WORKFORCE INNOVATION PROGRAM

REGIONAL SKILLS DEVELOPMENT PROJECT

RESEARCH SUMMARY

January 2013
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executive Summary</td>
<td>3</td>
</tr>
<tr>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td>Strengths</td>
<td>10</td>
</tr>
<tr>
<td>Weaknesses</td>
<td>12</td>
</tr>
<tr>
<td>Opportunities</td>
<td>22</td>
</tr>
<tr>
<td>Threats</td>
<td>24</td>
</tr>
<tr>
<td>Information gaps</td>
<td>26</td>
</tr>
<tr>
<td>Conclusion</td>
<td>27</td>
</tr>
<tr>
<td>References</td>
<td>31</td>
</tr>
</tbody>
</table>
Workforce development is a two stage process whereby organisations, industry bodies and regions first carry out workforce planning and use this as the basis for their Workforce Development Plan.

This report reviews the recent Australian and international literature on workforce planning and development in order to inform the development of Workforce Plans for the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA regions.

The primary research question guiding this review is:

- What can we learn about approaches to workforce planning and development from the existing body of Australian and international research and action?

The responses to this question are organised into a SWOT analysis (Strengths, Weaknesses, Opportunities and Threats) and this provides the basic structure for the report. This review has several implications for workforce planning and development in the two RDA regions of interest, and these are included in the concluding chapter.

**Strengths**

The economic and socio-political profiles of the two RDA regions are very similar. Notable strengths include the availability of highly productive land, a natural environment, favourable climate and good access to water. There is a long history of ‘know-how’ in Agriculture, forestry and fishing and good access to growing markets (essentially for food and wine). Tourism is growing in importance and there is potential to integrate it more fully with other successful industries such as Agriculture, forestry and fishing and the Arts. A large and growing population in both RDA regions is fuelling demand for services such as health and recreation. Unemployment is low.

**Weaknesses**

The key weakness affecting both RDA regions is their vulnerability to external shocks owing to their narrow economic base, predominance of micro to small businesses, and a highly casualised
workforce. Regional development strategies need to encourage the development of new industries, new products and services, and new markets such as China.

One-person/family owner-operated businesses (non-employing) represent two thirds of all businesses in the two RDA regions. We know that Owner-operators find it difficult to improve their knowledge and skills and expand their business. This represents a major constraint on growth. The continuation of government supported business development services, such as those provided by Regional Development Australia, is essential for future growth and prosperity.

Employers play a critical role in developing their workforce. They have a range of skilling options at their disposal including nationally recognised training, apprenticeships and traineeships, non-accredited training and informal (or on-the job) training. Data presented in this report show that employer use of the VET system (including apprenticeships and traineeships) decreased between 2009 and 2011. This is a worrying trend, particularly if it was to worsen or not improve over the short to medium term. Urgent action is needed to identify the major barriers to use of the VET system by local employers – particularly their use of apprenticeships and traineeships - and support them in accessing training for their workforce.

**Opportunities**

Current opportunities or ‘game changers in relation to workforce development in the two RDA regions revolve around: strong population growth, housing and infrastructure development, growth of service industries (e.g. health and recreational services), increasing demand for clean green agriculture wine a food production (with strong brand recognition), internationally recognised tourism destinations, technological advances such as the rollout of the National Broadband Network.

**Threats**

The vast majority of employers in South Australia think the skill level of their employees is adequate or above what is required. This is a major road block to workforce development. Research cited in this report by Dockery and Miller (2012) recommends that better alignment of workers’ education
attainment (or skills) to their jobs is needed as a way to unlock potentially large productivity gains in the workplace. They suggest three ways to go about it: by forming closer links between industry and the school and VET systems so that students engage with the workforce as early as possible; by introducing intensive counselling into the education sector; and by minimizing barriers to worker mobility e.g. poor public transport and high cost of selling a buying property.

**Implications for further research and action**

This review has several positive implications for the development of workforce plans for the “Barossa’ and “Adelaide Hills, Fleurieu and Kangaroo Island” RDA regions. In particular:

- Collect data locally on the current and future skill needs of individual businesses and employers – particularly to address information gaps e.g. through surveys and/or in-depth interviews;
- Further data analysis to identify the wealth creating industries in each of the two RDA regions and areas of Smart Specialisation building on existing strengths;
- Investigate why employers are disengaging from the VET system (including apprenticeships and traineeships). What are the barriers? How can we support businesses to overcome these barriers?
- Support persons who are unemployed or under-employed and who want to improve their work-related knowledge and skills;
- Form closer links between industry, school and the tertiary education and training sectors – e.g. through a pilot project to better coordinate work experience placements in the Adelaide Hills Region.
Introduction

Purpose

This report presents a review of the current literature on skills and workforce development as it applies to the Outer Adelaide area. This area of South Australia takes in the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” Regional Development Australia (RDA) Regions.

The purpose of gathering this information is to inform the development of Workforce Plans for these two RDA regions recommending and implementing strategies to:

- Increase the skills and qualification level of current and future employees with resultant increases in workforce productivity, capacity to innovate and market competitiveness at the enterprise and industry levels;
- Better direct delivery of, and maximise outcomes from, VET and other skills training across the region;
- Aggregate needs within and across sectors and regions to facilitate, especially for smaller employers, the purchase and delivery of training to up-skill existing workforces;
- Identify existing skills and facilitate skill sharing across and between enterprises and industry sectors;
- Inform career advice and education choices within the education and training system and in Industry;
- Assist Job Service Australia, Disability Employment Services and other labour market intermediaries to prepare their clients for and place them in skills training and sustainable employment;
- Coordinate and facilitate the targeting and placement of students/job seekers into industry through work observation, work experience, structured workplace learning or direct employment (including apprenticeships and traineeships);
- Develop industry consortia to compete in local, national and international markets and thus build range and number of local employment opportunities.

Primary research question

- What can we learn about approaches to workforce planning and development from the existing body of Australian and international research and action?
Allied research questions:

- What are the key sources of data that can be used for workforce planning and what are these data telling us?
- How do regions and specific industry sectors determine what is needed in terms of skills and workforce development. What are their priorities?
- What are the barriers to workforce planning and development and what works well?
- Are there serious gaps in our knowledge or existing workforce development strategies?

**Methodology**

In order to answer the research questions, the authors undertook an extensive literature and policy review spanning ten years from 2002/03 to present day. Findings have been organised into a SWOT (Strengths, Weaknesses, Opportunities and Threats) analysis which serves to provide the basic structure for the paper.

**Definitions**

Wendy Perry (2010) provides a useful definition of both workforce planning and workforce development. These are distinct activities, not one and the same activity:

- **Workforce Planning** - analysing workforce profile data and trends; forecasting future demand; analysing supply; undertaking a gap analysis and building an action plan aka what have we got? What do we need? What’s the gap?
- **Workforce Development** - bridges the gap between the current workforce and the desired/future workforce forecast aka what do we need to do to ensure our workforce matches what we need.

In terms of a process, The UK Local Authority Employers' Association (2004) advocate a two stage procedure whereby organisations first carry out workforce planning and use this as the basis for their Workforce Development Plan.

The above definitions and process are applicable to an organisation but can be modified to suit regional or industry-specific workforce planning and development.
Whose responsibility?

Key stakeholders involved in skills and workforce development activities include: employers, industry bodies, unions, the tertiary education and training sector, government departments and agencies (incl Regional Development Australia). Why do employers train their workers? What is the role of the tertiary education and training sector? When should governments intervene? Answers to questions such as these are provided below.

Role of employers and industry bodies

Employers play a critical role in developing the skills of their workforce. Smith et al (2009) examine the various reasons why employers provide training. They look at four types of training provided by employers and give reasons for each: vocational qualifications, apprenticeships and traineeships, nationally accredited training, and non-accredited training. They conclude that it is the need for skills that most motivates employers to provide training – principally to gain specific skills for the business and to improve the overall skill level in the organisation. The authors suggest three critical factors to be considered by employers when making decisions about investing in training. They are: the overall importance of training to the organisation, the level of workforce skills in the organisation, and the difficulties that the organisation faces in recruiting good staff. Training should have a central place in the organisation’s strategic planning (p9).

The role of trade unions

Trade unions have had a long tradition of promoting education for their members. Beyond the workplace, unions are active through policy advocacy around broader education policy and systems in schools and higher education, and also in work-related policy such as in vocational education and training and training in Occupational Health and Safety (Yasukawa et al, 2011).

The role of the tertiary education and training sectors

The higher education and vocational education and training (VET) sectors are pivotal to skills and workforce development.

The VET system provides training across a wide range of subject areas and is delivered through a variety of training institutions and enterprises (including to apprentices and trainees). The system provides training for students of all ages and backgrounds. Students may study individual subjects or full courses that lead to formal qualifications (NCVER, 2012).
A recent discussion paper from the Australian Workforce Productivity Agency (AWPA) raises a number of pertinent questions about the effectiveness of the Australian VET system including: how do we ensure that apprenticeship pathways remain attractive for industry and individuals alike? (AWPA, 2012: 66)

How well does the VET system meet the needs of employers? Rittle (2009) reports that the majority of employers are satisfied with the VET system, the level of satisfaction ranging between 77% and 83%. Those not satisfied with the VET system say that the training is too general and not specific enough. Employers gave the following suggestions for improving the VET system:

- Provide more practical skills and experience;
- Tailor training to specific industries;
- Increase flexibility of training provision;
- Improve access to training in regional areas;
- Increase government funding.

As a general comment, the very specific skills required by an individual business or employer are site related and it is these skills that are best taught and learned on-the-job under the supervision of the employer.

Role of the government

The government funds and regulates a large proportion of the education and training system and so is a major player. There is a strong case for continued government support for improving the nation’s skill levels (see TASC, 2011, Richardson, 2007).
Strengths

This section summarises the key strengths of the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA Regions.

The information is sourced mainly from the RDA Regional Road Maps and the Regional Profiles produced by the South Australian Centre for Economic Studies (SACES) supported by the SA Local Government Association (LGA). All of these documents are available online.

RDA Adelaide Hills, Fleurieu & Kangaroo Island
- SACES Fact Sheet: http://www.adelaide.edu.au/saces/economy/regionprofiles/

RDA Barossa RDA
- SACES Fact Sheet: http://www.adelaide.edu.au/saces/economy/regionprofiles/

Adelaide Hills, Fleurieu & Kangaroo Island

The Adelaide Hills, Fleurieu & Kangaroo Island (AHFKI) RDA Region covers six Local Government Areas (LGAs): Mount Barker, Adelaide Hills, Alexandrina, Yankalilla, Victor Harbor and Kangaroo Island. The region has a large and growing population – currently 120,000 people. The population in the Adelaide Hills and Fleurieu Peninsula is expected to increase by 51,000 people by 2030. The population on Kangaroo Island is not expected to grow significantly during this same period although the island is being heavily promoted for its premium agricultural products and as a major tourist destination.

Mount Barker and Victor Harbor are major growth centres with relatively good road access.

The region has approximately 10,000 registered businesses. The main areas of business activity are:

1 Anecdotal evidence suggests that about 50 per cent of all registered businesses in the region are active at any one time.
• Agriculture, forestry and fishing – including wine production, beef and dairy cattle, vegetable growing, fruit orchards;
• Tourism – a wide range of tourism experiences are available across the region. Kangaroo Island is recognised internationally as a tourist destination, attracting mostly overnight and long stay visitors, in contrast to the Adelaide Hills and Fleurieu which attract mostly day trippers;
• Retail trade;
• Health and recreation services – e.g. aged care services.

Labour force participation is well above the State average and unemployment in the region is low.

**Barossa**

The Barossa RDA Region encompasses the Local Government Areas (LGAs) of Barossa, Gawler, Light and Mallala. The region is currently is home to 66,468 people, including a large number of families with children. The population is expected to grow by a further 110,000 by 2030.

The region includes the town of Gawler; a major service centre which is readily accessible from Adelaide and is the gateway to the Barossa Valley.

There are approximately 5,300 registered businesses in the Barossa RDA region. The main areas of business activity are:

• Agriculture, forestry and fishing – wine production accounts for 80 to 90 per cent of economic activity, and 41 per cent of the workforce (SACES, 2012:8-10).
• Retail trade
• Health and social assistance
• Manufacturing

Key labour force indicators for the Barossa RDA region show above average labour force participation rates and low levels of unemployment.

---

2 Anecdotal evidence suggests that about 50 per cent of all registered businesses in the region are active at any one time.
Weaknesses

This section identifies the key weaknesses or ‘trouble spots’ in relation to workforce planning and development, particularly in the two RDA regions of interest. The ‘trouble spots’ are categorised into five broad areas: Population and settlement, Economic development, Education and skills development, Infrastructure and service provision, Environment and culture.

Population and settlement

Australia’s population is ageing. The number of people aged 65 years and over is increasing in size and proportion (Figure 1).

Figure 1: Population structure by age and sex, Australia, 1991 and 2011

Source: ABS June 2011

This ageing process is occurring faster in South Australia. In 2011, South Australia had a population of 1.6 million people, of which 257,551 (16.1%) were aged 65 years and over. This is higher than the
national average of 14.0%. By the year 2056, it is projected that one in four South Australians will be aged 65 years and over (DFACS, 2011).

The median age of people living in South Australia was 39 years in 2011 (above the national average of 37 years). This is expected to increase to approximately 40.7 years by 2021 and to 43.6 years by 2051 (DFACS, 2011).

Some regions of South Australia are experiencing a more rapid ageing of their population – particularly those regions that are attractive to retirees. In eight of the ten Local Government Areas that make up the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA regions, the median age is 40 years or more. In two of these areas (Victor Harbor and Yankalilla), the median age is greater than 50 years (ABS, 2012).

The rapid change in age structure of the Australian population – and here we are concerned with its effects in South Australia and more particularly in the two RDA regions of interest – has serious implications for workforce planning and development. The Treasury predicts that growth in the population of the traditional workforce age (15 to 64 years) will slow to almost zero over the next forty years and that this change will be permanent. What does this mean? Essentially, young and skilled workers will be in short supply; there will be greater competition for their labour. The impact is already being felt in Agriculture, forestry and fishing which has an older age workforce and finding young and skilled workers to replace them is difficult (SACES 2011, p12).
Economy

Business profile

Almost two-thirds of businesses in the “Barossa” and “Adelaide Hills, Fleurieu and Kangaroo Island” RDA regions are one-person/family operated businesses without employees. The remaining third are predominantly small businesses employing less than 20 people.

A farm of small business can be supplying premium food and wine to domestic and international markets. Problems arise when the business has difficulty ‘scaling up’ or expanding due to lack of knowledge or skills on the part of the business owner/manager. Workforce planning may be the underpinning to further growth and income generation of the business.

Table 1: Number of registered businesses, by size of business and RDA region.

<table>
<thead>
<tr>
<th>Size of business</th>
<th>Barossa</th>
<th>Adelaide Hills, Fleurieu &amp; Kangaroo Island</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number</td>
<td>Per cent</td>
</tr>
<tr>
<td>One person/family owner operated business (no employees)</td>
<td>3321</td>
<td>62.1</td>
</tr>
<tr>
<td>1-19 employees</td>
<td>1821</td>
<td>34.0</td>
</tr>
<tr>
<td>20-99 employees</td>
<td>189</td>
<td>3.5</td>
</tr>
<tr>
<td>100-199 employees</td>
<td>12</td>
<td>0.2</td>
</tr>
<tr>
<td>200+ employees</td>
<td>6</td>
<td>0.1</td>
</tr>
<tr>
<td>Total</td>
<td>5,349</td>
<td>100.0</td>
</tr>
</tbody>
</table>


Key industries

Key sources of information on industries critical to the two RDA regions include: RDA Roadmaps, South Australian Centre for Economic Development Fact Sheets, Government departments and agencies, and relevant Industry Skill Councils and Boards.
Barossa

The wine industry accounts for 80 to 90 per cent of economic activity in the Barossa, employing 41 per cent of the workforce (SACES, 2012: 8). Consequently, economic growth, employment and exports are all very reliant on the global market for wine. The Barossa RDA Road Map (2012) highlights the present over-supply of grapes and decreased grape prices. Key issues identified for the Australian wine industry include the need for: improved marketing of wines, benchmarking against international competitors, adoption of new business models, collaboration between producers, achievement of economies of scale and lower cost production, increased innovation, improved water use efficiency and adaption to climate change and increased investment in human capital. Untapped opportunities exist in growing markets such as China.

Adelaide Hills, Fleurieu and Kangaroo Island

Key industries in the Adelaide Hills include wine production, beef and dairy cattle, vegetable growing, fruit orchards and tourism (SACES, 2012: 12).

The older population in the Fleurieu is driving demand for health and recreational services, particularly around the retirement centres of Victor Harbor and Goolwa, requiring a shift away from a male dominated low skilled agricultural workforce to a female dominated qualified workforce (SACES, 2012: 12).

Kangaroo Island’s economy is reliant on agriculture and tourism (SACES 2012, 12).

The following industry weaknesses are identified in the RDA (AHFKI) Roadmap (2012) and other relevant research:

- Agriculture – older workforce has difficulty attracting young skilled workers.
- Tourism – shortage of suitably qualified tourism industry workers is retarding growth in this key industry (SACES 2012, 14).
• Health - Aged-care is a Commonwealth-identified jobs growth area. The workforce (everybody except nursing) is largely outsourced to self-employed persons (with an ABN) and female. We know that self-employed people find it difficult to maintain/improve their skills and knowledge

• Retail – this is a difficult period for retailers. Retail sales were generally flat towards the end of 2012, the biggest falls being in New South Wales and South Australia (ABS).

Employment

Richardson (2012) provides evidence of a highly casualised and part-time workforce in regional Australia generally and specifically in industries that are critical to the economies of the “Barossa” and “Adelaide Hills, Fleurieu and Kangaroo Island” RDA regions (Figure 2).  

He argues that not only does a highly casualised workforce make employment in such industries vulnerable during economic downturns (such as the one we are experiencing post-GFC); it is also not conducive to a culture of training and development.

“Almost by definition casual workers have little vested interest in the job in question and employers have little interest in the casual employee. Hence it is unlikely that a culture of training and development can be developed without permanent employment arrangements. As is well known, casuals tend to receive very little training” (Richardson, D. 2012: 11).

A recent study by the South Australian Department of Further Education, Employment Science and Technology (DFEEST, 2012) found that many employers on Kangaroo Island consider it unnecessary to provide casual workers with induction training. Training is not provided because “they are unlikely to remain in their employment for long; are often only required to perform a limited range of duties; and have previously worked in similar environments and already ‘know the ropes’ ” (p8).

3 Definition of casual – without leave entitlements. Proportion of casuals that are part-time 90%.
Unemployment

Overall, unemployment in the two RDA regions is lower than the State average (5.4% in September 2012). However there are pockets where the unemployment rate is higher than the State average:

Victor Harbor (7.6%), Alexandrina Coastal (7.6%), Yankalilla (6.7%) and Gawler (5.7%).

Table 2: Unemployment by RDA region, September Quarter 2012

<table>
<thead>
<tr>
<th>Region</th>
<th>Unemployment rate (%)</th>
<th>Unemployed persons (No.)</th>
<th>Labour force (No.)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adelaide Hills, Fleurieu &amp; Kangaroo Island RDA Region (AHFKI)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Adelaide Hills (DC) – Central</td>
<td>2.7</td>
<td>212</td>
<td>7,985</td>
</tr>
<tr>
<td>Adelaide Hills (DC) – Ranges</td>
<td>3.6</td>
<td>231</td>
<td>6,349</td>
</tr>
<tr>
<td>Adelaide Hills (DC) – North</td>
<td>2.3</td>
<td>97</td>
<td>4,269</td>
</tr>
<tr>
<td>Adelaide Hills (DC) – Balance</td>
<td>2.0</td>
<td>108</td>
<td>5,380</td>
</tr>
<tr>
<td>Alexandrina (DC) – Coastal</td>
<td>7.6</td>
<td>390</td>
<td>5,155</td>
</tr>
<tr>
<td>Alexandrina (DC) – Strathalbyn</td>
<td>4.4</td>
<td>232</td>
<td>5,292</td>
</tr>
<tr>
<td>Mount Barker – Central</td>
<td>3.8</td>
<td>413</td>
<td>10,969</td>
</tr>
<tr>
<td>Mount Barker – Balance</td>
<td>2.8</td>
<td>151</td>
<td>5,327</td>
</tr>
<tr>
<td>Victor Harbor (C)</td>
<td>7.6</td>
<td>392</td>
<td>5,183</td>
</tr>
<tr>
<td>Yankalilla (DC)</td>
<td>6.7</td>
<td>138</td>
<td>2,073</td>
</tr>
<tr>
<td>Kangaroo Island (DC)</td>
<td>3.8</td>
<td>101</td>
<td>2,658</td>
</tr>
<tr>
<td>AHFKI RDA Region (Average)</td>
<td>4.3</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Barossa RDA Region</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Labour force participation

The labour force participation rate in South Australia fell 0.4 percentage points over the twelve months from 63.2% December 2011 to 62.7 December 2012 (SACES, 2012b). In the two RDA regions of interest, the labour force participation rate was higher than the State average during this same period.

Skills and workforce development

Skill needs/gaps

Employers often posit skill shortages as one of the business difficulties they face. A skill (or labour) shortage is said to occur when ‘the supply of workers is not sufficient to meet the demand at current rates of pay’ (Richardson, S. 2007:11). Recognising areas of emerging skill shortages is not an easy task. Richardson (2007) thinks that asking employers about their skill shortages is not reliable as they may exaggerate the problem or interpret it incorrectly (p27). Solutions put forward by Richardson (p27/28) include:

- Establish a regular feedback system using recruitment firms who have a close ear to the ground (may require paying recruitment firms to provide such a service);
- Construct an index of skill shortages (including ‘persistent’ vacancies)

Indexes of skill vacancies and shortages

The Australian Government Department of Education, Employment and Workplace Relations (DEEWR) compiles a regular index of internet job vacancies covering all occupations, across all skill
levels and is based on a count of online vacancies newly lodged on SEEK, My Career, Career One and Australian JobSearch.4

In South Australia, a list of hard to fill occupations currently eligible for State-sponsored migration is available from the website of Immigration SA: <www.migration.sa.gov.au/SNOL%20data>. Current ‘on-list’ occupations for which there is high availability include: Specialist Managers, Education and Health Professionals, Legal, Social and Welfare Professionals, Engineers, Technicians and Trades Workers.

Formal training

The Australian vocational education and training system has an important role in equipping people with the skills and knowledge that industry needs.

Information on participation in the public VET System is available from administrative collections and surveys overseen by the National Centre for Vocational Education Research (NCVER) on behalf of the Australian, state and territory governments.5 Key collections include the National VET Provider Collection, Apprentice and Trainee Collection, VET in Schools Collection, Student Outcomes Survey, Employer Use and Views of the VET System, and VET Finance.6

Use of the VET system

Employer use of the VET system

Use of the VET system by employers in South Australia fell 5.7 percentage point between 2009 and 2011 (a fall of 2.8 percentage points was recorded for Australia). The proportion of South Australian employers using non-accredited training also decreased during the same period, from 54.9% in 2009 to 46.6% in 2011. Some 73.5% of South Australian employers used informal or on-the-job training in 2011, while 15.3% provided no training at all (NCVER, 2011: 10).

Apprenticeships and traineeships

Use the apprenticeship/traineeship system by employers in South Australia has decreased in recent years. In 2011, 25.7% of businesses in South Australia had an employee undertaking an apprenticeship or a traineeship (down from 30.1% in 2009). Some 34.5% of businesses in South Australia expected to increase their use of apprentices and trainees in the next twelve months (i.e. during 2012), while 6.2% expected this to decrease. This compared with 28.5% and 11.4% respectively for Australia (NCVER, 2011: 10).

---


5 Participation in private fee-for-service training is a current information gap presently being addressed by the Australian Government and NCVER.

Table 3: Use of the VET system by employers, 2009 and 2011.

<table>
<thead>
<tr>
<th>Employer location</th>
<th>Employers with apprentices/trainees</th>
<th>Employers using nationally recognised training</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2009</td>
<td>2011</td>
</tr>
<tr>
<td>South Australia</td>
<td>30.1</td>
<td>25.7</td>
</tr>
<tr>
<td>Australia</td>
<td>30.6</td>
<td>29.0</td>
</tr>
</tbody>
</table>

Source: NCVER Employers’ Use & Views of the VET System, 2011

**Participation in training by individuals**

Participation in nationally recognised training (or AQF qualifications) in the two RDA regions is considerably lower than the State and national averages. In the Barossa RDA Region, 65.7% of VET students were enrolled in nationally recognised training (as their highest current qualification) in 2011, compared to 76.9% for South Australia and 83.7% for Australia. The comparable figure for the Adelaide Hills, Fleurieu & Kangaroo Island” RDA Region was 62.5%

VET students living in these two RDA regions are almost twice as likely as others in South Australia and Australia to be doing non-accredited training (or non-AQF qualifications).

Individuals who operate a business without employees find it difficult to maintain or improve their work-related knowledge and skills for a number of reasons, including lack of access to training and lack of time. This is especially true of Owner operators in regional areas (cf Agrifood Skills Australia, 2011).

Table 4: Proportion of VET students by Qualification level, RDA Region, South Australia and Australia, 2011

<table>
<thead>
<tr>
<th>Highest current qualification level</th>
<th>Barossa RDA Region</th>
<th>Adelaide Hills, Fleurieu &amp; Kangaroo Island RDA Region</th>
<th>South Australia</th>
<th>Australia</th>
</tr>
</thead>
<tbody>
<tr>
<td>AQF qualification</td>
<td>65.7</td>
<td>62.5</td>
<td>76.9</td>
<td>83.7</td>
</tr>
<tr>
<td>Diploma or higher</td>
<td>7.7</td>
<td>7.7</td>
<td>9.3</td>
<td>13.9</td>
</tr>
<tr>
<td>Certificate IV</td>
<td>10.1</td>
<td>10.9</td>
<td>14.4</td>
<td>16.3</td>
</tr>
<tr>
<td>Certificate III</td>
<td>26.6</td>
<td>24.8</td>
<td>30.3</td>
<td>32.3</td>
</tr>
<tr>
<td>Certificate II</td>
<td>12.1</td>
<td>11.7</td>
<td>13.4</td>
<td>16.7</td>
</tr>
<tr>
<td>Certificate I</td>
<td>9.1</td>
<td>7.4</td>
<td>6.8</td>
<td>4.5</td>
</tr>
<tr>
<td>Non AQF qualification</td>
<td>25.7</td>
<td>23.3</td>
<td>13.2</td>
<td>16.3</td>
</tr>
<tr>
<td>Other</td>
<td>8.6</td>
<td>14.2</td>
<td>9.9</td>
<td>3.9</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: NCVER National VET Provider Collection, 2012

**Infrastructure and settlement**

The key challenge here is to service the fast growing (mainland) populations with public infrastructure at a rate that keeps pace with demand (RDAHC, 2012: 19).
Environment and culture

There is potential for increased bushfire risk and frequency and intensity of other natural events like flooding due to climate change.
Opportunities

This section identifies specific opportunities in the two RDA regions to further skills and workforce development.

The information in this section is sourced from South Australian Government’s 30 Year Plan for Greater Adelaide (2011), SACES Regional Profiles for the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA Regions (2012), RDA Regional Road Maps and relevant industry research.

30 Year Plan for Greater Adelaide

On 17 February 2010, the South Australian Government launched its 30 Year Plan for Greater Adelaide. It offers a long-term vision for the future. This Plan underpins the RDA’s regional development activities across the Barossa and Adelaide Hills, Fleurieu & Kangaroo Island.

The principle aim of the 30 Year Plan for Greater Adelaide is ‘to outline how the South Australian Government proposes to balance population and economic growth with the need to preserve the environment and protect the heritage, history and character of Greater Adelaide’ (p6, Summary).

The key objectives of the Plan (p12/13, Summary) are to:

- Maintain and improve liveability
- Increase competitiveness
- Drive sustainability and resilience to climate change

The Plan includes specific targets to accommodate an additional 560,000 people over 30 years and create at least 282,000 new jobs (p16, Summary).

RDA Regional Road Maps

The RDA Regional Road Maps guide regional development activities in the year ahead and beyond.

Growth opportunities identified in the 2012 “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” Road Maps are broadly centred around:

- strong population growth
• housing and infrastructure development;
• growth of service industries (e.g. health and recreational services);
• increasing demand for clean green agriculture wine a food production (with strong brand recognition);
• internationally recognised tourism destinations;
• Technological advances such as the rollout of the National Broadband Network (NBN).

Current priorities and actions

Adelaide Hills, Fleurieu and Kangaroo Island (AHFKI)

Current priorities for the region are identified in the RDA (AHFKI) Action Plan which forms a major part of the 2012 Regional Roadmap (RDAHC, 2012:35-41). The Action Plan contains fifty priority actions developed in consultation with the broader community. Four priorities are singled out below as being highly relevant for workforce planning and development:

1. Establishment of a regional skills leadership model involving significant employers, industry leaders, business leaders and decision-makers in government agencies with a role in planning, directing and delivering a more timely and focused approach to regional skills issues (p38);
2. Maintain government supported business services in the region for small business including access to one-on-one advice as well as group training (p36);
3. Develop an up to date Regional Food Plan for the Adelaide Hills, Fleurieu & Kangaroo Island RDA Region to foster product diversification and value-adding activities (p35);
4. Support retailers to up-skill and develop online opportunities taking full advantage of the National Broadband Network (NBN) roll out (p36);
5. Encourage the development of ‘gateway’ infrastructure to the region – including arterial roads, airports, sea and river ports, wharf developments, bulk handling facilities (p38);

Barossa

The Barossa RDA Regional Roadmap (2012) contains ten ‘game changers’ or future growth opportunities (p8). The most relevant of these to workforce planning and development are:

1. A Barossa based South Australian Culinary Institute and training centre;
2. High School at Two Wells with farm trades training facility;
3. Rail Link and Hospital at Roseworthy;
4. High Speed Broadband everywhere (not just homes);
5. Rejuvenation of Gawler Main street precinct.
Threats

The principal threats or barriers to skills and workforce development are discussed in this section.

Australian governments have responded to the demands of economic growth by launching initiatives to increase the education levels of the current workforce and new entrants to the workforce.

Three concerns emerge from the recent literature on this topic:

1. That there will not be enough jobs requiring the proportionate level of education;
2. That efforts to increase the proportion of workers holding educational qualifications, particularly higher-level qualifications, will result in credentialism rather than a more skilled workforce;
3. That skills are being under-utilised in the workplace.

Credentialism or over-skilling?

Dockery and Miller (2012) use data from 2006 Census of Population and Housing and the Household, Income and Labour Dynamics in Australia (HILDA) Survey to examine the issue of credentialism (‘an increase over time in the education standards for specific jobs and which is not necessary for the effective achievement of tasks across positions in the labour market’ p7). Their findings provide general support for the expansion of the education sector. The authors find that there is still a positive wage effect from years of over-education in the order of 3-6 per cent, meaning that the years of over-education are not wasted. They recommend better alignment of workers’ education attainment (or skills) to their jobs as a way to unlock potentially large productivity gains in the workplace (Dockery and Miller, 2012: 41-42). They suggest three ways to go about it: by forming closer links between industry and the school and VET systems so that students engage with the workforce as early as possible; by introducing intensive counselling into the education sector; and by minimizing barriers to worker mobility e.g. poor public transport and high cost of selling a buying property. The authors warn of the need to monitor and critically assess the increasing educational attainment of young people.

Mavromaras et al (2012) suggest that most adverse labour market outcomes stem from over-skilling – a form of labour market mismatch whereby a worker’s skills are under-utilised in his or her job –
and not from over-education. The authors use longitudinal data from the Household, Income and Labour Dynamics in Australia (HILDA) Survey to study the long-term effects of over-skilling. They find that over-skilling is persistent (i.e. self-perpetuating or lasting) and that this persistence varies by education level; it is lowest among university graduates and highest among VET diploma graduates and those who did not finish high school. They also find that the wages of university graduates are reduced by past over-skilling, more so than for any other education level. Over-skilling is shown to cause losses in wages and job satisfaction, thereby impacting directly and indirectly on productivity (p7). It is not good for the individual, the employer or the economy.
There are gaps in our existing knowledge of the current and future skill needs of industry in the two RDA regions.

Firstly, a lot of research on skills and workforce development is carried out at the national or State/territory level. Too often, it is conducted in capital cities and does not extend to rural or remote areas because of cost and resource constraints.

Secondly, much of the available data and research excludes one person/family owner-operated businesses that make up two thirds of all businesses in the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA Regions. For example, the main source of information on use of the VET system by Australian businesses is available for employers only. To be in scope of the national survey *Employer Use and Views of the VET System Survey*, a business must employ at least one person (NCVER, 2011:4). What of the views of one-person/family owner-operated businesses (who are non-employing) and their use of the VET system?

Thirdly, we know little about the efforts of one-person/family owner operated businesses to maintain or improve their work-related knowledge and skills. This is a serious information gap.

Lastly, we need to better understand how employers utilise the skills of their employees in the workplace (TASC 2011).

According to recent experiences in Norway, Singapore, the UK and the USA, this knowledge is best obtained at the local or regional level (Scott et al, 2011, 45).
Conclusion

By way of a conclusion, this section identifies the key lessons from this exercise and implications for further research and action.

The most useful way to do this is to answer our research questions.

What can we learn about approaches to workforce planning and development from the existing body of Australian and international research and action?

1. Learning 1: There is much to be gained from building on existing strengths. This is the preferred approach of Regional Development Australia. It applies equally to an individual business, an industry or industry cluster, or a region.

2. Learning 2: A key challenge is to encourage and support Owner operators and small employers to ‘scale up’ or expand. Two-thirds of businesses in the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA regions are One-person/family owner-operated businesses (i.e. they have no employees). The remaining third are predominantly small businesses employing less than 20 people.

3. Learning 3: A solution to the over-skilling problem needs to be found. For employees, over-skilling means a loss of wages and job satisfaction. This impacts directly and indirectly on productivity and is not good for the individual, the employer or the economy. An ideal opportunity exists to engage with employers on how they use skills in the workplace, and how they could increase productivity by making better use of employees’ knowledge and skills.

What are the key sources of data that can be used for workforce planning and what are these data telling us?

Key data sources for use in workforce planning include:

- Census, Labour Force and other ABS data;
- State/territory government administrative data (e.g. Immigration SA Occupations eligible for State-sponsored skilled migration);
- DEEWR Small Area Labour Markets, DEEWR Vacancy Index, DEEWR Higher Education Collection;
- NCVER data collections and surveys;
- Local custom and industry surveys (e.g. SAWIES Wine & Grape Industry Small Employer Survey 2007).
- Forecasts and projections (e.g. Access Economics Macroeconomic forecasts).

These data alert us to following:

- Growth of the traditional working age population (15-64 years) will slow to almost zero over the next forty years and that this change will be permanent;
- Employers are disengaging from the formal VET system (including apprenticeships and traineeships): use of the VET system by employers decreased between 2009 and 2011.
- Individuals living in “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA regions – and South Australia more generally - are twice as likely to be undertaking non-accredited training than others in Australia.

How do individual businesses, industry bodies and regions determine what is needed in terms of skills and workforce development? What are their priorities?

Skill needs or gaps are generally identified through Strategic planning. Often, this involves data analysis and broader consultation (e.g. with staff, Industry association members, key stakeholders within a region).

A peak body, government and community organisation may also conduct surveys of employers and employees, in-depth interviews or focus groups to inform their workforce planning and development activities.

Workforce planning activities normally result in an Action Plan or Workforce Development Plan; a program of action to bridge the gap between the current workforce and the desired/future workforce.

The Regional Roadmaps prepared by the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island RDA Regions” both contain an Action Plan to develop the region and its workforce. More extensive Workforce Development Plans for these two regions are being developed as part of the present study.

What are the barriers to workforce planning and development and what works well?

Barriers
• One-person owner operated businesses find it difficult to maintain or improve their skills as they are usually flat out running their business and don’t have the time to undertake training or professional development;

• The majority of employers think that the skill level of their employees is adequate or above what is required;

• A highly casualised workforce – as can be found in most regional areas and in the industries critical to these regions – is not conducive to a training culture;

• Many employers posit skill shortages as a major business difficulty;

• Employers in ‘old economy’ or low-skilled industries - such as Agriculture, forestry and fishing - are finding it difficult to attract young skilled workers.

What works well (or best practice)

• Build on existing strengths e.g. areas of Smart Specialisation;

• Concrete actions to plug skill gaps identified through workforce planning process;

• Information-sharing and collaboration to boost a region’s competitive advantage e.g. establishing closer links between industry and the education & training sectors.

Are there serious gaps in our knowledge or existing workforce development strategies?

• We need to identify the wealth creating industries in the “Barossa” and “Adelaide, Fleurieu & Kangaroo Island” RDA Regions as well as local skill and labour force needs.

• Little is known about the efforts of One-person/family owner-operated businesses (non-employing) to keep up their work-related knowledge and skills or how best to support them;

• We need to know why employers are disengaging from the VET system (including the apprenticeship/traineeship system)? Too complicated? Too costly?

• There is a lack of coordination of workforce planning and development activities across government departments and agencies resulting in needless duplication and wasted resources.

Implications for further research and action

Our review of the existing literature has positive implications for the development of Workforce Plans for the “Barossa” and “Adelaide Hills, Fleurieu & Kangaroo Island” RDA Region. In particular:

• Collect data locally on the current and future skill needs of individual business and employers – particularly to address information gaps e.g. through surveys and/or in-depth interviews;
• Further data analysis to identify the wealth creating industries in each of the two RDA regions and areas of Smart Specialisation – building on existing strengths to promote jobs growth in the regions;

• Investigate why employers are disengaging from the VET system (including apprenticeships and traineeships). What are the barriers? How can we support businesses to overcome these barriers?

• Support persons who are unemployed or under-employed and who want to improve their work-related knowledge and skills;

• Form closer links between industry, school and the tertiary education and training sectors – e.g. through a pilot project to better coordinate work experience placements in the Adelaide Hills Region.


Australian Workforce and Productivity Agency (July 2012), Future focus: Australia’s skills and workforce development needs: Discussion paper, Australian Government, Canberra.


Regional Development Australia (Adelaide Hills, Fleurieu & Kangaroo Island), Regional Roadmap 2012, RDA, Victor Harbor, South Australia

Regional Development Australia (Barossa), Regional Roadmap 2012, RDA, Tanunda, South Australia.

Richardson, D. (2012), Casual labour: A stepping stone to something better or part of an underclass? The Australia Institute, University of Canberra.


Rittie, T., and Awodeyi, T. (2009), Employers’ views on improving the vocational education and training system, National Centre for Vocational Education Research, Adelaide.

Scott, L., Buchanan, J. and Bretheron, T. (2011), Better Workforce Planning: Reflections on recent experiences in Norway, Singapore, the UK and the USA, Workplace Research Centre, University of Sydney.


