranged across knowledge, skills and competencies, values and attitudes, understanding and insights (UNESCO 2004, p.42).

The UNESCO Bonn meeting led to the Bonn Declaration on Learning for Work, Citizenship, and Sustainability. The Declaration includes the following statement on preparation for work.

Preparation for work should equip people with the knowledge, competencies, skills, values and attitudes to become productive and responsible citizens who appreciate the dignity of work and contribute to sustainable societies. We call on all stakeholders to adopt this broad perspective for TVET.

(UNESCO 2004, p.107)

A key theme emerging from the Seoul and Bonn UNESCO meetings was that the broadened concept of VET supporting sustainable development required an expansion of the VET concept beyond its traditional role of producing human and economic capital so as to incorporate other forms of capital (UNESCO 2004, p.99). These were seen as the natural capital of the earth's resources, and the social capital that builds strong communities.

UNEVOC has followed up on the Seoul and Bonn meetings through the issue in 2006 of a discussion paper on Orienting Technical and Vocational Education for Sustainable Development (UNEVOC 2006). This paper repeats the themes emerging from the Seoul and Bonn meetings and the Joint UNESCO/ILO Recommendation, and links these to development of the broad development of the capacities of all individuals.

A focus on the knowledge, skills, and attitudes for sustainability can develop all the powers and faculties of the individual—cognitive, affective and behavioural—an from them can flow such work values and attitudes as creativity and adaptability, productivity, quality and efficiency, patience and perseverance, loyalty and commitment ...

(UNEVOC 2006, p.19)

These are attributes desired by employers as various surveys have shown. This view of human development for work is also of interest in linking to the assessment by Richardson and Teese in the Consortium project that future demand for vocational skills will evolve towards higher level qualifications and cognitive and interactive skills more than motor skill (Richardson & Teese 2006, p.1).

The UNEVOC discussion paper is also provocative in its statement on the current orientation of many TVET systems.

Unfortunately, TVET in many countries remains locked into the role of being a supplier of skilled labour to industry and is, thereby unable to respond effectively to the needs of the emerging Information Age.

(UNEVOC 2006, p.12)

How Australia aligns with this comment merits careful consideration.

Policy and development in the United Kingdom

The themes discussed above are reflected in UK policy for skill and local and regional development over the past decade. Stages in policy development include:

- the establishment of local Training and Enterprise Councils (TECs)
- the replacement of TECs by local Learning and Skill Councils
- the establishment of a system of Frameworks for Regional Employment and Skills Action (FRESA)
- development of the role of Regional Development Agencies with links to the other local planning bodies
- the establishment of Local Strategic Partnerships, and
- policy to integrate these various mechanisms and link them in co-ordinated action.

Overall the UK demonstrates a strong concern link skills policy local initiatives, and to embed such policy in regional economic and social development.

TECs to Learning and Skills Councils

Local Training and Enterprise Councils were established to link training and enterprise development at the local level, based on an American model. However in 2000 following the commitment of the Blair Government to lifelong learning and building the UK as an inclusive learning society (Secretary of State for Education and Employment, 1998), the TECs were replaced by a network of Learning and Skill Councils, co-ordinated by a national Learning and Skill Council. The local Learning and Skill Councils have funding powers and so are able to support desirable local developments. The Councils are required to collaborate with Regional Development Agencies.

Frameworks for Regional Employment and Skills Action (FRESA)

In 2001 a joint initiative by the Ministers responsible for Education and Skills, Work and Pensions, and Trade and Industry led to the Regional Development Agencies being asked to take the lead in producing Frameworks for Regional Employment and Skills Action (FRESA) in each region. The FRESA is an action plan agreed by the RDA and their key partners including the local Learning and Skill Council, Jobcentre Plus, local government authorities, employers, and the TUC. The FRESA sets out an overall picture of skills and employment issues in a region within the particular economic, demographic, and social context (Secretary of State for Education and Skills 2003, p.101). This approach has the merit of providing an agreed joint plan of action to address regional skill and employment needs.

Overall, the UK demonstrates a strong concern to link skills policy with local initiatives, and to embed such policy in regional economic and social development and labour market services needed to raise productivity; provide support for employers and employees to promote investment in skills; and the allocation of funds to training providers.

Some implications and questions for the study

This overview of selected international developments raises a number of questions relevant to this study. These are set out below:

1. To what extent does regional planning and development adopt a triple bottom line approach to sustainable development? What contribution does VET make to this objective? What are the implications of this objective for VET?
2. Are the co-ordinating mechanisms in Australian regional sufficiently strong and well developed to integrate the action of key stakeholders in meeting skill and employment needs? If this is not the case, what is required?
3. How well developed are existing partnership arrangements? What barriers exist? Is there an on-going dialogue?
4. Should the VET role in meeting skill needs in regions examined in a broader context of regional social and economic development? If so, what are the main parameters of this context?
5. Has the paradigm underpinning VET activity in communities and regions broadened in the ways recommended in UNESCO, UNEVOC, ILO, and OECD work on TVET and adult learning since 1999? Is VET acting as a good citizen and active partner in the overall development of communities and regions?
6. Is the VET role in regional development guided by a shared strategic vision common to all key stakeholders?
7. To what extent is there a demand-driven focus in skill policy and strategy?

8. How well are learning and skill strategies integrated?
9. Is the learning region concept relevant to Australian conditions?
10. How flexible is VET provision in response to changing regional needs? Are there barriers? What is needed?
11. Is there a need for an agreed regional action plan for employment and skills, possibly along the lines of the UK Frameworks for Regional Employment and Skills Action (FRESA)? Should this be developed as a regional human capital strategy with a skill strategy as a component?
12. Have there been attempts in the regions studied to link skill, enterprise, innovation, and learning strategies? Are there particular constraints on creativity and innovation in adapting to changing conditions?

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Preface

The five case studies summarised in this document were undertaken in the period November 2006 to March 2007 as a component of a study directed at the question of matching VET provision with regional development skill needs. The report of the study, titled *The double helix of vocational education and training and regional development*, draws on these studies and an extensive review of Australian and international literature which is given in a separate support document.

The case studies were undertaken in the following regions:

- Riverina, New South Wales;
- Northern Adelaide, South Australia;
- Sunshine Coast, Queensland;
- Cooloola, Queensland;
- South Eastern NSW.

The studies found that context matters in examining the extent to which VET offerings matched regional development skills needs and that considerable diversity existed in these relationships across the five regions examined.

Overall, however, the case studies demonstrated unresolved tensions between the role of VET, especially TAFE, in serving national and state skill needs and meeting the broader learning and skill needs of particular communities and regions. This issue at times took the form of tensions between competition and co-operation objectives confronting VET institutions.

While VET institutions in the regions studied have made a notable contribution to meeting the skill needs of these regions, the VET effort has mainly been focussed on current skill needs rather than also serving the long-term social and economic sustainability of these regions. Contextual shifts such as demographic change with an ageing population and workforce, the impact of new technologies and globalisation, and other socio-economic changes have made this a question requiring re-orienting VET to support sustainable development.

The cumulative impact of these changes makes a compelling case to re-think the VET role in serving the needs of communities and regions for long-term capacity building and social and economic sustainability.

While the case studies show that in none of these regions have VET institutions made this adjustment fully, there are also indications of institutions moving in this direction.

We have accordingly concluded that the VET role in regional development should be strengthened in ways that foster an on-going dialogue and interaction between VET development and regional development. We have used the terms balancing and aligning, and the image of a double helix, to describe this process of on-going interaction.

Each of the case studies has a dual focus: the region itself and a selected community within the region in order to explore questions involved in community and regional development.

The major themes emerging from the case studies have been carried over to our report supported by our conclusions from the extensive literature review undertaken.

Riverina region and Griffith, NSW

Dr Kaye Bowman

Introduction

The case study of the Riverina illustrates a region with long term labour shortages that well established regional development networks have persistently sought to overcome. The 2006 September quarter unemployment rate in the Riverina region was 3.5 %. The employment rate was 76.2 % compared with a national rate of 72.5% and the labour force participation rate was 68.9% compared with 64.8%.¹ The Riverina Regional Development Board keeps updated lists of skills in regional demand. They are not dissimilar to the skill shortages now being reported for all non-metropolitan regions of Australia.²

While VET offerings are rationalised across the region based on what counts from a local industry perspective and of necessity due to “thin markets” or a scattered population within a large geographic area, there is a reasonable alignment between regional VET skills in demand and VET skill offerings, and there is a university in the regional centre of Wagga Wagga. Notwithstanding, the retention of local young people post compulsory schooling and in-migration of skilled labour remain critical regional strategic objectives to address skills shortages.

Towards achieving these strategic objectives the region appears to need more local employers to engage with the many initiatives in place and to move to the adoption of a whole of workforce planning approach, whereby education and training issues are tackled in an integrated way with recruitment and retention, workplace arrangements and conditions and perceptions of various industries. Also housing and perceptions of local community/lifestyle need to be tackled, as the regional population is well aware. There are six total factors³ that influence where people choose to live and work that need to be worked on in the Riverina region.

Griffith, the local community chosen for more detailed study within the Riverina illustrates well the points made above with particular specifics. Indeed, this case study illustrates the researchers’ contention that not only do the circumstances of regions vary,⁴ so too do localities within regions. Hence the need for a local component to our place management study in order to relate VET with local conditions and “labour” markets, that is, the distance people are willing and able to travel to undertake learning and/or work from where they reside.

There are learning and employment concepts and initiatives at state, national and international levels that Griffith/Riverina is worthy of being a part, to help continue its progress as a prosperous and cohesive, self-help community, as outlined at the end of this paper.

¹ ABS Australian regional labour markets, September quarter 2006 Murray-Murrumbidgee figures, not seasonally adjusted.

² As of June 2006 it included in 13 professional occupations in the health industry, as well as 21 other occupations including general and production managers, accountants, engineers, librarians, mechanics, several types of building and construction tradespersons and town planners. (see RRDB website). See BTRE 2006 *Regions and skills shortages* report for a list for regional Australia overall.

³ The BTRE *Regions and skills shortages* report notes that SCORD (2004) identified six factors that influence skill shortages in regional Australia. These factors are health; education and training; housing; jobs and career opportunities; infrastructure; and perceptions of lifestyle and community.

⁴ see *State of the Regions* annual reports prepared by National Economics for the Australian Local Government Association (ALGA).

Regional context

The purpose of the regional consultation phase of the case study, carried out in late 2006, was to gain knowledge of the region and its development planning context.

The Riverina region covers a large geographic area in southern New South Wales, adjacent in parts to Victoria. The region stretches 500km east to west from the alpine peaks of Kosciuszko National Park in the Tumut Shire across the sheep and wheat belt of the south-west slopes and the riverine plains of the Murrumbidgee and Colleambally horticultural and irrigation areas (MIA) to the semi-arid plains of Hay.



The region boasts an impressive industry base including; dry and irrigated agriculture, food processing, manufacturing, forestry and wood processing, transport and logistics, defence infrastructure⁵, education and research public sector institutions and a highly developed telecommunications infrastructure. The largest fibre optic trunk infrastructure (Sydney to Melbourne) runs through Wagga Wagga, the region's largest City of approximately 60,000 people. Gross Regional Product is in excess of AUD\$4.5 billion and Primary Production is valued over AUD\$1 billion per annum⁶.

The Riverina includes the following three subregions differentiated by *primary economic* drivers:

- the eastern highlands of the Snowy sub-region, that has softwood forestry/logging and wood/paper product processing as economic drivers
- the central sub-region, that includes the City of Wagga Wagga, the regional headquarters of government departments and Charles Sturt University, national defence forces as well as dry agriculture farming in its hinterland, and

⁵ The Royal Australian Navy Defence Communications Station - 20-25 km west of Boree Creek Australian Army Base Kapooka - 1st Recruit Training Battalion, Wagga Wagga and RAAF Base - Forest Hill

⁶ Adapted by Peter Rushbrook and Kaye Bowman from the Riverina Regional Development Board website: <http://www.rddb.com.au/home.asp>

- the western sub-region, that has an unmatched diversity of irrigated as well as dry agricultural and horticulture produce and related food processing, manufacturing and research and development facilities.

Griffith City, the focal point of this case study, is in Western Riverina. It is the second largest regional population centre, about 25,000 people, and acts as the Western Riverina sub-regional centre with a catchment population of about 50,000 including Leeton, the next largest town with a population of about 12,000 that is 60 km away. The distance from Wagga Wagga to Griffith is 190 km. The total Riverina population is 165,000 approximately. Historically Griffith industry has indicated that its growth has been continually impinged by professional, skilled and semiskilled labour shortages. Griffith consistently experiences unemployment rates 2% below the national average. Despite population influx of between 1.5-2%, this influx is absorbed rapidly and productively into the primary and secondary labour markets at all skills levels.

Of note also is that the Riverina region is adjacent to the Albury/Wodonga region with a population in the vicinity of 100,000. The administrative units of some government services including re-education and training, cover both regions,

Regional planning

Within the Riverina region, as shown in the map, there are many stakeholder organisations, industries and individuals that contribute to the economic and social development of the region. Their necessary inclusion and contributions are recognised in the Riverina Strategic Development Plan 2004-2010⁷ that covers all of the region's nine interdependent economic sectors⁸ and emphasises partnership development as the key means of achieving identified strategies and activities towards stated high order goals. Memoranda of Understanding are established between the co-ordinator of the plan, the RRBD (Riverina Regional Development Board) and the following organisations:

- the Riverina Regional Area Consultative Committee,⁹ the chief officer of which maintains a comprehensive list of individuals across the region involved in development. Many members are sole officers in various agencies and welcome the peer group network which is kept informal by a conscious decision of those involved
- the sixteen (16) local governments (LGs)¹⁰ that have their own local development plans as well and, together with some additional adjacent local governments form three proactive regional organisations of councils (ROCs), for sub-regional planning and development purposes:
 - Murray ROC, centred on Albury and formed in 1991
 - Riverina Eastern ROC, centred on Wagga and formed in 1994, and
 - Riverina ROC, centred on Griffith and surrounding shires in the west and formed in 1995.
- a variety of primary industry departments and research and development agencies¹¹ and related industry organisations such as irrigators, various produce grower groups, landcare management and other local environmental groups that actively plan, develop and implement new innovative initiatives that value add (refer later Griffith examples)
- Telstra and regional telecommunication groups, that work to a regional telecommunications (and new technologies) strategy

⁷ Developed and co-ordinated by the Riverina Regional Development Board (RRDB), which is independent to but supported by a base grant from the NSW Department of State and Regional Development (DSRD) since 1991, and one of 13 total NSW regional development boards.

⁸ 1. Agriculture 2. forestry 3. manufacturing and processing 4. employment, education and training, 5. community economic development (culture, heritage, creative etc) 6. transport and utilities 7. international business 8. telecommunications and 9. tourism.

⁹ Funded through the Commonwealth-DOTARS.

¹⁰ Hay, Carrathool, Griffith, Murrumbidgee, Leeton, Narrandera, Lockhart, Wagga Wagga, Coolamon, Temora, Junee, Cootamundra, Boorowa, Harden, Gundagai, Tumut- see map).

¹¹ including NSW Agriculture-Wagga Wagga Agricultural Institute, Yanco Agricultural Research Centre and Inland Fisheries Centre.

- Austrade and local business enterprise centres (BECs) located throughout the region
- Riverina promotion and marketing groups and DIMI¹² for which the RRDB is a Gazetted Regional Certifying Body for overseas immigration
- Charles Sturt University that covers all of inland NSW and serves the Riverina Region from its main campuses at Wagga Wagga, Bathurst and Albury. There are smaller campuses at Dubbo and Orange (wine), Goulburn and Manly (policing) and Canberra (theology). LaTrobe University, located in Wodonga, also services the Riverina, and
- VET agencies, including DEST and a DET¹³ regional offices in Albury and outposts in several locations, the TAFENSW Riverina Institute with 17 campuses and the Directorate office in Wagga Wagga.¹⁴ The many schools of the region are also involved in VET as are several adult community providers and private VET providers and Australian Apprenticeship Centres (previously referred to as NACs).

Regional vocational education and training planning informs and is informed by NSW State (DET) planning. In New South Wales, State VET planning uses data generated by NIEIR on employment projections by industry and occupations and other population, and economic and social trends data combined with data from regional consultations to develop a Department of Education and Training Strategic plan. The latest strategic plan is for 2007-2008.¹⁵ It is based on six objectives and there is a summary table for each of the skills development priorities and whether they relate to the state as whole or specifically identified regions.

The NSW Premiers Department, charged with co-ordination of all government services, also has a regional presence in Wagga Wagga, but with a geographic focus of the Riverina plus the Albury/Murray and Dubbo areas. From 2007, the regional officer will be focused on the implementation of the new *NSW State Plan* released in late 2006 that could elevate the role of education as a regional development tool.¹⁶

Regional strengths and weaknesses

The individuals from the various organisations above who we spoke to in the regional consultations phase about the region as a whole (see appendix A) were all in agreement regarding the Riverina region's strengths and weaknesses.

The Riverina's strengths include:

- its diverse economic base, that aids stability and continuing economic growth, and
- its people who consider the region a great place to live and work and have a "just get on with it" approach to life and a culture of cooperation and collaboration.

There is strong social as well as professional connectivity between regional development players. A culture of trust and co-operation and of working together for the benefit of the region as a whole has been built up and maintained through the Riverina Development Officers' network. There have been some key achievements in regional development and there are ongoing initiatives.¹⁷ The

¹² The Commonwealth Department of Immigration and Multicultural Affairs

¹³ The government bodies responsible for VET, schools and universities, namely: the Commonwealth Department of Education Science and Technology (DEST) and the NSW Department of Education and Training (DET).

¹⁴ The "Riverina" educational (and health) area is larger than Riverina region as identified in the map and for this study. The "Riverina" educational area is bounded by Lake Cargelligo and West Wyalong in the north, Tumut in the east, Albury in the south and Griffith, extending to Coomealla in the west.

¹⁵ *NSW skills development priorities 2007-2008*.

¹⁶ Premiers Department, 2006 (November), *A New Direction for NSW, State Plan summary*, Premiers Department.

¹⁷ For example; the Riverina Regional Telecommunications Strategy stages 1 to 3, Riverina Statistical Profile, Stump Jump Community Leadership Program, Western Riverina project officer, small business incubator and Higher Education Needs Analysis. Current projects

people and their energy were nominated by several of those interviewed as the region's critical success factor along with a sound economy. The following has also contributed to this success:

- its location, between the three major cities of Sydney, Melbourne and Canberra. Most major highway and rail corridors cross the Riverina and three commercial airlines provide regular services to Sydney and Melbourne as well as an air service between Albury and Canberra that is also not far away by road. Thus, transport is a well established secondary industry sector. Tourism, whilst not a key industry in the region, is aided by "driving-through" visitors.

Riverina's weaknesses include:

- its location which is perceived to be its greatest weakness from an outsider perspective. The Riverina is part of inland Australia. The people of the Riverina believe there are negative or false perceptions of inland Australia among the majority of Australians, who reside on the coast. This makes it hard to attract new residents to fill job vacancies and to grow the area further. In-migration of people has been a strategy undertaken by the region for years to alleviate the shortage of labour and there are several initiatives that are ongoing.
- significant out-migration of young people in pursuit of city life experiences, and higher education in some cases. This is a key issue contributing to the shortage of labour, that has been stemmed only somewhat by various local efforts made to retain young people, and
- drought which affects the agricultural base and related industries cyclically. The drought incidentally is restricting young people from home because of the substantial costs of supporting them and costs (\$15,000-\$20,000 conservatively for Sydney and Melbourne and not much less for Wagga Wagga and Albury).

These regional strengths and weaknesses all also apply to Griffith in particular ways.

The Griffith consultations

The purpose of the local consultations was to address in some detail the key research questions within this particular local community context and namely: How well does the range of VET offerings meet local skill needs based on realistic economic opportunities? In what ways is VET flexible and innovative to meet local and regional needs and what constrains such practice? And, what contributions are local community frameworks making to building social and human capital?¹⁸

Griffith's distinctive features

When Griffith people were consulted in early 2007 (refer appendix B) and in answer to the question what makes Griffith distinctive from other communities I was told -

- Griffith is a multi-cultural, family and faith-oriented, harmonious community of hard workers who have self-made their unique and generally solid local economy, quality housing and quality urban-based services and facilities.

Documents obtained contain data that support this view of Griffith.¹⁹

Ironically, despite these positives and the many efforts of local groups explained later, there is a lack of labour in general and skilled labour in particular for the reasons given by interviewees as follows:

include C-Change (a marketing strategy for other areas of Australia and the Riverina Skilled migration Program. The latter two initiatives are also mentioned later on in the text.

¹⁹ For example, the Griffith Community research report 2001, by the NSW Regional Women's Advisory Council for the Department of Transport and Regional Development (publisher), the Griffith City Council Social and Community Plan 2004-2007, various Riverina Regional Development Board papers and Griffith City Council papers mention a variety and number of successful locally taken initiatives.

- Griffith has high residential costs, low amounts of affordable rental accommodation, and is located inland on a side road to nowhere, which makes it hard to attract newcomers to fill local labour shortages and retain our young people.
- Drought and water issues are also negatives at this time. Historically, Griffith (and Leeton) were planned as irrigation towns to support rice growing. A tension exists now regarding water use. Feedlots are an additional major enterprise. Recently, irrigation water restrictions were implemented for the first time in the Western Riverina.²⁰
- Overall, however, the impression gained was that confidence remains high in Griffith.

The award winning vineyards and substantial wine industry, that maintain the local engineering base, uses “high security” water. There is the substantial Bartters (Steggles chicken) empire. The farmers who produce a wide variety of foods have, in many instances, off-farm investments and/or jobs off the farm making the farm more a lifestyle than work choice. Many farmers have trade qualifications that they are putting to use, while others are going mining or truck driving and women are going into administration retail, aged and health care. There is ongoing research and development activity in the horticulture industries²¹ and new building activity in town, including a new shopping complex and health and aged care facilities and VET facilities and offerings.

VET offerings versus VET skills needs

There is a range of VET agencies in Griffith that service locally and beyond. TAFENSW Riverina Institute has a campus in Griffith (and there is another in Leeton Narrandera and Lake Cargelligo within the Western Riverina). The adult community centre (GALA) has a partnership arrangement with the Riverina Community college in Wagga and offers an employment service only in Griffith. There is another sizeable and multi-part VET agency with separate names for its various branch activities. There are also three other Australian Apprenticeship Centres registered to work in Griffith. They broker between employers and apprentices/ trainees and registered VET providers (known as RTOs). Additionally, there are “blow through” private RTO providers.

Through interviews with representatives of the various local VET agencies it was ascertained that they invariably adopt a business approach. Agencies mainly compete with each other but collaboration does occur as necessary in the interests of their clients when they cannot provide the VET or related service themselves or the employer has chosen another VET provider.²² However, competition is avoided somewhat by the different VET providers offering different VET courses.

TAFENSW Riverina Institute, for example, dominates the area of trades skills training. It does not duplicate trades skilling in close locations, given “small numbers” or thin markets and the need to achieve critical mass in terms of specialised facilities and teachers. Riverina TAFE seeks to supply “VET that counts” from a local industry perspective. The Griffith campus offerings are in the education fields of business & information technology, child and family services, health and aged care services, hair, beauty and personal services, hospitality, building and construction, engineering manufacturing, automotive-light and heavy vehicles, wine and food and access and general education. The latter is important in areas such as English as a second language and literacy because of the numbers of local people from non-English speaking backgrounds, including the local Wiradjuri indigenous population, Italians, Turks, Afghani’s, Indians and Pacific Islanders.

Others of the more than 200 total trades are offered in other parts of the region. Examples of Griffith residents currently assessing courses elsewhere are: Albury-bricklaying and block-laying ; Cootamundra –health and aged services; Leeton- civil engineering design, electro-technology

²⁰ On the drought and water issues these were considered to be “only just beginning to bite”.

²¹ Griffith is part of the Riverina “food basket” region and uses the slogan “Riverina naturally”. Ongoing planning research and development activity includes into alternative agribusinesses and ethanol biofuels linked to federally funded *Opportunities for value adding and regional diversification of irrigated horticulture project* and *Taking stock and setting directions project* with rice growers.

²² For example the Australian Apprenticeship system, which is a combined work and training contract option, operates under a user choice for the VET provider arrangement..

systems, mechanical services, agriculture and horticulture; Narrandera-community services and hospitality; Wagga Wagga-building finishes and plumbing. Other trades are only available beyond the Riverina such as: refrigeration in Bathurst/Sydney, plastering in Canberra, glazing in Sydney, and floor and wall tiling in Sydney and Canberra.

TAFENSW, Riverina Institute - Griffith Campus VET offerings and facilities have developed over the past seven years. Government funded VET activity has grown by 65%, non government funded activity in terms of dollars by 500% (main area being wine-related) and enrolments have almost doubled and staff numbers have increased as well. Over the same period over \$11m dollars have been invested in campus infrastructure with over half of this on nursing and child studies facilities and another almost third of the total on a food and wine centre. The Griffith campus does not plan to rest on its laurels as longer term planning of relevant to local needs VET provision is occurring. Griffith campus student enrolments for 2005 show the wide spread of fields of education being studied, with the numbers doing agriculture related subjects being much higher than the national average as would be expected. Building and architecture also attract many students and proportions well above the national average. Of note also is the relatively low numbers doing higher level VET qualifications (see Appendix A to this case study).

The relevance of offerings is aided by the TAFENSW Riverina Institute's unique structure that provides for an integrated federated/faculty approach to planning and delivery.²³ Also, to aid responsiveness, Riverina TAFE teaching staff are required to be involved in local organisations and, through these professional and social connections, to acquire the necessary knowledge about local skills needs.

GALA has shown recent growth in its activities through adopting a business approach, in part because of the reduction in NSW funding to all adult community education centres. In 2005 GALA exceeded its VET annual student contact hour (ASCH) contractual targets with NSW DET, by delivering 20,660 in access literacy and numeracy (ASCH) and 27,814 (ASCH) in VET. The organisation's growth in the main has been due to the use of delivery agreements to facilitate training in line with communities needs. GALA had six such delivery agreements or partnerships at the time of the author's visit, such as with the Builders Institute. GALA has also begun online training and delivering more computer courses linked to accredited VET training packages. The result in 2005 was a drop off in attendance in fee for service hobby courses, partly because of the drought and its effect on local incomes, coupled with a more than compensating increase in fee for service and short VET courses.²⁴

The other local VET providers deliver in some of the same education fields as mentioned above but others deliver courses such as hospitality and retail, transport and distribution for example. The previously mentioned sizeable and multi-part private VET agency has all of the following functions. It is a registered, accredited VET deliverer, an employment service, a group training company (GTC) that is, an employer of apprentices and trainees, an Australian Apprenticeship Services Centre and a labour hire service. As needs have become apparent within the local employment and training industry this organisation has filled them. Also two of the other three AACs are also RTOs, GTCs and offer an employment service.

Overall, interviewees felt that the range of VET offerings align with local needs for VET as far as possible, if not as desired, given "thin markets" and the necessity to rationalise offerings across the region. Higher level VET courses (at AQF IV and diploma level) were highly desired. In this regard the recent announcement that higher level Apprenticeships will now receive employer incentives from the Australian Government was welcomed as was the expansion of training incentives to

²³ TAFENSW Riverina Institute operates on a federated/faculty model and not a faculty model as do all other TAFE Institutes in NSW. The federated/faculty model was suggested to be a most useful in regional areas where distance is a factor in terms of matching VET provision to local skills needs. In that model advice from national and state levels is provided by Heads of Studies from the Educational Planning and Development Division and Heads of Campus provide local input into the planning process. Whilst final decisions about planned profile of training rests with the Educational Planning and Development Division, the Heads of campus provide significant local perspectives. In the faculty model there are no educational Heads of Campus.

²⁴ Griffith Adult Learning Association Incorporated 2005 Annual Report.

middle career workers. The over 30 years age group in the Griffith population was singled out by a couple of those interviewed as needing more attention regarding up-skilling.

There is a high desire also for university level education opportunities in Griffith. An active Western Riverina Higher Education Reference Group aims to achieve an improved, flexible tertiary education system in the Western Riverina in order to grow and retain skilled workers in the sub-region. In 2001, the group oversaw a Western Riverina Higher Education Needs Analysis. The report records a strong desire for tertiary education among local businesses, young people, parents, professionals and community social groups. Young people were considered the greatest market. The report notes that Charles Sturt University, Wagga Wagga is the preferred option for 37% of the Western Riverina's young people going on to university and that there were other young people, especially women, not intending to leave the area for family reasons, who were interested in more local tertiary education opportunities. Older people also registered an interest in graduate and post graduate study.

The main education fields in demand were business management, agriculture related areas accounting, law, health and IT. The type of delivery mode determined to be suitable for the young was an identified local location to provide social space and contact for enhanced learning. The mature aged required access to a host university through online methods and video-conferencing with *in situ* assisted tutorial learning. Co-location with existing infrastructure was considered the way forward.

Subsequent to the Needs Analysis, an innovative, joint TAFENSW Riverina Institute and Charles Sturt University Study Centre was established and a draft Western Riverina University Study Centre Business Plan 2005-2008 developed.

Flexibility and innovation in VET

A unique, integrated Degree in Business Management program developed and delivered jointly by TAFENSW Riverina Institute and Charles Sturt University at the Griffith Campus was the main example of innovation in VET developed at Griffith provided by those interviewed for this study-innovation having been said to mean do new things to add value to products, services and processes. The degree is now in its fourth year. Health is the next area earmarked for a similar program to be developed at Griffith. The concept has since been applied at Albury and Wagga campuses of TAFENSW Riverina Institute and CSU in business, information technology, fine art and digital media. Integrated IT is now available across NSW.

The Griffith Link Day program is the other often mentioned example of innovation involving VET. The Link day is an innovative approach to maximising school student's VET choices and their quality. It has been running since 1999 and was identified in a 2001 NSW Public Education Inquiry as an illustrative example of creative cross-collaboration between the local TAFE and secondary schools.²⁵ The Link day is one day of the week that is set aside by all high schools in Griffith and surrounds to give school students maximum opportunities to participate in VET, including part-time work, work placement and/or institution based learning in their chosen subjects. It involves coordinated timetabling, travel options to get students to the various teaching and workplace learning options. It is a success in terms of student numbers and levels of satisfaction.

As to whether the TAFENSW Riverina Institute Griffith campus and other VET providers are flexible in terms of offering VET when, where and how the clients want to receive VET, mixed responses were received regarding TAFE. The responses varied from:

- the local TAFE is wonderful, to
- there are pockets of flexibility and innovativeness, to

²⁵ Professor T. Vinson, 2001, NSW Public Education Inquiry, Chapter 10 *Connecting schools and TAFE* .

- TAFE is not flexible. It is bureaucratic, too many rules oriented delivering training packages better suited to big business than the small local businesses.

Against these later comments we need to point out that some people's answers regarding the flexibility of TAFE may not be based on current knowledge. TAFE's throughout Australia have changed significantly over the past 15 years in response to numerous policy shifts but getting this message out has been hard. TAFENSW Riverina Institute Griffith Campus for example:

- has partnership arrangements with a variety of organisations, agencies and individual companies as evidenced through their 'on the job' training in a number of discipline areas. All TAFENSW Griffith teaching departments are engaged in workplace delivery (92% in the wine industry)
- implements the industry endorsed Training Packages of VET but with a huge amount of customisation to meet local needs while still allowing the students to meet the required competencies. The many electives lead to a class of students doing several different subjects requiring a self paced approach that is more time consuming for the teacher but is done by them
- delivers its General Education offerings in community settings as required
- has recently been equipped with video-conferencing facilities to meet the growing trend by students to receive their training (study) by means other than face to face
- consistently over-achieves its training hours targets (government funded and non government funded) by being flexible and regularly offering programs not on the formal training profile to meet the local need and demand, and
- has a structure whereby a requirement of the TAFE director is to have full control over the staff, full and part time.

We have learnt that GALA seeks to track community skills needs and incorporate many different delivery styles to meet learner preferences. Facilitating further VET opportunities is hampered by financial constraints, particularly where individuals lack the financial resources to take a first step into learning by themselves.

Perhaps the issue indeed is that a large numbers of people do not know what is now available and how the VET system can work for their benefit.

VET- community development partnerships/frameworks

VET agencies in the Griffith and Riverina generally operate on a competitive model. They collaborate in the interests of individual clients only as mentioned previously and all the agencies have good links with industry and business groups. The TAFE has its own industry reference groups. The other local VET agencies have contacts with the local Chambers of Commerce. On the social side, all VET agencies reported having ad hoc links only, engaging with social services agencies on an individual student needs basis when their education and training is affected by social issues, such as housing, for example. There is a local inter-government, social services network that could be tapped. The community education provider GALA also has a strong community involvement and a capacity building ethos as well as being involved in VET. TAFENSW Riverina Institute Griffith campus has community members on its Council as well.

Of particular interest to our study however, is the VET community partnerships that exist to address local skills shortages through the retention of local young people post compulsory schooling and in- migration of skilled labour.

Efforts made to keep young people in Griffith and surrounds

GEBAC, the Griffith Education and Business Advisory Council Inc, has high school, industry and community and government representation, according to the Australian governments requirements for the purposes of running the Local Community Partnership program. LCPs, such as GEBAC, work together to help young people aged 13-19 years and deliver three programs: structured workplace learning for students, adopt a school by employers and career and transitions support. The latter program has recently been complemented by the Australian government with a new Regional Industry Careers Advice (RICA) program run from Albury.

Despite GEBAC organising countless interchanges between school kids and local employers on local VET options over the years, and being backed up by local apprenticeship centre personnel who also go out to the schools to promote readily available VET opportunities linked with local employment, young people and their parents are still considered to have a university-focused mentality and see VET as a lesser HSC option and/or a short term focus regarding jobs. The latter meaning young people will go into the many unskilled jobs in the area (in the wine, chicken and horticulture industries) that give higher immediate wages rather than take a longer term VET and career focus.

This attitudinal situation prevails despite the successful Griffith TAFE/Schools Link Day and the promotional visits to schools and invitations for them to visit TAFE, a point also noted by Evans for all of NSW (2005, p5). Evans notes other VET in schools issues in NSW also need attention given his overall finding of the positive value of this option. Some of these issues were also mentioned by those interviewed for this study, including the need for governments to consider equity and local realities whenever changes are made to areas to be covered by a particular service, as occurred in relation to LCPs in 2005. The changes implemented meant that GEBAC is no longer considered an LCP in its own right but rather as part of a larger one with which it has made a sub-partner agreement to keep its local identity and focus.²⁶

While the new RICA is welcomed, because it potentially increases staff, the fact that it is based in Albury and covers a large area, limits its ability to impact on young people in Griffith regarding VET and careers promotion. The long term strategic goal of developing a training culture in the Griffith community requires continual locally- based effort and GEBAC and other local agencies appear to be prepared for the long haul.

In late 2004 GEBAC ran a “*Leaders in Careers*” forum to communicate all the career opportunities offered in Griffith. Close to 100 people attended from the full range of stakeholders. Two key themes emerged from the forum. The first theme was the need for a more effective industry network to share best practice in labour issues and formalise better links with local education institutions. The second theme was the need for a coordinated and consistent approach to branding and marketing Griffith as a great place to live and work. Efforts have been made since and continue to be made to achieve these two objectives.²⁷

Efforts made to attract skilled labour from outside the region

The RRDB is a regional certifying body (an appointment by the Minister for Immigration for the purposes of the Migration Act) which has helped employers in the Riverina, including an extensive program in the Griffith area, to employ skilled people from various overseas destinations in recent years. Recently the RRDB, in partnership with the Murray RDB (centred on Albury), applied to (DEST) *targeting skills needs in regions program* for funding to expand their efforts in this area but were unsuccessful. TAFENSW Riverina Institute also has international students who are supported by their extended family living in the region.

²⁶ B. Evans, 2005 *Strategic evaluation of VET in schools in NSW-establishing the value for students, employers and the community of VET in schools qualification*, Report to the Minister for Education and Training.

²⁷ *Leaders in Careers Forum, Griffith*, Full report obtained from the web February 2007 after googling GEBAC, Australia.

The RRDB and 18 local councils including Griffith have been involved in a regular campaign to showcase the Riverina since July 2006. At present The *Country-Change* program aims to encourage people to the Riverina and neighbouring Albury-Murray regions from Sydney and Melbourne. A group travels regularly to these locations. The Griffith City Council representative had over 30 jobs on the local data base when last doing a promotion in Sydney in March 2007. In the past, Griffith/Riverina people have also been to the Latrobe Valley when electricity was deregulated in Victoria a local people were looking for jobs and to Newcastle when industry restructuring was going on there and to Lithgow when one of its main industries closed.

Griffith has also tried a *Career on a plate* initiative involving introducing university students from elsewhere to the local area by offering vacation work-placements to university students such as engineers and biologists.

Most recently Griffith City Council has developed a new branding slogan-*Cosmopolitan Country*- and a DVD. They have also, unsuccessfully, applied for funding for an officer to drive the proposed Griffith Enterprise Network and for funding for a Skillsmart Industry Based Learning Program for late primary through to tertiary students to be linked with the Griffith Enterprise Network.²⁸

What local leaders think still needs to happen

As the final question in the interview Griffith people were asked what the number one initiative was from their perspective that needed to be put in place to progress education, training and employment in Griffith/Western Riverina. The same two themes emerged as at the forum of November 2004 as follows: involving employers was seen as unfinished business, as they are the ones that hire, and awareness-raising of Griffith and its job opportunities to both locals and non locals. The education of elders in the community, of all of the different cultural groups, of the importance of ongoing skill development post formal schooling would go some way to ensuring that the local labour pool is up-skilled and address local skilled labour shortages. However this will leave labour shortages in unskilled areas. Griffith's dilemma is possibly only solved by a larger population requiring a long term focus and solution.

Conclusions and general comments

The Riverina is doing a lot to try and develop its people and economy. In this study Griffith - Western Riverina has been used to show casing these efforts on a scale that is meaningful. Keeping people there and/or getting new people to come to the area to take up the available job opportunities are the central issues. The retention of local young people post compulsory schooling and in-migration of skilled labour is the learning and employment is the core issue more than the degree of alignment between local VET offerings and VET skills in demand. A more holistic and coordinated approach is possibly needed.

The adoption of a whole of workforce (and related housing) planning approach combined with a Griffith marketing strategy may be a way forward. While the Griffith Council has a social and community plan it does not have an economic and education plan. Perhaps such a plan is the way to bring together all of the ongoing initiatives and coordinate them. The new NSW state Plan which has a focus on education and training may also prove a useful lever as it begins to be implemented to move things forwards in the Riverina. Building relations direct with Ministers also needs to continue in Griffith and the Riverina in an effort to raise awareness and give their activities traction and leverage at state and national levels.

TAFENSW Riverina Institute has a key role to play in this planning and an apparent chance to see new ideas and roles they might play being accepted. There are two recent NSW VET reports "*Upskilling NSW*" and "*the Complete package: the value of NSW TAFE*" that advocate greater innovation in VET and VET providers and TAFEs in particular as strategic social and economic partners in their local areas. Moreover NSW has championed the *skills ecosystems approach* that focuses on networks of interconnected firms and all aspects of skills issues towards achieving

²⁸ Submissions were supplied to the author.

innovative integrated solutions.²⁹As well, there is a research project underway investigating non markets mechanism by which employers in Griffith and other parts of the Riverina signal their VET needs to VET providers that will be of interest to learn from and build on.³⁰

Skills ecosystems concern themselves with beyond workforce VET issues. Buchanan recommends a future program including:

- a guiding coalition with representation from the Australian and State governments, employers and unions, TAFE and other RTOs and governance arrangements that reflect local circumstances
- a new role for VET providers as catalysts for change, in the form of a new, semi-autonomous section of TAFE that was not caught up in the current 'sausage machine' logic of ASCH. It would aim to make TAFE integral to economic and social renewal, but not have a monopoly on the catalyst role. Arguably the most important issue for reform in this area is the character of the jobs created, not just more and/or better education and training
- a core of funding from VET, but also funding from across a range of portfolios relating to industry innovation and regional development, and
- preferably support by a new 'extension service' similar to those that operate in many agricultural industries. Such a service would help brokers working for intermediaries at the local level to build new networks that better integrate employment and learning.

Finally, there is much relevant international literature on the themes of localisation, partnerships, integration and coordination, the learning region, the need for a holistic approach which integrates social and economic and environmental objectives for sustainable development and builds social human and identity capital.³¹ The OECD is among those interested and promoting these concepts and the OECD is to be involved in 2007 in an Australia country education and training review.

²⁹ There is a NSW DET skills ecosystems web site- www.skillecosystem.net. Three critical documents are *Beyond Flexibility, 2001*, the final report out of the NSW Board of VET major research program on the changing nature of work. *From skills shortages to decent work* by John Buchanan (June 2006) that takes a future policy perspective on Skills Ecosystems and *A mid-term evaluation of the national skills ecosystem demonstration projects*. 13 July 2006.

³⁰ By Peter Rushbrook and Richard Pickerskill from Charles Sturt University for the NCVER.

³¹ For this research project Peter Kearns has put together Working paper 3 :*Some key themes in selected international literature* and Stephen Garlick has put together Working Paper 1 on *Approaches to regional development and universities and regional engagement in Australia*.

Table 1 Student enrolments by Field of Study and Qualification level in 2005 at the NSW Riverina TAFE-Griffith campus

Field of Study	Cert IV and above	Cert III	Cert I & II	Non award courses	Statement of attainment	Other	Total Riverina	Total Riverina %	National
01 - Natural And Physical Sciences	13	25	0	0	0	0	38	1.3%	0.3%
02 - Information Technology	5	20	65	0	21	0	111	3.8%	3.5%
03 - Engineering and Related Technologies	1	131	128	30	78	0	368	12.7%	16.0%
04 - Architecture and Building	18	52	16	338	257	0	681	23.5%	6.3%
05 - Agriculture, Environmental and Related Studies	2	84	171	0	78	0	335	11.5%	4.9%
06 - Health	1	0	0	9	176	0	186	6.4%	4.7%
07 - Education	56	0	0	0	12	0	68	2.3%	2.9%
08 - Management and Commerce	87	73	59	28	101	0	348	12.0%	19.1%
09 - Society and Culture	42	88	68	0	7	0	205	7.1%	9.9%
10 - Creative Arts	0	16	1	1	0	0	18	0.6%	2.7%
11 - Food, Hospitality and Personal Services	0	42	80	1	149	0	272	9.4%	9.2%
12 - Mixed Field Programmes	1	7	130	13	83	38	272	9.4%	11.6%
Subject only - no qualification	0	0	0	0	0	0	0	0.0%	8.7%
Total Riverina	226	538	718	420	962	38	2902	100.0%	99.8%
Total Riverina %	7.8%	18.5%	24.7%	14.5%	33.1%	1.3%	100.0%	0.0%	
National	21.5%	26.7%	20.8%	5.8%	n/s	n/s			

* National profile is from : NCVET, 2006, *Australian vocational education and training statistics, students and courses, 2005* NCVET, Adelaide.

Local profiles provided by NCVET, special run, with permission from the TAFE

Northern Adelaide region and Playford/Salisbury, SA

Dr Kaye Bowman

Introduction

The case study of Northern Adelaide illustrates a region with a paradox when it comes to demand and supply of workforce skills. Northern Adelaide has a general mismatch between the skills sets of the local people and the skills required by the region's growth industries. On a range of social indicators, including education, Northern Adelaide is well behind most other regions in Australia. This contrasts with its economic situation of primary, driver industries that require high level skills.³² As a result, there are large numbers of locals who leave the region for work and of non-locals who come into the region to work. The case study illustrates a region that is part of a larger "natural" labour market (the Adelaide CBD is 25-50kms away) that is concerned not to leave local residents behind as its modern economy develops.

The client-driven education and training challenge is great in Northern Adelaide. The region is working across the full spectrum of education provision and issues from the community client perspective that involves engaging many in learning for the first time or as another chance opportunity through to the industry client perspective that demands leading edge mathematics, science and engineering skills education and training. Redirecting its education and training to meet both local community and emerging industry needs and to have these two objectives meet in the middle, as evidenced by employing more locals in local jobs without moving out any existing residents, is a major strategic goal of Northern Adelaide.

The region appears to be up to the challenge. Regional planning is extensive. There are many active development agencies that have a strong experimentation culture and years of experience working together in various collaborative networks and partnerships. They have demonstrated successes, some nationally recognised, to build on as outlined in the body of this report. However, Northern Adelaide could do with a master regional plan or "a community directory of who is doing what to whom" as one local person put it, when asked what the key initiative is that needs to be taken now. There is a plethora of important issues, plans and coordinating bodies but no overarching regional governance structure (or regional strategic plan) to give Northern Adelaide the capability of connected-up development, community and industry, social and cultural, economic and environmental, and with all levels of government.

The formation of an overarching *facilitative* regional body should be considered again to fill the gap left by the former Office of the North and the lessons learnt by this body and recent research into what are good contemporary governance structures.³³ Other useful next initiatives include government awareness-raising, the need for programs that encourage and allow flexibility and innovation, and a bottom up approach to regional development. This includes VET and the local

³² The Northern Adelaide Region Statistical Profile provides several statistics that demonstrate Northern Adelaide's socioeconomic disadvantage while Blandy and Hagan (2006) have quantified the extent of mismatch between the local skills available versus skills required by the local economy. Some of these data are reproduced in the next section of this paper.

³³ Sandeman and Elliot (2006), *New Governance for sustained collaboration-the Northern Adelaide experience*, Paper delivered at the conference Governance and community partnerships, Centre of Public Policy, University of Melbourne. Also need to consider also all other papers delivered at this conference.

TAFE Institute in particular whose management has indicated a preparedness to take on the challenges ahead with systemic assistance.

Regional context.

The aim of the regional consultation phase of the case study carried out in late 2006 was to gain knowledge of the region and its development planning context. It was found that the Playford and Salisbury local government areas (LGAs) form the core of the Northern Adelaide region. What else makes up the region differs among the organisations involved in the area³⁴

The Northern Adelaide regional profile records Playford as having 70,061 residents and Salisbury 206,008 residents. This comprises about 13% of the South Australian State population in 2001. Indications are that Northern Adelaide has positive and expected long term growth in the local population due to natural population increase as a result of a relatively young age distribution (60% are under the age of 45). The statistics also show the Playford and Salisbury economies to be highly based on manufacturing.

The individuals interviewed about the region were all in agreement regarding the strengths and weaknesses of Northern Adelaide. The key strength of Northern Adelaide is that there are good economic opportunities.

In Salisbury/Playford the driver industries include:

- manufacturing and advanced manufacturing
- transport and logistics
- defence industries and electronics
- information and Communications Technology
- food produce and processing, and
- environmental products and services.

The Army plans to establish a unit there in the near future. Other key economic sectors feeding off the key economic drivers include: housing, retail, a range of amenity services and education.

Another perceived strength is:

- That there has and continues to be much urban renewal or environmental quality improvement activity to develop Playford and Salisbury as good places to live as well as work.

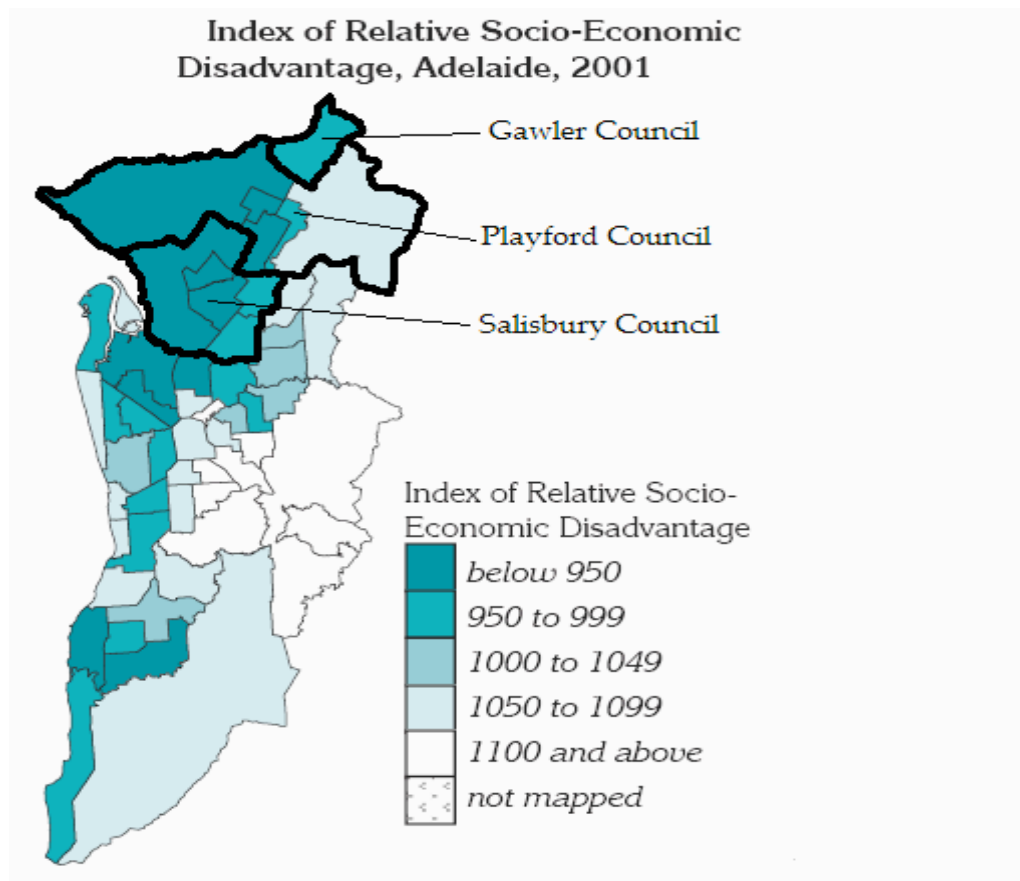
The key weakness of Northern Adelaide is:

- It is highly disadvantaged on several statistical measures, including levels of income and educational attainment, unemployment rates, dependency levels on social welfare payments, and state of health and wellbeing.

Sandeman and Elliot (2006)³⁵ illustrate the relative disadvantage of the region by the following two pieces of data. First, the Australian Bureau of Statistics (ABS) Socio-economic indexes for areas (SEIFA), shows Playford and Salisbury to be highly disadvantaged (see map below). Second, tertiary education participation rates in Australia show Elizabeth in the Playford region to be the third lowest, bettering only two remote indigenous communities as of 1999.

³⁴ For example, the Northern Adelaide region falls within the Commonwealth DOTARS Adelaide Metropolitan Area Consultative Committee that covers a much broader area. The Northern Adelaide AMACC sub-region includes four local government areas- Gawler, Playford, Salisbury and Tea Tree Gully. However, for many local agencies Tee Tree Gully is not seen as part of Northern Adelaide and Gawler is not associated with several initiatives relevant to this study them. The latest regions break-up by the SA Department of Industry and State Development has Northern Adelaide comprising Playford, Salisbury, Tee Tree Gully and Port-Adelaide Enfield.

³⁵ Sandeman and Elliot (2006), *New Governance for sustained collaboration-the Northern Adelaide experience*, Paper delivered at the conference Governance and community partnerships, Centre of Public Policy, University of Melbourne



Map note: Relatively low scores, indicate the most disadvantaged areas. They are clustered in locations within the three northern councils which occupy the top third of this map of metropolitan Adelaide, as well as in Southern Adelaide

Source: Sandeman and Elliot (2006)

The Northern Adelaide Statistical profile shows that even though education levels have improved since 2001 the relative disadvantage remains. The general level of qualifications of the residents of the region was below the state average in 2001 (66.7% had no post school qualification compared to 58.1% for the State of SA as a whole. Only 27.7% had completed year 12, a further 22.4% year 11 and 24.3% year 10). Also there have been falling local student numbers undertaking mathematics and science that are required for many regional job opportunities in the science and technology professions. Moreover, Northern Adelaide VET participation results between 2003 and 2004 were mixed. The results showed there was significant growth in contracts of training commencements among all ages but in other VET courses there was growth only in the 20-24 years and under 14 years and a decline in VET course participation in most other age groups in the region.³⁶

As a result of the above, the growing job opportunities in Northern Adelaide are being filled by people mostly from outside the area. There is a general mismatch between the skills sets of the local people and the skills required by the region's growth industries.

³⁶ Northern Adelaide Region Statistical Profile, DFEEST

Blandy and Hagan (2006) have quantified the extent of mismatch between the local skills available versus skills required by the local economy in relation to the Salisbury LGA.³⁷ They illustrate this by determining the numbers of locals who leave the region for work and of non-locals who come into the region for work. They found:

...firms and other employers in Salisbury do draw on skilled outsiders in large numbers in order to fill skilled local jobs. Locals captured only just over 1000 of the more than 6000 jobs created in Salisbury over the decade 1991-2001. Thirty-two per cent of these 6000 new jobs were filled by people with degrees (about 1600 by outsiders and 300 by locals). Sixty-nine per cent of these 6000 new jobs were filled by people with some sort of post-school qualification - of whom about 3500 were filled by outsiders and 700 locals... (paraphrased from p.4)

Blandy and Hagan (2006) also estimated the economic contribution of the people who live in Salisbury, wherever they may actually work, and found:

Salisbury's local economy is significantly larger than that implied by the more traditional GRP measure,³⁸ implying that more Salisbury residents find employment outside the Salisbury local government area (LGA) than there are outsiders coming to work in Salisbury. Indeed, two thirds of jobs in Salisbury are held by outsiders, while three quarters of the jobs held by Salisbury residents are located outside Salisbury. (p.1)

Regional planning context

There are multiple players and layers in regional planning in relation to Northern Adelaide. The region has sometimes been a "laboratory" for new schemes over the years. It appears that networks have been set up both by outsiders and by the people of the region. Some networks have endured and matured whilst others have fallen by the wayside. Overall there has been much activity in relation to co-ordinating development through partnership building. The many VET related planning groups and activities are discussed later. Here the overall planning context is described, working from the state to the region to the local level.

South Australia has a State 10 year Strategic Plan, overseen by the Executive Committee of the Cabinet, which has recently been reviewed and revised through a community engagement process. The state also has comprehensive workforce planning happening in all industry sectors. As one example, *The Defence Skills Institute*, part of the Defence Teaming Centre located at Mawson Lakes in Salisbury, is focused on identifying and integrating work force, education and training requirements for the delivery and maintenance of defence capabilities.

In relation to VET there are several plans that feed off and build on the State Plan.

These include: the DFEEST Strategic Plan, A Workforce Development Strategy (driven by an industry led SA Training and Skills Commission linked to 9 Industry sector Skills Boards), a DFEEST SA VET Plan, three region based SA TAFE Institutes Plans, and a DFEEST SA Works program that has 17 Regional Plans developed by 17 Employment and Skills Formation Networks focussed on disadvantaged individuals and groups and operates as a contestable funding program.

The two Cities of Playford and Salisbury also are very proactive in local planning and development and have been for many years. Sometimes they work alone, sometimes together.

The City of Salisbury has a five year strategic economic plan, to be developed and executed in collaboration with the public and private sector. The plan focuses on: building a culture of

³⁷ Blandy, R and Hagan, P, 2006, *Assisting economic activity in the City of Salisbury-Quantitative assessment of the Salisbury economy, present and future skills needs and of job localisation together with an outline of options for enhancing future growth*, a report commissioned by the City of Salisbury.

³⁸ The alternative measure of Salisbury's economic output, akin to the Gross National Product (GNP) measure was termed Salisbury's GR[N]P, where [N] is meant to imply the 'regional' equivalent of 'national'.

innovation, entrepreneurship and collaboration³⁹, sustainable business growth by placing a priority on wealth generation that brings outside resources into the area, a focus on local jobs for local people that calls for close industry links with all education providers and the development of a lifelong learning focus linked with local employment pathways, and the building of enabling infrastructure, strong communities and environmental sustainability.

The City of Playford has plans, reports and/or programs on industrial renewal⁴⁰, urban regeneration and employment and skills. It has a lifelong learning officer and an early childhood strategy in recognition of the need to start from the cradle to influence lifelong learning dispositions. Playford City Council also operates on a partnerships basis.

Playford Partnerships was established in 1999 as a pro-active model for the involvement and management of the local community and all levels of government to create sustainable quantum change. Playford partnerships is a way of thinking, a core value and everyday way of doing business – ‘we live it we breathe it and we embrace it’. (www.playford.sa.gov.au)

As examples of their cooperation, Salisbury and Playford combined, were selected in 2001 to be a part of the Sustainable Regions Program but this did not give rise to a sustained regional governance structure. They have had a three way partnership with the UniSA since 2003 and jointly manage and deliver an annual community leadership program, originally developed by TAFE Adelaide North.

The Sustainable Regions Program⁴¹ pilot encouraged Playford and Salisbury to work together and to think big involving \$10.9 million of Commonwealth funding over four years that leveraged an additional \$16.4 million (\$10.2m in cash and \$6.2m in-kind support). Some of the 23 total projects developed and implemented are mentioned later, as relevant.⁴²

UniSA Northern Partnerships (UNAP) has had a social inclusion focus and achievements in the form of new student placement models in the health area. They are involved in a regional response to literacy and in other regional youth/education and training initiatives.⁴³ UNAP was established to act as a facilitator and has developed a community engagement model that emphasises flexibility, evolutionary development and longer term institutional commitment to achieve more effective engagement in the region. The Partnership advisory group includes representation from the two local councils, the Department of Education and Children’s services (DECS), local business export and enterprise centres, a couple of local health services agencies, Anglicare and a member of Parliament as well as the UniSA. UNAP works with many of the other networks mentioned later.

There was a Northern Partnership and Office of the North, between 2002 and 2006, charged with relationship facilitation and regional governance development. Sandeman and Elliot (2006) tell the

³⁹ Salisbury based Mawson Lakes- its science and technology innovation park, a concentration of organisations with specific capabilities in electronics, ICT, advanced manufacturing, mineral processing, environment and water sustainability, and defence system-combined with quality residential and commercial areas. Located adjacently is a campus of the University of SA and quality residential and town centre facilities. Edinborough Parks (mainly in Salisbury but also Playford) that supports a clustering of defence research and manufacturing organisations such as Australia’s largest government defence force establishment- the Defence Science Technology Organisation (DSTO) - and many private companies.

⁴⁰ Playford’s Industrial Renewal program in which the outcomes are recorded of an audit of 44 equipment manufacturers and 143 of their first tier suppliers, suggests new clustering opportunities in electronic and related to be developed with the relevant industry associations to obtain enterprise best practice and supply chain performance and there is a Virginia Horticultural Precinct (in Playford).

⁴¹ Together the cities of Playford and Salisbury in 2000/2001 won funding under the inaugural Sustainable Regions Program- set up under Minister John Anderson (about the same time as DOTARs. and the ACCs). All up there were 8 original pilot sustainable regions projects across the country based on the most disadvantaged regions that had to show the extent of their disadvantage as well as what opportunities existed and what actions they were taking, so far, as a show of commitment. Each of the regions was allocated up to \$12m over three years that later was extended to 4 years – i.e. until 2005/2006.

⁴² A Report to the Community on the Playford-Salisbury Sustainable Regions program is available from the Adelaide Metropolitan Area Consultative Committee.

⁴³ UNAP works closely with The Northern Adelaide Community Youth Services and the Northern Adelaide (primary) health and aged care industry group, first established by the Office of Northern Adelaide, May 2005.

story of the Office-what worked, what did not and the lessons they learnt-which is referred to in the final section of this paper.

In summary there is a cascade of state, regional and local planning levels. There is more than one VET plan at the regional level, and even more plans and regional VET networks as outlined later.

Detailed consultations

In early 2007 further consultations were conducted in the Playford/Salisbury areas of Northern Adelaide. The purpose of these consultations was to address in detail the key research questions within this particular local community context, and specifically : *How well does the range of VET offerings meet local skill needs based on realistic economic opportunities? In what ways is VET flexible and innovative to meet local and regional needs and what constrains such practice? And, what contribution are VET-local community frameworks making to building social human and positive institutional capital in the local area?*

Distinctive features

The people consulted in early 2007 (refer list in appendix B) suggested the following were the distinctive features of Playford/Salisbury compared to other Australian regions (and as knitted together by the author from their separate answers):

- Northern Adelaide is dynamic and innovative. There is regional development activity happening on all fronts at once involving many agencies trying to adapt the available programs to make them work for the region's "real life" situations.
- There is an apparent dilemma of who is the client - the individual or industry. Interviewees explained:

We have endemic social disadvantage and intergenerational unemployment and so need and have people with a strong community focus and social inclusive VET strategies. We also have changes a plenty going on in the local economy and development officers with a high-tech industries focus that requires high-end tertiary education and business services strategies.

Local VET offerings versus VET skills needs

Local VET offerings are many and varies across the full spectrum of fields of study and provided by a range of VET agencies. All the schools of Northern Adelaide are heavily involved in VET and there is a notable local employer group that has a VET in schools program. The region has a new Commonwealth funded Australian Technical College that commenced in 2007. TAFESA Adelaide North (TAN) has three campuses in the two cities of Salisbury and Playford (one is a specialist campus in aviation) as well as six other campuses in neighbouring suburbs that TAN covers.⁴⁴ There are regionally based private VET providers (RTOs⁴⁵) and many others that operate from other parts of metropolitan Adelaide. The two local governments also put resources into VET. They both have brokerage officers. Indeed, brokers and various players cooperating in VET ventures is common in Northern Adelaide and outlining these perhaps is the most useful way of illustrating how VET offerings are being moulded to meet local needs, ending with the roles played by the TAFE.

The student enrolment profile for 2005 for the TAFE Northern Adelaide Playford and Salisbury campuses illustrates the broad cross section of VET provision that is occurring (see table at then

⁴⁴ TAFE governance arrangements in SA have changed in the past two years. There are three geographically based TAFEs in SA, formed to achieve "critical mass" dimensions-Adelaide North, Adelaide South and Regional TAFE SA. TAFE SA Adelaide North (TAN), is the largest.

⁴⁵ Registered Training Organisations are those with accreditation to deliver nationally recognised VET.

end of this section). The student profile by qualification level is similar to that for the nation as a whole but with a few less at the highest qualification levels (17.8% compared to 21.4%) and a few more at the lowest levels (non award courses- 9.1% compared to 5.8%). There are students in all fields of education as in the national profile. There are high and comparable with the national average percentage of students in Engineering and Related Technologies (15.8% for Northern Adelaide, 16% for national) and Management and Commerce (16.3% for Northern Adelaide, 19.1% for national), and more than the national average proportions in Architecture and Building (10.9% compared to 6.3%) and Agriculture, Environmental and Resources studies (10.1% compared to 4.9%).

Northern Adelaide VET related partnerships/frameworks

There are several regional community partnerships/frameworks relating to young people and transitions to work from education and training. Others have an adult focus. These are discussed in turn. All partnerships are seeking to achieve learning, education and employment outcomes appropriate to their individual clients' needs.

School VET brokers and partnerships

Futures Connect is a SA Department of Education and Children's Services initiative to improve and connect students in years 8 to 12 with their future through curriculum provision (including VET Pathways), career development, Individual Learning Plans, transition from school to work portfolios and post school life plans. It has encouraged the development of regional or cluster based models of VET provision.

The state schools in the region collaborate in the delivery of a wide range of University and Vocational curriculum. The alliance of these public schools is known as NASSSA (Northern Adelaide State Secondary School Alliance). NASSSA has its own board drawn from eminent local industry, community and education leaders. Schools in the alliance have a curriculum philosophy that encourages applied learning in all curriculum areas. All students in the 11 member schools can access a wide range of transition pathways linked to their aspirations and employment opportunities. They have the opportunity to select from more than 20 VET programs at Cert 1 to Cert 4 level as part of the provision. Students can access courses at neighbouring schools and local RTOs. The numbers of students participating has grown to 2500 or about 50% of senior school enrolments.

Principals of schools in the alliance formed the Northern Adelaide Secondary Schools Principals Network (NASSPN) several years ago to provide the educational direction for the alliance. Further regional leadership structures at Deputy Principal, Assistant Principal and Coordinator levels ensure further sharing of programs, resources and leadership. The Alliance has defined five broad 'skills hubs' to provide an organizational structure between the multiple industry areas and the eight areas of the school curriculum. These five skills hubs ('IT/Business', 'Agriculture/Land Management', 'Creative Industries', 'Human Services' and 'Science/Technology') provide the framework in which schools provide a 'lead' or focus, on behalf of all schools, in the provision of certain pathways. They may take a lead in the provision of VET courses or ensure students are brokered into courses or apprenticeships of their choice.

The notion of 'lead schools' and the emergent governing structure have ensured the growth and sustainability of this innovative curriculum provision. Feedback from parents and industry suggests that the increased VET student numbers supported by career development activities is 'good for the students, good for industry and good for the region'

Northern Futures is a peak regional group focused on successful transitions to adulthood of youth in learning, earning and wellbeing. The Northern Futures Board has representation from industry, public and non-government schools, TAFE, private training providers, UniSA, Local Government, youth agencies, health agencies and young people. This umbrella organisation bridges the

traditional gaps between schools, youth agencies, training and higher education providers and industry. Northern Futures coordinates a range of programs⁴⁶ and has developed a comprehensive strategy to engage and support young people across the Northern Adelaide region to make the programs far more powerful than they could ever hope for if they were working separately. Northern Futures is also directly responsible for some programs itself.

The new Australian Technical College is also a broker regarding VET. The college is not an RTO. It brokers employment based trades training (at AQF Certificate III) for its year 11 and eventually year 12 students with TAFEs, other RTOs and employers. It operates in five trades areas; building and construction, electro-technology, automotive, metal engineering and commercial cooking, combined with school Year 11 and 12 subjects including mathematics and science. The college has unashamedly recruited the best kids that applied, around 105 for 2007, from well beyond the northern region and 40 are redoing year 11 to get into the ATC. Some interviewees believe the Australian Technical College initiative cuts across others in the region however the Australian Technical College believes this is based on misunderstandings. Its mandate is to provide another distinct school/work learning option. Tremendous excitement was reported among employers, kids and their parents with the establishment of the new Australian Technical College.

The NAMIG Concept 2 Creation program is an initiative linking the defence and advanced manufacturing industry to young people in schools. It is industry developed and led. NAMIG (the Northern Advanced Manufacturing Industry Group) was funded by the sustainable regions program. Its C2C program introduces students and teachers to a product life cycle approach to science, mathematics and technology education. It is an action oriented approach to learning and developing industry experience in which students work together to solve problems that require new products or services. NAMIG offers support and professional development for the teachers as well as their students. About five schools so far have come on board. Cost per student is \$1500 and over 500 have been through the C2C program to date, a scale required to make a lasting difference at a regional level rather than an individual level. The NAMIG initiative has been included in the recent national *Shifting Gears report* on the automotive industry and recommended for throughout Australia as a means of facilitating an enduring culture of advanced manufacturing industry engagement with educational and training providers.

Adult VET brokers and partnerships

Salisbury City Council has an officer that brokers VET foundation and employment programs for locals. To enable flexibility, the funding contract for the program does not specify the projects to be undertaken, only the broad targets to be met. The officer starts with employer groups to determine their job vacancies and the skills requirements, and then contracts an appropriate VET provider or neighbourhood centre to deliver the training. Advertisements for locals interested in being skilled for the jobs generally bring in large numbers. Interviewing takes place and acceptance onto a program is based on the individual's motivation and suitability against criteria related to the particular training. After training, the officer places graduates into jobs and provides after care for the first weeks to help them settle in and stay employed. The officer links with other agencies in Northern Adelaide for referrals on if they cannot help an individual and for recruitment positions for their trained people. This has worked well. In the past twelve months local adults have been skilled and put into local jobs in food processing, industrial cleaning, and customer services to name a few areas and a youth hospitality and bar course was being planned.

Playford City Council also has an officer who brokers local community focused learning and education programs. A notable Playford initiative is the *Marni Waaindi-towards a future* model. It has just won a national award⁴⁷ for local government and is a designated "project of national significance."⁴⁸ *Marni Waaindi*

⁴⁶ Including programs such as the DEST funded Local Community Partnerships (schools with industry) initiative and recently added Career Advice Australia initiative. Northern Adelaide has 3 LCPs and one RIC who works to AIG. There is a progress report on the LCPs showing substantial growth in student numbers in Northern Adelaide (contact Kim Clayton).

⁴⁷ of the Commonwealth Department of Transport and Regional Development (DOTARS)

⁴⁸ by the Department of Education, Science and Technology (DEST)

is described as a learning node connected to a network of other agencies and local industry which provides a comprehensive range of education and training and other support services to engage indigenous young people in seamless, aspirational action based learning pathways leading to employment, social inclusion and cultural participation.

Paralowie school has a adult campus attached, to allow for adult learning opportunities outside a competitive environment and there are other adult community providers, such as neighbourhood houses.

Roles played by TAFE SA Adelaide North

Although TAFE SA Adelaide North (TAN) is involved in the above local VET partnerships, they are not seen as the leaders within them, which is not to say they should be. Ways in which they are involved include:

- TAN (and other RTOs) is involved in the school/VET/industry initiatives because schools in SA are not RTOs (with 2 exceptions) and so TAFEs and other RTOs are required for the VET components in schools. Often the RTOs work through an auspicing arrangement whereby the schools deliver some of the course but the RTO assesses and issues qualifications as relevant.
- TAN through the Heads of the various faculties⁴⁹ work with the state Industry Skills Councils. Some faculties are trialling a case management approach to their graduates in an effort to keep them employed in their chosen occupation, for example wastage is seen as an issue in hospitality.
- The Elizabeth campus of TAN has an education manager of pathways and partnerships as part of its inclusiveness strategy who is one of a kind in the whole of TAN. The officer works with the networks described above and others to ensure TAFE offerings are relevant to community members. The Rage Cage and Sprint Cars are two innovative and successful action learning projects run by the TAFE.

We (TAN) are one of the pieces of the puzzle in terms of social and economic development We have a responsibility to engage with the community and build the capacity of people to deal with their own issues. Indeed capacity building has now been written into the TAN strategic plan.

- TAN (and universities) are involved and said to be very co-operative with the Northern Adelaide (primary) health and aged care industry group, first established by the Office of Northern Adelaide, May 2005. Good health and aged care services were a gap identified in the Northern Adelaide region. The group is still active providing a network for collaborative action. The education institutions are seeking to make their courses relevant and are exploring not only new curriculum but new approaches to learning that involve industry placements for work experience.
- TAN reaches out to social service networks to achieve joined up services for disadvantaged students and offer VET courses in a range of ways to ensure no individual or group is left out for delivery mode reasons.

Flexibility and innovation in TAN

Clearly from the above, there are some model examples of innovative and integrated vocational education and employment activities in Northern Adelaide, including those offered by TAFE.

⁴⁹ TAN operates on a functional head basis rather than a campus head basis. This is in contrast to Riverina TAFE for example that runs on a campus head basis with functional study area heads offering advice only to the campus head that makes final decisions regarding what is delivered at the campus level.

However TAN was criticised by some, as being too expensive in some instances, unable to be responsive in others and that the TAFE system is very unwieldy or does not have modern equipment in some areas.

It was suggested that TAN Elizabeth campus has less and older infrastructure compared to other campuses that limits its capacity and the Salisbury campus is small relatively but has modern buildings and specialises in areas other than the traditional trades. The TAN campuses in Playford/Salisbury offer courses in all community services and business services, about half of all the engineering and building trades, music & multi media, indigenous education and women's studies and vocational preparation. Vocational preparation is a big area of demand because of the large numbers of students with low previous education and work experience.

TAFE systemic constraints mentioned included: one size fits all policies and too tight program directives and too narrow performance measures; the lack of flexibility that regulations create in terms of recruitment and employment that can inhibit innovation and which inhibits capacity to attract and retain the right people and manage the effective development of staff and overall capacity issues due to budget constraints; and goals that can conflict locally that are industry demand driven versus individual student demand driven.

What local leaders think still needs to happen to improve VET demand vs supply

Capacity building of VET (and other) practitioners

- Investment in TAFE and its people, otherwise we have “a cart before the horse” situation whereby VET reforms are announced but the TAFEs cannot deliver. There was a view that TAFE has a public responsibility to be an effective strategic partner. Its staff need enterprising skills and a culture of innovation not compliance. There is a need in TAN to establish one organisational culture of flexibility.

Build on our apparent successes. Allow us to tailor VET and related programs to the terrain. More holistic and foundation learning programs for disengaged youth and adults

- We have innovative people and collaborative networks and know what it takes to achieve success. Factors offered by UNAP staff included an initiative that is of mutual benefit to those involved, doing things differently, partnering arrangements that are embedded into core structures so that if one leaves another takes over within the structure, some seed money to get new ideas up and running and, where all take personal responsibility to make it happen. Others went on to say, we need to be empowered to get on with the job and do things in new ways through action learning for agreed outcomes that need to be broader than completed VET qualifications and getting a job. There needs to be more opportunity for locals to decide how to use the money. We need to be able to undertake integrated projects not isolated functional projects. This need was mentioned by several of those interviewed with a community focus.

For many of the local residents of Playford and Salisbury a continuum of learning steps is required. Steps into learning programs support the individual to get back on the pathway to training and employment. They follow a continuum model that recognises that there are pre entry to learning issues that need to be addressed and the individual first needs to be motivated to want to learn before foundation learning pathways will make any difference. The pre entry learning issues are an interwoven mesh of complex social issues that make just surviving the main motivation in life, not learning. It is this that makes the need for collaboration with other stakeholders/agencies critical in ensuring that learning is an option let alone a pathway to developing local skills for local jobs. There is a far more human side to all this than just trying to turn out skilled workers to meet industry demands even if the aim is for this to benefit locals and the local region. The human side is resource intensive and messy in the VET equation and something government policy has difficulty

reconciling in terms of funding beyond labeling people into categories, offering funding by category silos and the focus on allowing industry to drive the VET agenda unchecked.

Foundation programs in turn are required before pre vocational and then vocational and enterprise specific programs become relevant to these individuals. Such programs are already being delivered in the region but need to be integrated into 'mainstream' delivery, for want of a better word, to ensure that they become a sustainable part of the landscape in providing Northern Adelaide with what it specifically needs instead of relying on providers constantly chasing piecemeal funding that is either a feast or a famine. On going sustainable foundation programs are needed. It takes a long time to reach some of the disadvantaged and a long time to build credibility. Often by the time this happens, the program which is really only a project, has run out of money. A critical aspect of this sustainability is also collaborative effort between government, business and the not for profit sector to ensure all resources into the north are maximized for the communities overall benefit.

Conclusions and general comments

Playford/Salisbury is engaged in the full range of education and related issues and activities that successful regions need to be engaged in. There is something for every other region in Australia to learn from Northern Adelaide. As Blandy (2006) has summarised,

Successful regions provide the skilled people that enterprises need to be successful and expand. Local skill availability is important not only for local businesses but for local populations if they are to fully benefit from and become fully integrated with the local economy.

Successful regions also provide the economic infrastructure needed by local businesses to compete successfully on the local, regional, national or international stage. This means developing social as well as physical capital by supporting civic engagement and networks of neighbourhood organisations. It means enhancing environmental quality by reducing waste, energy use and air pollution and improving public amenities.

The managers and planners of VET and related agencies in Northern Adelaide are aware that the local level is where the needs and potential sources of jobs can be identified more easily. They need systems that are flexible and encourage innovation, particularly TAFE SA Northern Adelaide.

Current regional planning and governance arrangements are rich but could do with more coordination. One respondent suggested a community directory of who is doing what to whom. Full coordination and cooperation will be increasingly needed in Northern Adelaide as competition grows from many other regions in SA and as other parts of Australia seek to develop maximally their economic and social opportunities in mining etc. An overarching Northern Adelaide coordinating plan, and perhaps a coordinating body, appears needed.

As Sandeman and Elliot 2006 explain:

The chief difficulty is that a series of narrow partnerships may not in themselves address the complex challenges the region faces and may compete for scarce resources. While more difficult to achieve, the broader partnerships are perhaps a necessary precondition to the whole of government approaches that are required. (p.25)

The important role that local government can play in regional development is illustrated in Northern Adelaide but other external players appear needed to encourage them to work together. Lessons learnt from the previous Northern Adelaide overall governance arrangements also need to be heeded, particularly the following point.⁵⁰

⁵⁰ Sandeman and Elliot (2006), *New Governance for sustained collaboration-the Northern Adelaide experience*, refereed paper delivered at the conference on Governance and community partnerships, by the Centre of Public Policy, University of Melbourne

The governance structures need to enable relevant conversations to be linked and so all members are at least aware of what others are doing. They need to provide symbolic and real places where conversations can be drawn together. A culture of collaboration is more than a preparedness to work together, it involves changes, not just in how individuals work with each other, but also about addressing the way organisations operate. Patience is one virtue necessary for collaboration as it's often necessary to wait for the 'planets to align' rather than attempting to force the collaboration before sufficient social capital has accumulated and a shared vision has engaged the participants.

Table 2 Student enrolments by Field of Study and Qualification level in 2005 at the TAFE Northern Adelaide Campuses in Playford and Salisbury

Northern Adelaide	Cert IV and above			Cert III	Cert I & II	Non award courses	Statement of attainment			Subject only - no qualification		Total %	National
	1	2	3				0	1	0	0	0		
01 - Natural And Physical Sciences	27	11	26	1	0	0	0	0	0	0	3	0.1%	0.3%
02 - Information Technology	98	405	151	60	93	1	0	0	0	0	66	1.3%	3.5%
03 - Engineering and Related Technologies	63	225	6	109	153	1	0	0	0	0	808	15.8%	16.0%
04 - Architecture and Building	91	156	178	15	76	0	0	0	0	0	557	10.9%	6.3%
05 - Agriculture, Environmental and Related Studies	69	17	2	16	141	0	0	0	0	0	516	10.1%	4.9%
06 - Health	52	32	4	0	20	1	0	0	0	0	245	4.8%	4.7%
07 - Education	260	242	301	4	25	1	0	0	0	0	109	2.1%	2.9%
08 - Management and Commerce	163	114	41	1	18	0	0	0	0	0	833	16.3%	19.1%
09 - Society and Culture	30	38	20	1	1	0	0	0	0	0	337	6.6%	9.9%
10 - Creative Arts	19	209	140	1	37	23	0	0	0	0	90	1.8%	2.7%
11 - Food, Hospitality and Personal Services	38	6	93	259	22	27	0	0	0	0	429	8.4%	9.2%
12 - Mixed Field Programmes	0	0	0	0	0	0	0	0	0	0	445	8.7%	11.6%
Subject only - no qualification	911	1457	962	467	587	44	688	0	688	688	5126	13.4%	8.7%
Total	17.8%	28.4%	18.8%	9.1%	11.5%	1.1%	13.4%	0	13.4%	100.0%	5126	100.0%	99.8%
Total %	21.4%	26.7%	20.8%	5.8%	-	n/s	8.7%		8.7%				

* National profile is from : Australian vocational education and training statistics, students and courses, 2005, NCVET, Adelaide.

Local profiles provided by NCVET, special run, with permission from the TAFE

Sunshine Coast region and Noosa, QLD

Peter Kearns

Introduction

The case study on the Sunshine Coast illustrates the relationship of VET offerings to regional development skill needs in a region with well defined boundaries and identity, substantial education resources, and with considerable development of regional machinery to progress the economic and social objectives of the region. Although much of this development is relatively recent, there is in the Sunshine Coast a well developed regional framework for aligning VET offerings with the development needs of the region.

In this study, Noosa Shire was selected as the community for the second stage of this study that followed up on the regional consultations undertaken in December 2006. As one of the three shires comprising the Sunshine Coast, Noosa is particularly interesting in its attempt to adopt a triple bottom line approach to sustainable development with some differences of emphasis to Caloundra and Maroochy Shires which have a greater development orientation. How VET is responding to this context is a particular interest in this study.

The Planning Context

The Sunshine Coast comprises the three Councils of Caloundra, Maroochy, and Noosa which are linked for economic development through the role of SUNROC (Sunshine Coast Regional Organisation of Councils). While the Sunshine Coast is a resort and retirement strip with rapid population growth, attempts are also being made to develop knowledge industries, and SUNROC has a Knowledge Economy Strategy to guide this development. A current diversification project is examining how industry and employment diversification can be taken further.

Behind the tourist coastal strip, a number of older towns linked to agriculture survive, although agriculture is less important than previously. With its rapid population growth, the Sunshine Coast is experiencing the problem of sustaining growth, including what is seen as a major employment challenge in creating enough new jobs.

Planning to meet the skill and development needs of the region involves a cascade of planning levels with attempts to coordinate through key planning principles and strategies. This cascade involves:

- State level planning for the Smart State including the 2006 Queensland Skills Plan
- the South East Queensland Regional Plan 2005-2026
- regional skill and employment planning for the Wide Bay and Sunshine Coast region as one of the six regions of the Department of Education, Training, and the Arts

- Sunshine Coast economic planning and development through SUNROC, and
- economic and social planning by each of the three Councils.

How well this planning cascade works was a key issue taken up in the consultations. There is a strong emphasis on sustainability in the South East Queensland Regional Plan which sets a context for Sunshine Coast planning, and for co-ordination of the various planning levels.

With its rapid population growth, the SUNROC 2004 Economic Development plan identified a major employment challenge to be addressed so that the supply of jobs keeps pace with employment growth. A SUNROC update of September 2006 on the employment challenge provides a useful assessment of progress.

A further useful planning source is provided by the annual Regional Training and Employment Priorities report of the Wide Bay and Sunshine Coast Region of DETA. From 2007 the RTEP report replaced by a shorter What Has Changed? Report which was focused on emerging trends and change drivers.

The Sunshine Coast is well served by post-school education with the University of the Sunshine Coast, the Sunshine Coast Institute of TAFE, and a spectrum of private providers. Useful information on the contribution of higher education to the region is available from a 2006 OECD Peer Review Report on the Sunshine-Fraser Coast. A number of the findings of this report are also relevant to the VET role in the region.

Overview of Key Statistics

Population

Rapid population growth is driving development of the region. This increased from 223,868 in 1998 to 284,402 in 2005 with an annual growth rate of 3.6% between 2001 and 2005. Growth from 247,167 in 2001 to 482,780 by 2027 is forecast with a growth rate of 95%.

Job creation

The Sunshine Coast has approximately 90,900 jobs located in the region which increased to around 104,000 in 2006. This employment creation of 13,110 jobs in 2005/06 comprised 9,760 population and construction jobs and 3,350 “driver” sector jobs. The increase in the “driver” or export-oriented jobs exceeded the average annual target of 1,100 jobs set in the 2004 Economic Plan.

Labour force

The overall unemployment rate in the Sunshine Coast region at the time of the 2001 Census was 11.3% (Queensland 8.2%). The participation rate was 56.0% (Queensland 63.1%)

• Employed full-time	52,870
• Employed part-time	38,246
• Unemployed	11,935
• Labour force	105,962
• Not in labour force	83,420

Employment by industry

At the time of the 2001 Census, retail trade was the largest employer with 17,019 (18.1%). Other large employers were health with 9,795 (10.4%), property and business services with 9,194 (9.8%), and construction with 9,072 (9.69%). A table for industry of employment by occupation from the 2001 Census is attached to this paper.

The greatest specialisation occurred in the accommodation, cafes, restaurants and construction industries. Of employed persons in the region, 8.1% were employed in the accommodation, cafes and restaurants industry (Queensland 5.6%).

Employment by occupation

In the 2001 Census, intermediate clerical, sales and service work was the occupation with the most number of employed persons (14,929 or 15.9%). Other significant occupations were professionals (14,139 or 15.0%), associate professionals (13,107 or 13.9%), and tradespersons and related workers (12,952 or 13.8%).

Education qualifications

The most significant qualifications were at the time of the 2001 Census:

Bachelors degree	14,065 (7.1%)
Advanced diploma & diploma	12,626 (6.4%)
Certificate	35,544 (18.0%)
Not stated	22,893 (11.6%)

This reflects the structure of the Sunshine Coast industry at the time of the 2001 Census. The 2006 Census data should clarify the extent of structural change in the Sunshine Coast workforce including the development of knowledge based industries and creative industries.

Regional development planning

SUNROC has an Economic Development Plan (2004) and a Knowledge Economy Plan (2005) while quarterly economic reports are prepared for a range of indicators. SUNROC services a leadership group for the region named SCORE (Sunshine Coast Office of Regional Enterprise) while SCORE has a high level Education Executive which comprises the Vice-Chancellor of the Sunshine Coast University, the Director Sunshine Coast TAFE, the Education Department's Regional Director, and the Executive Director of SUNROC as chair. This group is a recent development and has yet to develop its role. However, the potential exists for the group to develop a regional education and training plan that would open education pathways and contribute to meeting regional learning and skill needs.

Knowledge economy development

The Sunshine Coast's Knowledge Economy Strategy of 2005 set a framework for the development of a knowledge based economy in the region. The role of the University of the Sunshine Coast was seen as central to this objective. The Strategy noted that skill development in the identified

foundation knowledge industries (eg design and construction, creative goods manufacturing, smart manufacturing) was at the level of “some supporting activity” only.

Critical priorities

The 2006/07 Department of Education, Training, and the Arts planning document (RTEP) identified a number of critical skill priorities for the region. These range across building and construction, community health and allied services (especially aged care), metal fabrication, some creative industries, and horticulture.

Some key issues

Our overview of Sunshine Coast development identified a number of issues that were taken up in the regional and Noosa community consultations. These included the following:

- How effective is the cascade planning model in supporting sustainable economic and social development in the region?
- How well is the employment challenge driven by rapid population growth being addressed? What part is VET playing?
- How well is the new DETA regional planning model based on What has Changed reports working compared to the former Regional Training and Employment Practices report approach?
 - Is this effective as an early warning system for the identification of shifts in demand for skills?
- What role has VET played in progressing the identified knowledge economy skill requirements of the region? Has VET been an effective partner?

These issues were addressed initially in the regional consultations undertaken in December 2006, and were carried over to the Noosa community consultations in March 2007.

The Regional Consultations

The regional consultations undertaken in December 2006 threw up the following themes relevant to meeting the skill needs of the region;

- While a significant employment challenges existed in creating enough new jobs to keep pace with the rapid population growth in the region, job creation was keeping pace with this requirement.
- A current objective was to achieve more diversity and balance in the industry and employment base with the major industries (retail, health, construction, property and business services, tourism) consumer and population driven and subject to consumer shifts.
- While comprehensive planning machinery existed through the SUNROC role, much of this machinery such as the Education Executive was fairly recent with the main benefits lying in the future.
- The machinery established through the SUNROC role provided a valuable basis for fostering collaboration and partnership in the region.

While the regional consultations pointed out that progress that has been made in the establishment of arrangements to foster partnership in the coordinated development of the region, they also threw up a number of issues needing to be addressed. The dominance of small business in the

region meant that the attitudes of business to training and skill reflected the typical views of small business. It was pointed out in the workshop conducted that most industry and business organisations were not strong in their membership so that these were barriers to the articulation of strategic demand-side perspectives in the planning and development of regional skill policy. Much remained to be achieved in this area.

Overall, the regional consultations provided a portrait of a region where considerable progress has been made in the establishment of machinery and planning for the strategic development of the region, while at the same time a number of significant issues remained as a legacy of past times. These questions were examined further in the Noosa consultations undertaken in March 2007.

The Noosa Consultations

Noosa Shire Council is distinctive in the strong emphasis placed in the Council's economic and social planning on sustainable economic, social, and environment development within the Council's Quadruple Bottom Line framework.⁵¹ This orientation is reflected in such aspects as the Council's so called "lifestyle economy", policies to encourage innovation and collaboration and diversify the economic base, and in the recognition given to the significance of learning in the social planning of the Council.

A further feature we observed in Noosa's economic planning that was not evident in the other communities we studied, was the division of Noosa industries into established industries and emerging industries. Emerging industries identified included the following: health and lifestyle, creative industries, knowledge industries, and sustainable rural industries.

While the emerging industries were smaller in scale (estimated to contribute in total between 16% and 28% of Noosa Shire's GRP), they were important aspects of Noosa's lifestyle economy and community values, and the overall vision of the future of the Shire. This division has the further advantage of articulating a challenge to VET planning and providers as to how small industries with thin markets for skill can best be nurtured in training arrangements.

Noosa's distinctive lifestyle economy was further divided in the Economic Sector Plan into three sub-sectors: the Village Economy; the Experience Economy; and the Export Economy (which includes Knowledge Economy developments).⁵²

The Noosa 2002-2015 Social Sector Plan was also notable for its clear recognition of the importance of learning for sustainable communities.

*Learning is critical to sustainable communities which are adaptive, flexible and proactive in addressing community priorities. Learning is a powerful tool for identifying and solving problems, and enhances the development of skills and knowledge relevant to our community.*⁵³

It follows that a point of interest in the Noosa consultations was the extent to which this philosophy had carried over to economic and social development in the Shire.

⁵¹ Noosa Council 2004, Noosa Council Economic Strategies & Innovations Implementation Strategy 2004-2007; Noosa Council 2002, Noosa 2015 - A Well Chosen Future: Social Sectors Plan 2002-2015.

⁵² Noosa Council 2004, p.8.

⁵³ Noosa Council 2002, p.21.

The clear articulation of a social, economic, and environmental vision for the future of Noosa gave a particular orientation and value to the Noosa case study and threw up the question of the extent to which the VET system has been responsive to this vision of community development.

It is relevant to note that the issue of the VET contribution to sustainable development has received international prominence in the context of the United Nations Decade on Education for Sustainable Development. In the case of VET, this question has been taken up by UNESCO's VET research agency, UNEVOC, in a 2004 meeting of experts to consider the issues⁵⁴ and in the subsequent release of a discussion paper on VET and sustainable development.⁵⁵

Matching VET Offerings to Regional Development Skill Needs

While Noosa Shire Council has developed strong economic and social planning arrangements linked to the overall vision of the development of the Shire, converting VET provision to this view encounters the reality that ninety five per cent of businesses in the Shire are small businesses with small business attributes and values. In addition, the significant number of home-based businesses poses a particular issue in meeting their learning and skill needs.

This context reflects the problem of aligning VET provision with emerging and future skill needs. The Noosa Social Plan for 2006-2016 comments on this problem in pointing out the disparity between current qualifications held in the community and future skill needs forecast in the Shire's business strategy.⁵⁶

Whereas Noosa Shire has relatively large numbers of people with qualifications in fields of tourism, hospitality, personal services, and creative arts – reflecting the current economic drivers – this is less the case with respect to the new areas identified in Noosa Shire's business strategy.⁵⁷ The Social Plan illustrates this point in the case of qualifications held in information technology and health.⁵⁸

This example from Noosa development planning illustrates the need to balance present skill needs linked to current economic drivers with the forging of knowledge and skill to support future skill needs identified in business planning for the community. This argues for co-evolution of business and human capital (including skill) development with intimate connections forged between the two systems. Achieving this will require flexibility in VET provisions, partnerships that foster an on-going dialogue, and VET funding arrangements that recognise the need to support innovation at the community and regional levels and to nurture emerging industries.

Our consultations suggested that Noosa is on the path to such arrangements, but that a number of barriers remained to be addressed. Among the issues mentioned in our consultations was the question of aligning State and national priorities with local and regional needs, which in turn depends on how well emerging local skill needs are identified and articulated. This was a common issue that emerged in all case studies.

⁵⁴ UNESCO, 2004, *Learning for Work, Citizenship and Sustainability: Report of the UNESCO International Exports Meeting*, UNEVOC, Bonn.

⁵⁵ UNEVOC, 2006, *Orienting Technical and Vocational Education and Training for Sustainable Development* UNEVOC, Bonn.

⁵⁶ Noosa Council Social Plan 2006-2016, p.69.

⁵⁷ *Ibid*, p.69.

⁵⁸ *Ibid*, p.69. The Social Plan points out that Noosa Shire has less than half the rate of persons with a qualification in IT compared to Queensland. This is rapidly seen as a barrier to Noosa's future development. *Ibid*, p.12.

The dominance of competition over cooperation in the work of VET providers was identified in a meeting with the Business and Corporate Services Committee of Noosa Council. Other meetings supported this view although various examples of good partnerships were also given.

Noosa is dependent on non-local VET provision to meet many of its skill needs. The VET student profile of the TAFE Cooloola Sunshine Coast Institute –Noosa centre is narrow in terms of fields of education. The Centre’s small numbers of students (531) study mostly in four fields- management and commerce (36.7%), creative arts (20.5%), mixed field programs (22.6%) and education (10%). A higher proportion are studying at certificate III level than the national average (47.1% compared with 26.7%) (see table 4 at the end of this section).

Flexibility and Innovation in VET

Noosa is a community with a clear vision of its future development—social, economic, and environmental—and with emerging industries identified that fit the lifestyle economy of the community. This context challenges the VET system to be innovative in responding to the shifting economic and social base of the community, and to be flexible in balancing emerging and existing needs.

Our contributions suggested that the VET system is still in the process of adapting to these requirements. While various examples of innovation were pointed out in our consultations, these tended to be either linked to larger organisations or were ad hoc examples of innovations taken by enterprising individuals.

There was less sense that innovation was approached on a systemic basis with funding and administrative arrangements that stimulated, nurtured, and supported innovation. How to foster innovation in the small business and home based business environment were recurring issues that arose in consultations.

The need for a systemic and strategic approach to innovation is a further example of the requirement for the co-evolution of business and human capital development with arrangements that promote an ongoing dialogue on this requirement. The SUNROC development of a high level Education Executive provides machinery that could be used to further such a dialogue and planning.

OECD work on the learning region concept also provides a source of guidance on the links between learning strategies, especially organisational learning, and innovation that is relevant to the community and regional development needs of Noosa. Much could be gained from development of Noosa as an innovative learning community which harnessed learning strategies to progress its economic and social objectives.

VET – Community Partnerships and Frameworks

While a broad spectrum of partnerships exist in support of Noosa’s social and economic development, the role of the VET sector tends to be played out in a series of ad hoc partnerships rather than in a cohesive and strategic framework that fosters ongoing dialogue and interaction. The Noosa Economic and Social Plans provide the main frameworks for coordinating and integrating the range of activities that bear on Noosa’s human resource development, supplemented by regional planning undertaken through the work of SUNROC. Issues identified in this planning, such as the low level of people with IT qualifications in Noosa, require strategic responses that go

beyond the role of the VET sector, and which will require broader partnerships that associate all stakeholders in addressing the identified requirement.

Other key issues such as addressing adult literacy deficiencies have not been picked up so far in Noosa's social and economic planning. Although Noosa performs well in terms of qualifications held and school retention to Year 12,⁵⁹ it is unlikely that significant deficiencies in adult literacy do not exist that would serve as barriers to Noosa achieving its desired economic and social future.

Such issues require broad partnerships that associate the roles of VET, schools, Noosa Council (including its library service), business and industry, and community organisations in a systematic and strategic response. There would be considerable value in Noosa forging such a framework that associated the roles of the education sectors, and other stakeholders, in addressing key strategic learning and skill issues that bear on Noosa's planned future, such as the low level of IT qualifications held and adult literacy levels, and which contribute to building a learning and innovative culture in Noosa.

Conclusions and General Comment

Noosa has achieved much in developing social and economic planning to support sustainable development in line with the clear vision held of Noosa's future. In these respects Noosa provides a good practice example with national significance.

At the same time, the process of adapting the work of the VET sector (and the education system generally) to these requirements is still a work in progress with continuing challenges to be addressed in developing flexible responses to shifting learning and skill requirements. While there is some evidence of tensions between State and national priorities and those of the Noosa community, Noosa and the Sunshine Coast region has well developed planning arrangements that enable local skill needs to be identified and articulated in the context of overall socio-economic development of the community and region.

Key learning and skill needs discussed in this paper will require strategic responses that go beyond the work of any single education sector, such as VET, and which will require an on-going dialogue and considerable partnership development. There is a good case to develop further, both at the regional and community levels, frameworks that cross the education sectors and which link to other stakeholders in addressing these requirements.

The Sunshine Coast Plan includes a recommendation for the development of the Sunshine Coast as a learning region⁶⁰. While this recommendation has not yet been progressed in a significant way, much would be gained from a learning region framework for the region to extend partnerships and collaboration in a strategic way. Such an initiative would have most value if it recognised that learning occurs in many contexts outside of education institutions with informal learning in the workplace, home, and many community contexts increasingly important.

⁵⁹ Noosa Council 2006, pp 66-69. Responses to the 2003/04 Noosa Business Survey showed the strong position of Noosa in terms of qualifications held compared to Queensland averages (Fact Sheet 2). However, aspects such as literacy levels were not included in the survey.

⁶⁰ SUNROC 2004, Sunshine Coast Regional Economic Development Strategy, p.91. This proposal appears to interpret a learning region in terms of the activities of the education sectors rather than the broader concept found in the work of OECD, the European Union, and initiatives in Europe and Australia where the concept relates to all forms of learning (including informal) and the other learning contexts.

At the community level, much could be gained from the development of Noosa as an innovative and inclusive learning community. Noosa already has some of the key characteristics of a learning community, while its vision for the future would fit well with a learning community initiative.

Extending collaborative frameworks such as these would provide a basis for a more comprehensive and coordinated approach to aligning VET offerings with regional development skill needs in ways that support sustainable economic, social, and environmental development, and which stimulate innovation and building a learning culture in the community.

**Table 3 2001 Census of Population and Housing Sunshine Coast (Statistical Subdivision) – Qld Industry of Employment by Occupation
Count of employed persons (excluding overseas visitors) Based on location on Census Night**

	Managers & Administrators	Professionals	Associate Professionals	Trades-persons & Related Workers	Advanced Clerical & Service Workers	Intermediate Clerical, Sales & Service Workers	Intermediate Production & Transport Workers	Elementary Clerical, Sales & Service Workers	Labourers & Related Workers	Inadequately described	Not stated	Total
Agriculture, Forestry and Fishing	510	72	46	97	49	39	171	7	470	14	7	1,482
Mining	22	31	12	44	4	7	44	0	7	0	3	174
Manufacturing	807	422	342	1,839	201	546	692	174	695	49	24	5,791
Electricity, Gas and Water Supply	26	44	55	109	8	38	42	9	15	3	3	352
Construction	770	152	415	3,363	358	265	590	67	802	43	14	6,839
Wholesale Trade	458	136	254	232	129	774	341	260	237	17	9	2,847
Retail Trade	477	326	2,193	1,610	269	1,279	922	5,506	845	30	49	13,506
Accommodation, Cafes and Restaurants	128	68	1,849	436	63	1,894	75	640	957	44	16	6,170
Transport and Storage	124	226	216	98	157	360	947	133	68	10	5	2,344
Communication Services	43	61	106	106	5	73	138	343	5	3	3	886
Finance and Insurance	114	68	631	8	335	641	0	39	5	70	3	1,914
Property and Business Services	403	1,679	1,857	234	829	750	99	484	978	115	17	7,445
Government Administration and Defence	165	410	330	110	68	553	104	189	148	19	3	2,099
Education	299	3,262	200	99	108	918	27	76	180	10	5	5,184
Health and Community Services	245	2,830	924	116	114	2,593	52	125	338	26	13	7,376
Cultural and Recreational Services	110	373	360	199	38	378	29	148	105	17	4	1,761

	Managers & Administrators	Professionals	Associate Professionals	Trades-persons & Related Workers	Advanced Clerical & Service Workers	Intermediate Clerical, Sales & Service Workers	Intermediate Production & Transport Workers	Elementary Clerical, Sales & Service Workers	Labourers & Related Workers	Inadequately described	Not stated	Total
Personal and Other Services	94	342	588	783	88	393	132	259	330	9	3	3,021
Non-classifiable economic units	29	44	26	33	31	74	19	20	46	32	21	375
Not stated	40	70	77	124	24	98	48	75	107	39	670	1,372
Total	4,864	10,616	10,481	9,640	2,878	11,673	4,472	8,554	6,338	550	872	70,938

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Table 4 Student enrolments by Field of Study and Qualification level in 2005 at the Cooloola Sunshine Coast- TAFE Institute-Noosa Centre

Field of Study	Cert IV and above				Non award courses			Statement of attainment		Total %	
	Cert IV and above	Cert III	Cert I & II	Cert I & II	Other	Statement of attainment	Other	Total	National	Total %	
01 - Natural And Physical Sciences	0	0	0	0	0	0	0	0	0	0.0%	0.3%
02 - Information Technology	0	0	0	0	0	0	0	0	0	0.0%	3.5%
03 - Engineering and Related Technologies	0	1	2	0	0	0	0	3	0	0.6%	16.0%
04 - Architecture and Building	0	0	0	0	0	0	0	0	0	0.0%	6.3%
05 - Agriculture, Environmental and Related Studies	0	0	2	0	0	0	0	2	0	0.4%	4.9%
06 - Health	0	0	0	0	0	0	0	0	0	0.0%	4.7%
07 - Education	1	0	4	0	48	0	53	10.0%	2.9%	10.0%	2.9%
08 - Management and Commerce	15	178	2	0	0	0	195	36.7%	19.1%	36.7%	19.1%
09 - Society and Culture	7	29	0	0	0	0	36	6.8%	9.9%	6.8%	9.9%
10 - Creative Arts	90	19	0	0	0	0	109	20.5%	2.7%	20.5%	2.7%
11 - Food, Hospitality and Personal Services	1	12	0	0	0	0	13	2.4%	9.2%	2.4%	9.2%
12 - Mixed Field Programmes	1	11	61	39	0	8	120	22.6%	11.6%	22.6%	11.6%
Subject only - no qualification	0	0	0	0	0	0	0	0	0	0.0%	8.7%
Total	115	250	71	39	48	8	531	100.0%	99.8%	100.0%	99.8%
Total %	21.7%	47.1%	13.4%	7.3%	9.0%	1.5%	100.0%				
National	21.4%	26.7%	20.8%	5.8%	n/s	2630.0%					

* National profile is from : Australian vocational education and training statistics, students and courses, 2005, NCVET, Adelaide.

Local profiles provided by NCVET, special run, with permission from the TAFE

Cooloola region and Gympie, QLD

Peter Kearns

Introduction

Gympie is the centre of the Cooloola region of Queensland, a local government shire and sub-region of the Wide Bay-Burnett region. This location with a dual Janus-like orientation towards both the Sunshine Coast for some areas of development such as tourism, and towards Wide Bay-Burnett for other aspects of development, such as administrative and educational services, defines much of the balancing and development dilemmas confronting the shire.

While Cooloola may properly be recognised as part of a Greater Sunshine Coast region for tourism and related development, it is linked to Wide Bay-Burnett, one of the poorest regions in Queensland, for most services and key aspects of regional development. These links include the scope of the Area Consultative Committee, the TAFE role, and the Regional Organisation of Councils which encompasses the twenty-two councils in the Wide Bay-Burnett region, as does the Area Consultative Committee.⁶¹

In these respects, Cooloola reflects a dispersed planning and development model that ranges over communities without much in common. The differences between the coastal communities such as Cooloola and the rural inland communities such as Kingaroy are substantial and present a particular challenge for strategic regional development, including the question of matching VET provision with regional development skill needs. This case study explores the influence of this context on how well regional development skills needs are met.

The Wide Bay - Burnett Region

Wide Bay-Burnett is one of the poorest regions in Queensland on a range of economic and social indicators so that it has received funding from the Australian Government under the Sustainable Regions program. This funding has supported, among other initiatives, a study by the National Institute of Economic and Industry Research (NIEIR) on demographic and economic change (NEIS 2006a). This large-scale study includes both an overview for the whole region and reports for sub-regions with Cooloola included in a Country Coast sub-region report (NIEIR 2006b).

The disadvantage of both the Country Coast sub-region and WBB overall, is shown in the main characteristics identified in the region.

These were:

- average household incomes are low
- there is a high unemployment rate

⁶¹ This compares to three councils in the Sunshine Coast ROC and Area Consultative Committee.

- there are particularly high unemployment rates among lone households and couples without children
- there is a high dependency on government social security benefits in household income
- employment generation per capita is low, and
- average earnings per capita are low. (NIEIR 2006b).

For example, the unemployment rate in the south coast sub-region (where Cooloola is located) was 19.0 in 2005 with rates of 17.1 in the Wide Bay-Burnett region compared with the Brisbane rate 4.9 per cent at the time.

The NIEIR study of Wide Bay-Burnett highlighted a central issue for many regions with ageing populations, as in the WBBR. This exists in the relationship between the share of population aged 55 and over and the unemployment rate. Analysis undertaken by NIEIR for 62 comparable Australian regions compared the share of population aged 55 and over and the unemployment rate. This showed:

- there is a strong positive relationship suggesting that for every 1 percentage point rise in the share of population aged 55 and over, the unemployment rate will increase by 0.9 percentage points
- that Wide Bay-Burnett is one of the top regions in terms of an aged demographic structure and high unemployment;
- that, in general, the more aged a region the greater the rate of ageing. (NIEIR 2006b pp, 3-4).

These findings led the NIEIR study to conclude that the Wide Bay-Burnett region was trapped in a vicious cycle of ageing. These findings, if verified by further research have significant implications for the many regions of Australia with ageing populations, and for the VET role within these regions.

The NIEIR study found four alternative scenarios for WBRR and its sub-regions (including Cooloola):

1. **God's waiting room** scenario where the negative economic impacts of an aged society dominate with a decline in productivity.
2. **Connecting to the world** scenario which is seen as the best demographic and economic scenario for the region.
3. **Bumbling along**, the scenario that reflects current trends and policies.
4. **Two speed development** with a dual economy and society under which the coastal regions exploit their direct potential of connecting with the world while the inland regions languish.

The NIEIR study of Wide Bay-Burnett poses stark choices for regions like Wide Bay-Burnett which are subject to ageing populations, declining wealth from traditional industries (especially in the inland shires) and for the VET role within such regions and communities. In these regions whether VET policy should continue to be tied to a “bumbling along” scenario or whether VET should be an active partner in proactive action directed at a “connecting to the world” scenario is a key issue. While this question goes beyond the issue of matching VET provision to regional

development skill needs, it is highly relevant to the deeper question of the VET role in communities and regions, and in Australian society.

Cooloola Regional Consultations

The NIEIR report was not available to the GLS team when the regional consultations were undertaken in December 2006 so that the issues raised by that report were not able to be examined in the consultations. We found in the consultations that planning and development in Cooloola had to be viewed in the broader Wide Bay-Burnett regional context with various services administered from Maryborough, outside the Cooloola region.

These services were the Area Consultation Committee, the Wide Bay Institute of TAFE, the Wide Bay-Burnett Regional Organisation of Councils, and the Regional Office of the Department of Education, Training, and the Arts. Wide Bay-Burnett is a large and diverse region that the NIEIR report broke down into four sub-regions with Cooloola located in the South-Coast sub-region.

An overview of key statistics for the region is given in Attachment A. These statistics point to the nature of the challenge confronting both the Cooloola sub-region and the broader Wide Bay-Burnett region. They show a situation where the unemployment rate is high (13.2% in June 2003 compared to Queensland 7.0%), average household incomes are low, the population is ageing ahead of the state average, and with the labour force participation rate lower than the State average.

We found in our consultations in the region a keen awareness of the seeming paradox set out in the NIEIR report that the region “was relatively unique in that it was experiencing both a relatively rapid ageing of the population and a high unemployment rate.”

Various recent changes made it difficult to assess the influence of these contextual shifts on the matching of VET offerings to regional development skill needs. These changes included relocating TAFE in Cooloola from the former Cooloola Sunshine Coast TAFE to Wide Bay Institute of TAFE, and the shift to a What’s Changed regional planning approach by DETA from the former more detailed planning assessment.

We were told in consultations with TAFE that the present planning arrangement involved a dual system with the DETA regional planning arrangements, and with TAFE also developing its own assessment of needs and priorities. It was suggested that there was insufficient interaction between the two systems.

Overall, Wide Bay-Burnett is a diverse region with little in common between the coastal sub-regions such as Cooloola and the rural shires to the west. The diversity appears to be a barrier to regional planning and development, and to highlight the need recognised in the NIEIR report for machinery to achieve stronger regional planning and development. In this context, local initiatives appear to be important, such as the education forum developed in Hervey Bay.

While the transfer of TAFE responsibility for Cooloola from the Sunshine Coast to Wide Bay Institute of TAFE is recent, we found in discussion with the Director of Wide Bay Institute TAFE a number of examples where partnership arrangements have provided for increased flexibility and responsiveness to industry roles in VET provision. These examples included a flexible learning approach in the maritime industry and an arrangement with Big W for retail training.

Overall, the regional consultations threw up a number of key issues that were taken up in the community consultations in Gympie in late February 2007. These included the VET role in

addressing exclusion in a region with high unemployment and considerable disadvantage, the implications of a significantly ageing population for the VET role, and issues involved in the relationship of skill shortages and high unemployment. Overall, the Cooloola context throws up a number of important issues that bear on questions of meeting regional skill needs, and on the role of VET in such regions. These questions were taken up in the community consultations undertaken in Gympie on 26-27 February 2007.

The Gympie Consultations

A set of questions was prepared for the Gympie consultations directed at the three research questions of this study. Our discussions suggested that Gympie was seen as being in a transition situation with significant skill requirements to be met if the Traveston Dam proposal proceeds. If this happens, there will be a broad spectrum of skill development needs to be addressed both during the construction period for the dam and after construction is completed.

Matching VET Offerings to Regional Development Skill Needs

In our consultations, the recent transfer of Cooloola TAFE from the Sunshine Coast Institute of TAFE to the Wide Bay Institute of TAFE was cited as presenting a transition situation while new arrangements and patterns of collaboration were established. It was also pointed out, however, that up to now there had not been close working relationships between TAFE and the Cooloola Regional Development Bureau, which was seen as a barrier to a close linking of TAFE with regional development skill needs.

This comment emerged in consultations with the General Manager of the Cooloola Regional Development Bureau and in meetings with the Bureau Board, and with senior managers from the Cooloola Shire Council.

The sense of transition in the current situation was enhanced by uncertainty as to whether the proposed Traveston Dam will proceed. If it does, there will be a significant demand for trade and other skills during the five-year construction period for the dam, with a further question as to how these skills might be utilised in the post-construction period. This question suggests the need to integrate VET provision more closely with regional development skill needs.

The changed approach by the Queensland Department of Education, Training and the Arts to its process for funding allocations to regions under its “What's Different” method may also be seen as an influence on change in the Gympie region. However, as this was the initial year of the new arrangement, this approach may take some time to settle down and be refined.

There was a persistent theme in our consultations that local and regional needs had not been sufficiently taken into account in VET provision, which was seen as too much “top down” driven by state priorities. There was also a view expressed that this was starting to change and that the transfer of Cooloola TAFE to the Wide Bay Institute of TAFE had served as a stimulus to more intensive consultations with industry. This had been evident in a program of visits to industry over eight months.

The case to address the skills needs of older people was widely recognised in our consultations and various examples were given of instances where this was starting to happen. The importance of strengthening the so-called employability skills was also generally recognised although there were divisions of view as to whether this was mainly a task for schools. I found little awareness in my

consultations of the seriousness of adult literacy deficiencies or of the implications of this problem in raising skill levels in a situation of demographic change with an ageing population.

Local VET statistics provided in the table at the end of this case study show that in 2005 significantly more students at the Cooloola Sunshine Institute - Gympie College were studying at the VET Certificate I and II levels (32.5%) than the national average (20.8 %) and fewer at the higher VET level (Certificate IV level and above)-13.3% compared to 21.4%. The proportion at the Certificate III level (29.5%) was similar to the national average (26.7%). Double the national average proportions of students at Gympie college were involved in Mixed field or general education programs (20.2%) that can include literacy studies. Double the national average proportions of students were also studying Society & culture (18.9%). Health was also a highly popular area of study (13.0%) as might be expected given the ageing local population. As might also be expected, above national average proportions were also studying Food, hospitality and personal services. Study levels were weak in Gympie in the knowledge economy fields of information technology, and management commerce and also in the national skills shortage area of engineering and related technologies.

A key issue identified in the consultations was the view that the dominance of competitions over cooperation between public and private providers, and also between adjacent TAFE Institutes, had led to a fairly low level of collaboration and partnership. This in turn had led to some resources not being sufficiently utilised, and some needs not being met. A more collaborative approach to matching VET offerings to local and regional skill needs would bring benefits to communities and regions. In some cases, the low level of partnerships between VET providers was contrasted with the effective partnership seen as existing between secondary schools in VET in Schools programs. The competition/cooperation tensions will need to be addressed if a better alignment of VET provision with local and regional skill needs is to be achieved.

Flexibility and Innovation in VET

Much of the same pattern emerged in consultations on the focus questions relating to flexibility and innovation in VET as in the Bega Valley. While VET providers had moved to implement flexible workplace delivery programs with large providers, the same flexible workplace learning programs had not emerged in the case of small businesses which were required to conform to the constraints of campus delivery of programs at fixed times and locations. This distinction was generally described in terms of thin markets and the lack of sufficient numbers in small business to justify TAFE resources to be applied to workplace delivery arrangements.

In the case of large firms, major developments such as the Centro retail development which had included Big W, had enabled workplace delivery arrangements to be negotiated. In some cases as with the Team Moto initiative, the agreed partnership had enabled a significant number of apprentices to be brought into the partnership arrangement.

While extending flexible learning arrangements to the small business sector was widely seen as a difficult issue to resolve, there was a general recognition that flexible learning arrangements could be achieved with networks or clusters of small firms, especially if an industry association was actively involved in the scheme as a partner. This approach had not been applied in Gympie.

In one discussion a distinction was made between the old culture of VET (especially TAFE) and a new more entrepreneurial culture which was starting to emerge, in particular in the commercial fee for service activities of TAFE. While this old culture was seen as competitive and rather inward looking, in the new emerging culture a more sophisticated concept of competition and

collaboration could be observed. This was more akin to the view of competition and collaboration adopted by major corporations operating in global markets, in the car industry for example, where much collaboration and joint ventures existed along with competition. How to drive such cultural change in the VET sector towards a more sophisticated concept of competition and cooperation is a significant issue thrown up by this study.

The study also suggests that it is necessary to view the VET role in the wider context of a regional system of innovation. Articulating this objective in practical terms poses a challenge for the sector and their partners in regional development.

VET – Community Partnerships and Frameworks

Our consultations in Gympie indicated that while a broad spectrum of partnerships existed, these were not connected in a strategic framework that built synergies and interdependencies between networks and partnerships so as to produce creative, value-added outcomes. The VET role in such partnerships was conditioned by this reality.

The influence of competition policy on partnership and network building is noted above and was mentioned to us in a number of consultations. The small business issue in VET/industry partnerships was frequently mentioned in this context. While a number of VET/industry partnerships have developed with large organisations and firms, this has not been the case with small businesses where the costs of provision in thin markets have been a barrier to more flexible partnership arrangements. This is a key area for experiment and innovation using flexible learning strategies in networks and clusters of small businesses.

The comment was made in our consultations that a higher level of collaboration existed among high schools in providing VET in Schools than among post-school VET providers. While this may reflect funding arrangements, there is a strong case for strategies that build a broader network of VET partnerships with other stakeholders in strategic ways, and that build human and social capital and overall capacity in the Gympie community. This discussion threw up the question how such a broader range of partnerships might be brokered.

The Gympie discussion of partnership and collaboration supported the notion that much would be gained from a strategic approach to building skill, human capital, and social capital through a multi-faceted framework such as a Learning, Employment, and Skill Strategy that associated all stakeholder in partnership and collaboration in support of key objectives across these areas vital for community and regional development. Such a strategy would need to be supported by the Wide Bay Areas Consultative Committee, the Cooloolool Shire Council and its Cooloolool Regional Development Bureau, any further regional development organisation that might emerge for Wide Bay Burnett, as well as the Wide Bay Institute of TAFE and other VET providers.

Conclusions and General Comment

The Cooloolool Region and Gympie case study illustrates the situation of a community confronted by the challenge of a changing socio-economic context marked by demographic change and an ageing population, the drift away of young people, and the existence of high levels of unemployment along with some skill shortages.

While the Cooloolool Regional Development Bureau has been enterprising in attracting development opportunities, there is a case for a broader strategic approach to meeting the learning and skill needs of Cooloolool in regional development that builds and connects partnerships and networks,

and which has an orientation towards sustainable economic, social and environmental development. Such a strategic framework, which might take the form of a Cooloola Learning, Employment and skill Strategy, should have a prime objective to extend collaboration and partnership between VET providers in meeting community and regional learning and skill needs, while also contributing to building human and social capital in the region, and a culture which supports enterprise and creativity.

Cooloola may be seen as a community in transition in the development of such arrangements with the recent transfer of Cooloola TAFE to the Wide Bay Institute of TAFE, adding to this sense of a transitional situation. If the proposed Traveston Dam proceeds, there will be a need for a significant increase in trade and other skills in the region during the construction phase. This will pose a particular challenge for VET in the region in contributing to meeting this requirement.

Our consultations in Gympie and the Coooloa region revealed a broad spectrum of issues, including a number related to trade training, if Cooloola is to have a modern workforce able to meet the learning and skill requirements of Cooloola's future in a 21st Century world of constant change. While the modernisation and streamlining of trade training depends to a considerable extent on state national policy there are things that can be done through partnership of all stakeholders in Gympie and Cooloola, and there is a good case to develop a strategic approach to building the skilled workforce that Cooloola will need in the future. We found considerable awareness of these issues in our consultations and considerable goodwill that will be necessary to build a more strategic partnerships approach to Cooloola's workforce learning and skill needs.

COOLOOLA PROFILE & OVERVIEW

Cooloola is a local government shire and sub-region of the Wide Bay-Burnett region. Gympie is the largest town in the shire with coastal resort and retirement areas, and some farming areas in the Mary Valley. Cooloola is subject to the dual influences of Wide Bay communities such as Maryborough and the adjacent Sunshine Coast, and fits into different groupings for different purposes such as tourism, TAFE, and the Area Consultative Committee. It shares this characteristic with the South East NSW region which is also being studied.

The Planning Context

The “frontier” situation of Cooloola is reflected in planning arrangements. While Cooloola was served until recently by the Cooloola-Sunshine Coast TAFE Institute, this Institute has now been divided with Cooloola now served by the Wide Bay Institute with its head office in Maryborough. The local Area Consultative Committee is also based in Maryborough.

For VET regional planning, Cooloola forms part of the DETA Wide Bay and Sunshine Coast region so that its links to both the Wide Bay-Burnett and Sunshine Coast regions are brought into this planning context. Until 2007, Cooloola has been part of the Regional Training and Employment Priorities report prepared annually for the Department to guide training allocations. It will still fit into this region under the new Change Drivers Report arrangements. Cooloola’s economic development is driven by the Cooloola Regional Development Bureau.

OVERVIEW OF KEY STATISTICS

Population

At the 2001 Census, the extended resident population of the Cooloola sub-region was 33,670 persons, with 11,935 persons residing in Gympie. While the Cooloola population involved a 5.6% growth since the 1996 Census, there was a 1.5% drop in the population of Gympie. Projections to 2006 include a small increase in the population of Cooloola, and some increase in the Gympie population to 16,350. Projections to 2026 envisage a Cooloola population of 47,745.

Cooloola has an ageing population with the median age of 38 higher than the Queensland average of 35.

Labour Force

The unemployment rate for Cooloola in June 2003 was 13.2% compared to Queensland 7.0% and Australia 6.1% at the time. The labour force in Cooloola is somewhat over 12,000 people with approximately half of the labour force in the 35 to 54 age group. The overall labour force participation rate in the Wide Bay Sunshine Coast region at 54.5% is lower than for Queensland (63.1%), and Cooloola appears to be consistent with this pattern.

Employment by Industry

At the time of the 2001 Census, the wholesale and retail sector was the largest employer in the Cooloola region with 21.9% of the region’s employed labour force (Queensland 20.4%). agriculture, forestry, fishing, and hunting with 13.0% was ahead of the Queensland proportion of 4.9%, as was manufacturing with 13.3% compared to Queensland 10.70% construction, health, and community services were slightly below the Queensland proportion.

Employment by Occupation

A breakdown of employment by industry and occupation at the time of the 2001 Census is given in Attachment A. This breakdown suggests a pattern similar to that from the Wide Bay region overall with intermediate clerical, sales, and service workers and labourers and related workers as the most significant occupations for employment.

Issues for Investigation

This overview of Cooloola development points to a number of issues which were taken up in the consultations in early December 2006:

1. *How does the “frontier” situation of Cooloola with links to both Wide Bay–Burnett and the Sunshine Coast impact on economic and social development in the region? Is there benefit or loss in this situation?*
2. *What is being done to address the high unemployment rate in the region? Has the situation improved since the 2001 Census?*
3. *What is being done to address demographic change and the ageing population in terms of meeting the skill needs of the region?*
4. *What impact has the recent transfer of TAFE responsibility between Institutes had on TAFE offerings in the region?*
5. *To what extent have knowledge based Industries been promoted in Cooloola? Are there particular barriers?*

These issues supplement the questions already built into the regional discussion paper, and put a gloss on some of these questions.

Table 5 Student enrolments by Field of Study and Qualification level in 2005 at the Cooloola Sunshine Coast-TAFE Institute-Gympie College

Field of Study	Cert IV and above	Cert III	Cert I & II	Non award courses	Statement of attainment	Other	Total	Total %	National
01 - Natural And Physical Sciences	0	2	0	0	0	0	2	0.2%	0.3%
02 - Information Technology	0	15	2	0	0	0	17	1.4%	3.5%
03 - Engineering and Related Technologies	2	36	53	0	0	0	91	7.5%	16.0%
04 - Architecture and Building	0	4	0	0	4	0	8	0.7%	6.3%
05 - Agriculture, Environmental and Related Studies	1	13	51	0	0	0	65	5.3%	4.9%
06 - Health	1	26	1	0	131	0	159	13.0%	4.7%
07 - Education	33	13	0	0	11	0	57	4.7%	2.9%
08 - Management and Commerce	41	44	72	0	0	0	157	12.9%	19.1%
09 - Society and Culture	63	164	3	0	1	0	231	18.9%	9.9%
10 - Creative Arts	2	0	32	0	0	0	34	2.8%	2.7%
11 - Food, Hospitality and Personal Services	0	40	113	0	0	0	153	12.5%	9.2%
12 - Mixed Field Programmes	19	3	69	135	18	2	246	20.2%	11.6%
Subject only - no qualification	0	0	0	0	0	0	0	0.0%	8.7%
Total	162	360	396	135	165	2	1220	100.0%	99.8%
Total %	13.3%	29.5%	32.5%	11.1%	13.5%	0.2%	100.0%		
National	21.4%	26.7%	20.8%	5.8%	26.3%				

* National profile is from : *Australian vocational education and training statistics, students and courses, 2005*, NCVET, Adelaide.

Local profiles provided by NCVET, special run, with permission from the TAFE

South Eastern NSW region and the Bega Valley, NSW

Peter Kearns

Introduction

This case study was focused at a regional level on the South Eastern New South Wales region, while the Bega Valley as one of the five shires in the region studied, was examined as the selected community within this region.

South eastern NSW is a region with no clear boundaries or identify that is defined in several different ways for different purposes. For the purposes of this study we interpreted South Eastern NSW as the five shires that comprise the South-Eastern Area Consultative Committee (SEACC). These shires are Bega Valley, Eurobodalla, Cooma Monaro, Bombala, and Snowy River.

This case study illustrates issues involved in matching VET provision to regional development skill needs in rural communities where tourism is important in most of the shires, and where fairly limited post-school education facilities exist. There is no regional development plan, and social, educational, and economic networks across the region look Janus-like in dual directions towards Wollongong and Canberra.

Whether this low level of regional coherence and identity served as a barrier to the process of matching VET provision to regional development skill needs, and adapting to 21st century condition and challenges was the central issue examined in this case study. Such issues may be found in a number of rural communities across Australia.

The Regional Development Context

Defining South Eastern NSW is made complex by the existence of Canberra in its role as a regional centre, and the consequent convergence of ACT and State roles in the region. This is given institutional shape in the role of the Capital Region Development Board, established under an agreement between the ACT and NSW governments, and the fourteen councils surrounding Canberra, including the five rural shires which comprise SEACC.

The SEACC sub-region joins the south coast strip of retirement and tourist development with some farming (Bega Valley, Eurobodalla) with the southern end of the belt of high plains, traditionally fine wool country, but with tourism now significant in the Snowy River Shire.

The complexity and fragmentation of a number of planning contexts is driven by the Janus-like character of the region. The Bega Valley looks two ways in its development – towards Canberra for certain regional services and the role of the Capital Region Development Board, and towards Wollongong and the south coast in respect of education and training development, and a range of other services. For example, the Southern Regional Organisation of Councils comprises the five coastal councils from Bega Valley to Wollongong rather than the coastal/tablelands mix existing in SEACC.

Unlike regions such as the Sunshine Coast, there is no single economic development plan for the region. Rather, analysis of the regional development framework involves consideration of the work of a number of separate organisations including the Capital Region Development Board, SEACC and the Southern Regional Organisation of Councils. In addition, there is no regional university within the SEACC territory with higher education provided through a small Access Centre in Bega, while the head office of the Illawarra TAFE Institute is located a considerable distance away in Wollongong with several small campuses within the SEACC sub-region.

While this planning dispersion of effort has a deleterious impact on the quality and comprehensive nature of data available for regional planning, there are some local initiatives that have provided useful insights. These include a skills audit undertaken by SEACC which was released in February 2007 at the time of our consultations in the Bega Valley Shire. In addition, DEWR has been undertaking a local study in Eurobodalla Shire which was released in late 2006.

A Regional Overview

Attachment A provides an overview of key statistics for the region based mainly on 2001 Census data. This profile shows a modest population growth down to 2013 with most growth in the older age groups and with a forecast decline in the under 15 age group. The extent of population ageing exceeds both the NSW and non-Sydney averages. This challenge of an ageing population and declining youth cohort is particularly severe in rural areas such as the Bega Valley so that the dual challenges of social and economic sustainability loom large in such regions.

The employment focus of the region on retail (18%) accommodation, cafes and restaurants (12.1%) also means that the economy is sensitive to downturns in these sectors associated with economic cycles. Overall, there has not been much diversification of the economy so that VET providers have continued to offer much of the same provision throughout this period.

Table 6 gives TAFE enrolment statistics for 2005 for Bega. Of particular note is that nearly half of all the students in the Bega campus are not studying full VET qualifications. They are enrolled in statements of attainment or subjects only, suggesting that individuals are only doing particular job skills set studies. The most popular statement of attainments by far were in Food hospitality and personal services followed by information technology and management and commerce. The proportion of students in Health related studies at the Bega campus of the Illawarra Institute of TAFE was noticeably low at 1.7% given the ageing local population and compared with the national average of 4.7%.

Matching VET Provision to Regional Development Skill Needs

There has not been significant change in the industry and employment base of the region in recent years. Retail remains the largest employer (18%) followed by accommodation, cafes, and restaurants (12.1%). At the same time there has been some decline in agriculture and fishing which have been traditional employers in the region.

TAFE enrolments in the region have risen only slightly since 2001 and have fallen as a proportion of the overall enrolments of the Illawarra TAFE Institute (from 17.2% in 2001 to 16.1% in 2005). Training hours for the same period show the same pattern.

Participants in the regional workshop held in Bega on 13 December recognised the range of issues confronting the economic and social development of the region. Issues raised included the following:

- education levels (eg retention to Year 12) are lower than State averages
- improving education, including literacy, is recognised as a problem
- poor transport networks are a problem
- there is patchy broadband access
- more needs to be done to promote regional branding and identity
- social capital is an issue
- detriments to investment exist in such areas as a shortage of medical practitioners
- young people are leaving for the cities and
- demographic change and the ageing population.

It was recognised that economic and skill shortages needed to be viewed in this context. Sustainability was seen as a major issue in all areas.

In this relatively stable situation, providing for thin markets with emerging industries was recognised as a problem. In the workshop the view was articulated that TAFE could not provide all necessary courses because the population was not large enough to support normal TAFE provision. Hence flexibility in the way people learn and acquire skill was seen as critical for the region. The role of technology in learning was a significant theme in the workshop. This was, however, seen as requiring appropriate education structures and programs to meet real world situations.

It was difficult not to conclude that matching VET provision to regional development skill need was impaired by the relative weakness of economic and social planning in the region, and the absence of a regional development plan. This situation has led to ad hoc development without an adequate strategic basis for partnership and a sense of strategic longer term directions. Bega Shire Council has attempted to respond to this situation with its 20 Year Plan for the Shire up to 2025. The Plan adopts a broad approach to sustainable development of the Shire covering environment, culture, economy, community and infrastructure.

This need has been recognised in the recently released New South Wales State Plan which includes as a possible new direction the establishment of a Regional Training Strategy for the region involving local government, training providers, and business. This proposal was welcomed in the workshop although it was recognised that considerable work needed to be done in fleshing out the details including the question of what region.

Findings of the Skills Audit

Further evidence on the skill needs of the region became available in December 2006 from a survey of skills shortages and recruitment difficulties undertaken by the University of Wollongong for the South-Eastern Area Consultative Committee. The survey, undertaken in July-September 2006,

showed a mixed picture of skill shortages and recruitment difficulties (SEACC 2006).⁶² The survey results showed:

- 120 organisations had experienced difficulties filling vacancies and 130 had not
- most of the difficulties represented ongoing recruitment difficulties
- the 12 occupations where most difficulties were experienced were food and beverage, waiter, chef/cook, retail worker, electrician, heavy truck driver, registered/enrolled nurse, plant mechanic, manager, town planner, boilermaker, mechanic, engineer
- these shortages reflected unmet demand in the traditional occupations and industries of the Bega Valley ranging over a number of trades, service occupations and some professions where it was difficult to attract qualified professionals to the district and
- the need to distinguish skills shortages and recruitment difficulties was recognised in the summary report.

While some of the recommendations of the skills audit report involve aspects such as increasing employer subsidies and increasing apprenticeship wages, which lie outside the role of the VET sector, other recommendations are in areas where VET can bring about change. These recommendations include:

- strengthened promotion of apprenticeships in schools
- promotion of the Group Training Company role and
- increasing the flexibility in delivery of training including greater use of e-learning, including harnessing modern technologies such as blogs, wikis, podcasts etc to make training more interesting.

The need for systematic and strategic follow up on the SEACC skills audit was recognised and it was recommended that the South East Labour Market Group coordinates this development with a taskforce formed to undertake this role. This approach has merit which will be enhanced if the follow up led to the development of an Employment and Skills Strategy for the region (ESS), or preferably a Learning, Employment and Skill Strategy (LESS) which also addressed necessary education objectives such as improving adult literacy, raising school retention, and overall building a learning culture in the region.

The Community Consultations

There was follow up on the regional consultations with a round of consultations in the Bega Valley Shire undertaken in February 2007. A set of questions which reflected the three research questions of this study, and issues emerging from the regional stage of the study was prepared and circulated to participants. The consultations involved employers, providers, and community representatives. In arrangements for the consultations we were supported by the South Eastern Area Consultative Committee and Bega Valley Shire Council, both providing invaluable assistance.

An aspect of particular value during the consultations was a meeting with the Labour Market Group of the South Eastern Area Consultative Committee. This meeting discussed the project and other items including follow up on the skills audit.

⁶² 490 organisations were selected to be surveyed with 250 responses received, giving a 52% response rate.

Matching VET Offerings to Regional Development Skill Needs

The consultations confirmed that State and national priorities have the major influence on what is offered by VET. In the case of private providers, their offerings are funding led rather than through assessment of local needs. While State and national priorities are reflected in this region, a consequence is that local needs are sometimes not funded. An example given during consultations was in the area of aged care where jobs existed along with a supply of people wishing to acquire skills in this area.

The consultations confirmed that absence of a regional development plan for South East NSW makes the task of VET providers, in particular TAFE, more difficult in being responsive to changing and emerging skill needs in the region. This situation is exacerbated as Bega Shire Council also does not have an economic development plan. In this situation it is not surprising that there has been little change in the courses provided by the Bega campus of the Illawarra TAFE Institute over the past five or six years with a continuing focus on the traditional skill needs of the Bega Shire.

This situation also reflects the structure of industry in the Shire with a predominance of small businesses except for the Bega Cheese factory. We found that there has been innovation in workplace delivery of training for the cheese factory. This is discussed below. However, matching VET offerings to the skill needs of small business in more flexible and innovative ways remains a continuing issue for the Bega Valley.

This problem is exacerbated by the dispersed population pattern of the Shire with population scattered across six towns and twelve villages, and with poor public transport, a point frequently made in our consultations. A result is the problem of thin markets for emerging industries scattered across the Shire which are difficult to service.

In discussion with TAFE representatives, the point was made that innovation and change tends to occur more easily in the commercial activities of the Institute than in the government funded provision. The partnership arrangement with the Bega Cheese factory, discussed below, is an example of such innovation, and similar arrangements exist with the Bega Valley and Snowy River councils. However, such arrangements depend on the existence of funding and don't address the issue of innovation and workplace delivery in meeting the learning and skill needs of small businesses.

In the absence of an economic development plans for the region and shire, the role of the Area Consultative Committee assumes particular significance. The extensive participation in the Labour Market Group of SEACC meeting on 22 February demonstrated the range of providers with an interest in meeting the learning and skill needs of the region, and the value of furthering collaboration and partnership through the group and SEACC.

A new SEACC strategic plan for 2008-2010 is to be developed this year, and there would be considerable benefit in linking follow up on the SEACC skills audit to a strategic approach to the work of SEACC over 2008-2010. This might include strengthening collaboration between public and private providers in meeting the skills needs of the district, strengthening links between schools and VET in addressing key issues identified in the skills audit, and addressing the skill needs of small business in innovative ways.

The skills audit showed that community perceptions of some trades and apprenticeships served as barriers to meeting skill needs of the community so that these image patterns need to be addressed in a systematic, strategic way involving partnerships of the key stakeholders.

There would be considerable value then in follow up on the skills audit and preparation of the SEACC strategic plan for 2008-2010 leading to the development of a Learning, Employment, and Skill Strategy for the region that addressed the issues identified in the skills audit, and other relevant issues, in a systematic and strategic way. Such a strategy might include:

- active promotion of apprenticeships and the trades
- addressing barriers identified in the skills audits to young people entering apprenticeships
- strengthening partnership and collaboration between public and private providers in meeting the skill needs of the region
- addressing the skill needs of small businesses in innovative ways including wider use of information and communication technology
- developing a strategic approach to adult literacy needs in the region, and
- finding innovative ways to meet the skill needs of emerging industries and thin markets including emerging lifestyle and creative industries.

There will be substantial benefits for all stakeholders in the developing of a strategic partnership approach to development needs and issues such as these.

Flexibility in Reporting to Local and Regional Needs

The absence of strategic regional and shire economic planning imposes a constraint on VET responding flexibly to local and regional needs. In addition, there has not been much change in the industry and employment base in recent years so that VET has not been subject to the same pressures to be flexible in responding to local and regional needs as exist in other regions where there has been greater economic change.

Nevertheless, examples were given of situations where TAFE had responded flexibly to particular skill needs through workplace delivery and training.

An example exists in the partnership arrangement with Bega Cheese for workplace delivery of training. This scheme involves a significant number of Bega Cheese staff undertaking a Certificate III in Food Processing under workplace delivery arrangements with Bega Cheese staff serving as trainers. Staff obtained a Certificate II in Food Processing through RPL processes so that experienced staff were able to have their skills acquired on the job recognised. This scheme is flexible in catering for the needs of a wide age range.

Similar schemes have been devised for the Bega Valley and Snowy River councils in the area of Water Operations with workplace delivery of training.

While these schemes provide good examples of TAFE acting flexibly in supporting workplace delivery to meet the needs of large organisations, similar flexibility in the case of smaller businesses has yet to be achieved and this remains a challenge for the future.

Strengthening economic planning in the region and developing an early warning system to alert VET to emerging skill needs would aid VET in responding flexibly to changing skill needs.

The Role of Local Community Frameworks

There are a substantial number of networks and partnerships in the Bega Valley, some involving VET institutions. However, many networks do not interact with each other to generate new ideas and approaches so that the full potential of these networks to stimulate innovation and new ideas is not realised.

There is also a Janus-like duality in some networks being oriented towards Wollongong and the coastal communities while others look towards Canberra and the southern tablelands communities.

A learning community initiative was launched in 2005 following a considerable initiative taken by the head of the Library Service and Chair of the Community College. However, the absence of funding has constrained the full potential of this initiative being achieved. A successful learning community initiative could contribute much to the district and build a learning culture to underpin ongoing social and economic development.

Conclusions and General Comment

The Bega Valley case study illustrates a situation common in many rural and regional communities. The community faces the challenge of demographic change with an ageing population, smaller youth cohorts, and the loss of young people to larger centres, the decline in employment in traditional farming and fishing occupations, and the absence of a shared vision of the future and regional economic planning to drive towards a desired future. In this context, social sustainability is an important issue for the community.

The geographic and population spread of the shire with fairly poor public transport, poses particular issues in linking VET offerings to regional development skill needs. There is only a single TAFE campus in the shire at Bega with a small annex at Eden. Substantial towns like Merimbula do not have a TAFE presence although a larger private provider is located in Merimbula. In this context there is a strong case for strategic planning to extend partnership and collaboration between providers in meeting regional development needs and optimising the use of VET resources and facilities.

While innovation has been difficult in this context, nevertheless, there have been achievements from community action, such as the government decision to build a new hospital and the development of the University of Wollongong Access Centre.

The absence of strong regional planning makes the task of VET more difficult in aligning and responding to emerging regional development skill needs. In this context, the South Eastern Area Consultation Committee has a key role in responding to the skill needs identified in the SEACC skills audit.

Much will be gained from:

- (a) the development by SEACC of a regional Learning, Employment and Skill Strategy (LESS) for the region to follow up in a strategic way on the issues identified in its skills audit, and
- (b) the establishment for the Bega Valley Shire of an Education and Learning Forum to associate all education sectors and other stakeholders in collaborative partnership action in addressing the education and skill needs of the shire

- such a forum should include representatives of schools, TAFE, private providers, higher education (Access Centre), early childhood education, libraries, U3A, Bega Valley Shire Council to promote partnership in addressing the priority education, learning and skill needs of the shire
- the Forum might have a leading citizen as chair.

While the Bega Valley faces the challenge of change, the community has a rich heritage of achievement, and community enterprise has been shown in a number of areas so that there are grounds for believing that this leadership challenge will be addressed. Meeting skill needs for regional development is an aspect of a broader challenge for sustainable development, but it provides a good starting point in addressing the broader challenge.

Overview of Key Statistics on SE NSW Region

Population

There is only moderate population growth in the region with a forecast decline in the under 15 age group by 2013 and a rise in the over 65 population. The regional population of 87,780 in 2004 is forecast to grow to 95,760 by 2013 with most of the growth in the older age groups. The extent of the ageing of the population exceeds both the non-Sydney NSW and NSW averages. Almost half of the population is in Eurobodalla Shire with the three tableland shires totalling 20,105 in 2004 out of the regional population of 87,780.

Job creation

Projections of job growth to 2007/08 envisage most growth in property and business services (28%), retail (19%), and health and community services (14%). Forecasts envisage employment growth to be concentrated in service industries and skilled occupations, with an ageing labour force, an increasing proportion working part-time and casual, business sizes becoming smaller, and with an improvement in education levels.

Labour force

The participation rate at the time of the 2001 Census was 54% which was lower than the non-Sydney NSW (58%) and NSW averages (62%). There were 30,402 employed persons over 15 with 60% working full time. This is lower than the non-Sydney NSW (78%) and NSW (80%) averages. There were 3,206 unemployed people at the time of the Census with the unemployment rate of 9.5% slightly higher than the non-Sydney NSW rate (9.3%) and above the NSW average of 7.2%. The youth unemployment rate in 2001 of 16.8% was slightly below the non-Sydney NSW rate of 17.6% but higher than the NSW average of 13.3%.

Employment by industry

At the time of the 2001 Census retail trade was the largest employer (18%) followed by accommodation, cafes, and restaurants (12.1%). The population employed in these industries was greater than the proportion in non-Sydney NSW and NSW overall, especially for accommodation, cafes, and restaurants. Health and community services, agriculture, and construction were also significant employers.

Employment by occupation

Intermediate clerical, and sales were the main occupations for employment (15%), although below the non-Sydney and NSW proportions. Associate professionals were more significant than in non-Sydney NSW and NSW, although the proportion of professionals was lower. Tradespersons and managers had similar proportions to the non-Sydney and NSW proportions.

In the period between the 1996 and 2001 Censuses, the main change occurred with growth in elementary clerical, sales and services (24%), labourers and related workers (19%), and professionals (18%).

Table 6 Student enrolments by Field of Study and Qualification level in 2005 at the TAFENSW Illawarra TAFE-Bega Campus

Field of Study	Statement of attainment						Total	Total %	National
	Cert IV and above	Cert III	Cert I & II	Non award courses	Other	Total			
01 - Natural And Physical Sciences	0	0	0	0	0	0	0	0.0%	0.3%
02 - Information Technology	2	13	9	9	91	124	124	7.9%	3.5%
03 - Engineering and Related Technologies	0	82	45	26	55	208	208	13.3%	16.0%
04 - Architecture and Building	1	3	0	12	2	18	18	1.1%	6.3%
05 - Agriculture, Environmental and Related Studies	2	10	33	10	66	121	121	7.7%	4.9%
06 - Health	1	0	0	5	20	26	26	1.7%	4.7%
07 - Education	43	0	3	0	17	63	63	4.0%	2.9%
08 - Management and Commerce	13	73	52	21	90	249	249	15.9%	19.1%
09 - Society and Culture	30	59	0	0	18	107	107	6.8%	9.9%
10 - Creative Arts	0	21	17	0	12	50	50	3.2%	2.7%
11 - Food, Hospitality and Personal Services	9	77	10	35	222	353	353	22.5%	9.2%
12 - Mixed Field Programmes	3	0	66	14	163	248	248	15.8%	11.6%
Subject only - no qualification	0	0	0	0	0	0	0	0.0%	8.7%
Total	104	338	235	132	756	1567	1567	100.0%	99.8%
Total %	6.6%	21.6%	15.0%	8.4%	48.2%	0.0%	100.0%		
National	21.4%	26.7%	20.8%	5.8%	n/s	n/s			

* National profile is from : *Australian vocational education and training statistics, students and courses, 2005*, NCVET, Adelaide.

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