



SOUTH AUSTRALIAN  
**CENTRE FOR ECONOMIC STUDIES**



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**Importance of LLN Skills From An Economic, Social, Labour  
Market, Government and Citizenship Perspective Including  
Links With Industry and Employment**

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## **Topic: Importance of LLN Skills From An Economic, Social, Labour Market, Government and Citizenship Perspective Including Links With Industry and Employment**

Good afternoon and thank you to DEEWR and the LLN Provider Forum for the opportunity to speak to you today.

By way of personal background and involvement with economics, review of labour market and training initiatives, unemployment assistance programs and language literacy and numeracy programs provided by the Adult Education sector, I have been involved in this area in one way or another since the mid-1980s.

Initially, as Director of the State Government Youth Bureau I was first involved in a series of studies examining “School Students and Work” at the early stages of greater casualisation of the workforce, in evaluating programs such as CYSS, SYETP and various employment subsidy programs. I was Director in 1985 at the time of IYY – International Youth Year – when employment and training issues were very much to the fore. Then, with the South Australian Centre for Economic Studies we reviewed successive Victorian Government employment assistance programs from 1994 through to 2006:

- Community Business Employment (CBE);
- Community Jobs Program (CJP); and
- Workforce Participation Program (WPP) – version 1 and 2.

Most recently the Centre completed several high level, strategic reviews of state-based labour market programs including, *inter alia*;

- *South Australia Works and South Australia Works in the Regions*;
- Strategic Review of the Adult Community Education (ACE) sector;
- A Discussion Paper on Generic Skills for the Training and Skills Commission.

The Centre has conducted studies and literature reviews of overseas labour market programs and programs designed to develop employability, generic skills and foundation skills, culminating in a number of reports titled “Modelling What Works Well”, identifying programs and program design that appear to contribute to high performance, best practice outcomes. Outcomes certainly include market benefits such as employment or higher income but also a range of non-market benefits.

The Centre designed a high level outcome monitoring tool for the Personal Support Program (PSP) when that program was with FaHCSIA and is now Stream 4 under JSA, we developed the star rating system for the Job Network and recently for the Vocational Rehabilitation Service (VRS) and Disability Employment Network (DES).

The Centre has also undertaken numerous workforce planning studies and research projects for industry sectors – defence, electronics, IT, construction, mining, the agricultural sector and specific studies on programs to assist indigenous youth, new migrants, women returning to work and injured workers returning to work.

The opportunity to review a diverse range of international, national, state and community sector programs – including the Adult Community Education sector and Career Development Centres – provides some meaningful basis (and I hope some useful insights) to consider the contribution of the LLNP initiative and similar programs such as WELL, and language, literacy and numeracy skills from such a wide perspective as my topic today implies.

And recently, specifically on the need to address language, literacy and numeracy skills we have seen a renewed emphasis and series of reports and initiatives from the

- ABS/OECD Adult Literacy and Life Skills Survey (ALLS) 2006 and comparisons with the 1996 study (IALS);
- Australian Industry Group (AIG) research;
- Industry Skills Councils (“No More Excuses”);
- Skills Australia and State Training Commissions;
- COAG Agreements.

I note in the 2011/12 Federal Budget, an allocation of \$30 million to the WELL program to assist 18,000 workers and 1,500 in the IEP program to raise literacy and numeracy skills to build the prospect of further participation in education and training and up to \$97.5 million for LLNP to support 30,000 extra commencements, including a targeted work experience component. It was pleasing to see an allocation for the LLN Practitioner Scholarship program to expand the number of qualified adult LLN practitioners.

That is a snapshot of my background, some of my research and evaluation activities and a partial summary of the **inputs** and emphasis on LLN as it does not include all the effort in schools to improve literacy and numeracy, L&N in the VET packages, the contribution of the community-based, Adult Community Education (ACE) sector and literacy and numeracy training that takes place in State and community based basic foundation skills training programs.

However, today I want to consider the **outputs** – i.e., the diversity of programs, design, features, what works well – and the outcomes – what are the impacts, the gains, the benefits relative to costs – of this emphasis on literacy and numeracy.

It is pleasing to see that a targeted work experience component is to be introduced into LLNP as **combination type programs** – those that involve basic literacy with employment related training including exposure to employment through work experience and mentoring in work is one of the key design features of effective labour market programs.

### SLIDE 1: key principles

In the Centre's recent review of the effectiveness of international and national labour market programs we identified broad agreement on 7 key principles to improve overall effectiveness:

- training should be closely targeted to the needs of industry or local employers and match the interests of the cohort of job seekers (latter involves careful selection of job seekers);
- programs should generally be small in scale and again, be targeted at skills in demand;
- achieving a qualification or certificate is important for some participants and for some industries, as it signals to the employer competency, skills and employability;
- combination programs work best as they have the capacity to address ‘multiple barriers’ to employment and are able to be tailored to the needs of the individual. Combination programs may involve, *inter alia*, training on and off the job, LLN accompanied by a work placement, mentoring, job search assistance, and follow up once in employment;
- early intervention is advisable, whether this involves the unemployed job seeker or those currently at school who are at risk of leaving school without sufficient a foundation to compete in the labour market;
- there are job seekers with entrepreneurial skills and talents who have the capabilities and desire to commence their own business who would benefit from training and business start up support; and

- evaluation should be built into the design of program, it should provide an assessment of the benefits and costs of the program, including outcomes and hence effectiveness of the program over time. For example, if the measured outcome is sustainable employment, then this needs to be followed up for a minimum period of time. If the outcome is to place job seekers into employment or into a specific occupation, where there is a demand for skilled workers, then the actual job placements should match those skills in demand in that occupation or that industry.

## SLIDE 2: personal observations

There are two other critical observations I would draw from my experience, review and evaluation of labour market assistance programs, one at the *individual level* and one at the *program objective level* they are:

- **firstly:** encouraging, supporting and helping the individual to *invest in themselves* and reinforcing this message is critical to good outcomes.

I would also make the observation (from experience) that providers of programs at the local, community level generally know best; they know more about the capabilities and motivation of job seekers/learners and this is why flexibility in the delivery of programs is important.

For example, I have seen central administration want to support participation in Certificate I and II courses when participants are a long way from this – they need first to be engaged, then retained, to then set a learning plan, build basic skills, including LLN before they have the ability and motivation to go further. This applies to many Indigenous participants.

But the important message is “you get the benefit from investing in yourself”; and

- **second:** a truly democratic society facilitates and equips its citizens to do things for themselves. Basic foundation skills such as literacy and numeracy are the platform to acquire generic, work and life skills and community/social participation skills. This is the ultimate contribution from developing competency in language, literacy and numeracy.

## SLIDE 3: economists’ digression

### Developments in Economic Theory: The Importance of LLN Skills

The power of ideas and theories – new ways of seeing the world – should never be underestimated. This is remarkably well illustrated in the evolution of economic growth theories or our search for a better understanding of why some nations and regions achieve economic growth and social development while others do not.

A fully comprehensive review of the evolution of economic growth theory is not possible today – suffice to say that from the 1950s through to today – through to the “new knowledge economy”, the ICT revolution and globalisation of trade and information – there have been remarkable changes in how economists understand how economies, nations and regions grow.

Two contrasting theories should help to make this point. In the 1950s and 1960s the main determinants of growth were understood to be an increase in investment in physical capital (plant, machinery) with respect to labour. The basic argument here is that the more a country saves the more it can invest in physical capital. A variation on this classical growth model was the neo-classical growth model which did include investment, not just in physical capital, but human capital but still argued diminishing returns to investment in human capital. That is to say, investment in human capital through education, universities, vocational education was basically treated the same way (in the model) as investment in

ports, infrastructure, farm equipment. To achieve growth you had to continually increase the rate of investment in human capital to achieve an increase in output or GDP.

These neo-classical models, the most popular was the Swan-Solow model incorporated exogenous technology ~ but did not explain where innovation or technical progress came from, where and how new and better technologies were developed.

Public policies were based on these theories and governments sought to attract large scale investment, to accumulate capital and with each wave of new investment – which included new and better technology – productivity and output increased.

The public policy implications and strategies are best illustrated through attraction subsidy policies to lure that investment – car industry in Elizabeth, ship-building at Whyalla accompanied by an increase in labour and capital, supported by policies offering tax concessions, subsidies and tariff protection.

We had a few oil shocks in the 1970s, unemployment, high inflation and high rates of unemployment continued into the 1980s.

The mid-1980s saw the emergence of new growth or endogenous growth models – basically models where technical and technological progress is endogenised or included in the model – which was a weakness in the Swan-Solow model. Essentially, an R&D sector and human capital was able to be included in the model. Human capital was included as a factor of production reflecting the skills and knowledge that makes workers productive.

In new growth models the treatment of human capital is very different to that of physical capital.

The important point about this is that unlike physical capital, which has diminishing returns to its expansion, technology unchanged, expanding human capital generates increasing rates of return, not only as the source of innovation that increases returns to physical capital, but also because through learning from new ideas (tacitly as well as formally) further new knowledge is created. This reflects a key characteristics of knowledge – that it is non-rivalrous in consumption. That is, once produced it can be consumed (used) by many without diminishing its availability to others.

And this leads to a virtuous cycle with constant or increasing returns to investment in human capital – in education, training, literacy and numeracy, ideas, processes – so that an economy as it gets richer can invest still further in people (essentially) to achieve sustained increases in GDP output.

The other important strand of literature that stressed knowledge, education and the quality of human capital was Michael Porter (1990) on the Competitive Advantage of Nations wherein he stressed

“... the importance of knowledge and skills embodied in people, concluding that the process of creating skills – foundation, generic and specialist skills – had an important influence on economic growth, innovation and hence employment”.

So, the new endogenous growth theories associated with Paul Romer stressed the importance of human capital as the source of growth promoting innovation and emphasised the importance of education, knowledge, foundation and specialist skills. The quality of education matters!

In short – improvements in human capital **lead to** technical progress, then **lead to** economic growth and employment and growth can be indefinite as ideas, processes innovations, new ways of doing things expanded – human capital does not experience diminishing rates of return unlike physical capital.

So for example, much of the OECD literature on “how nations and regions grow” identify a key determinant of growth as:

- the quality of human capital; and
- regions with low education are less economically vibrant.

*New Paradigm!* – of integrated policies that prioritise education, LLN and basic foundation skills and knowledge and innovation coupled with investment and infrastructure that promote growth.

The new paradigm not only emphasises the importance of literacy and numeracy, foundation skills and life-long learning, but it has resulted in a fundamental shift in the direction of public policy and the design of labour market programs.

Associated with developments in economic theory that emphasise learning and education are a range of external forces – changes – that continue to be felt within the economy that contribute to the process of structural adjustment which is on-going with no identifiable “commencement and end” points. Structural adjustment creates economic and social challenges that require a response at the macro or national level and at the micro or individual level at the same time.

#### **SLIDE 4: external considerations**

#### **Economic Growth: Education, Training and the Labour Market**

We now understand that a very significant proportion of the difference in growth rates between countries is explained by differences in the level of education and training. Factors which improve the quality of labour – **participation** in education, training, skills formation, lifelong learning as well as health, housing and social and community infrastructure – improve the productive capacity of the economy. Evidence also supports that the more highly educated and skilled people have consistently higher workforce participation rates.

In *Addressing Canada’s Literacy Challenge: A Cost/Benefit Analysis* the authors reported that:

“Difference in average adult literacy level have been shown to exert a profound influence on key indicators of economic success, explaining as much as 55% of long-term difference in the long-term growth rate of GDP per capita and productivity growth. Specifically, the higher the proportion of adults with very low literacy skills, the lower overall rates of long term GDP growth”. (Data Angel, p. 13)

A higher rate of workforce participation, reduction in unemployment, skills development for those at the margins of the labour force, the necessity of addressing increasing rates of obsolescence of previously acquired skills and emerging skills shortage all reinforce the long-established role of government in funding and delivery of education, training and the provision of labour market programs.

#### **Fundamental Shift in the Role of Labour Market Programs**

There has been a fundamental shift in the objectives of labour market programs (and income security arrangements) in response to changes in macroeconomic conditions and the strength of the labour market. From a situation of deficient aggregate demand and high unemployment through the 1970s and 1980s the current macroeconomic environment (and likely future environment) is characterised by strong demand for labour, skills shortage and the need for higher rates of workforce participation. The benefits of economic growth must also be spread throughout the entire community.

Labour market programs are increasingly designed to support an increase in the **rate of workforce participation**; address **population and demographic change** and raise skill levels to support higher **productivity**.

**Participation:** near full employment has shifted the focus of labour market programs from addressing high rates of unemployment to a sharper focus on addressing skills shortage, the need to increase workforce participation rates, assistance for those who are most disadvantaged and who experience multiple barriers to employment, and highlighted the importance of the replacement demand for labour. As an important aside, it is recognised that unemployment assistance programs are dealing with a different cohort in 2011 than say in the 1980s when deficient aggregate demand was the reason for much unemployment. We are living in the age of skill shortages.

We are dealing with a more disadvantaged cohort; we are dealing with many people who have multiple barriers to employment, many who have no work history, have lost work and social skills and many who are long-term unemployed.

**Population:** the changing demographic profile and the ageing of the workforce have elevated the importance of retention in the labour force, upskilling, skilled migration and improvements in pathways into employment (e.g., skill recognition, career development services).

A paper prepared for the US National Commission on Adult Literacy (by Strawn) found that:

“the current potential pool of skilled workers among prime age adults (18-44) is equal to the next 17 years of high school classes”.

The implication here (as some states of Australia are similar to the findings in the USA) is the need to skill up those in the workforce, to assist those who are NLF acquire basic skills and enter the labour force and assist the unemployed into employment.

These numbers also suggest that NAPLAN, reforms in school TAFE/VET while necessary will not be sufficient given the numbers to enter the workforce ... LLNP.

**Productivity:** the knowledge based economy and emerging new industries tend to speed up the process of skills obsolescence, create new occupations and skill sets and so that the demand for new qualifications and skills is at a premium and increasing productivity of the existing workforce is a priority.

Active Labour Market Policies (ALMP) and programs and participation in the workforce or in education and training, are also supported by the manner in which allowances, benefits and income security payments are structured. The most recent example is the incentives built into the Youth Compact covering the youth allowance and Family Tax Benefit A.

### **Alignment of Economic Development and Labour Market Policies and Programs**

The appropriate policy, implementation framework and supporting infrastructure for labour market programs now and in the coming decade will depend on:

- a) establishing an even stronger alignment or relationship between economic development objectives and labour market policies and programs; and
- b) the design of location specific responses or customised programs so that service delivery can be more responsive to the needs of the individual, local businesses and conditions in the local labour market, and so that potential employees are able to be sourced from the local or regional labour pool.

The twin objectives of regional economic development – business attraction and investment and employment outcomes – are inextricably intertwined with the quality of the labour force, the skill profile of the local labour force and the flexibility to tailor national and state policies and programs to provide location specific solutions to skills in demand. A partnership approach involving local employers and community providers will also be required.

### **Discuss critical issues of education, LLNP in disadvantaged suburbs, regions**

Linking LLN programs with local employment placements, community and State-based labour market programs provides a unique opportunity to harmonise the objectives of labour market policies and programs, economic development and regional policy.

### **Industry Restructuring**

In my own State of South Australia, the economy, employment opportunities and occupational demand is constantly in a process of transition, adjustment and change. New industries such as mining and defence will require new skills, but so too do clean technology industries, human services, aged care, community and education services with new occupations and new skill sets.

I will just comment on two discernable trends.

First, is the change in occupational mix. In the last 20 years 26,500 jobs have been lost in manufacturing and 36,000 jobs gained in health and community services; 20,000 jobs lost in agriculture and wholesale trade where both sectors are subject to technology and process improvements with 57,000 jobs in business services and education. In the sectors where jobs have been gained there are numerous requirements and systems for record keeping, documentation, government regulation that demand more literate and numerate employees.

The second trend is the shift in employment to more labour intensive services. We never cared about how many production workers it required to make and assemble a car – we care even less today where it was made.

However, as employment shifts to labour intensive public services and the service sector more generally, the “quality and quantity” of labour becomes the principal focus of attention.

The “services” sector is measured in terms of people and the quality of service: the quality of aged care/child care, the number of child protection officers, the quality of the teaching workforce. There will be even more significant demand for a skilled, literate and numerate labour force because, labour in these services is “the end in itself”, whereas in manufacturing and other industries “labour is primarily an instrument – an incidental requisite for attainment of the final product.” (Baumol)

It is necessary to raise the rate of skills formation, offset the decline in workforce participation (via ageing/retirement) and increase the number of people with post-school qualifications. The costs of inaction are twofold; the costs to the individual and to the national economy:

- individuals with inadequate literacy and numeracy skills will be faced with even higher barriers to employment<sup>1</sup> in the ‘New Knowledge-based Economy’ and social inclusion and participation; and
- at the national level, a shortage of skilled labour coupled with the decline in workforce participation levels (due to an ageing workforce) would further add to the labour supply

<sup>1</sup> See also “National Workforce Literacy Project: Employer views on workplace literacy and numeracy skills, their impact on business and the most effective measures for improving skills” (Australian Industry Group, 2010).

constraints. Socially, the costs of inaction further increases the income gap resulting in pockets of the disadvantaged in the community.

Yes we need more Certificate III, IV and Diploma courses, graduates, but there remains a challenge to address the training and participation needs of those who have limited basic or foundation skills including poor literacy and numeracy which combine to create barriers to engaging in the workforce and restrict opportunities to develop “generic or employability skills”.

For reasons of social equity and economic development it is important to ask:

- what human resources (skills, capabilities, talents) can we liberate through improvements in literacy and numeracy?; and
- what human resources are available to the economy and community through developing “generic or employability” skills?

### Changes to Commonwealth Programs

In a number of studies the Centre has completed we argued that changes to Commonwealth employment programs including a new Job Services Australia (JSA), the Productivity Places Program (PPP), reforms to existing programs including the Indigenous Employment Program (IEP) and Disability Employment Services (DES) and expansion of LLNP and changes to eligibility criteria mean that there are fewer population groups not eligible for Commonwealth services than previously.

Taken together, changes to Commonwealth programs are designed to extend coverage (thus minimising gaps), to support a broader range of assistance measures including, *inter alia*, work experience, access to training while promoting a stronger focus on improving participation rates and employment outcomes.

The Commonwealth advised that in the DEEWR request for tender, that

“the new Employment Services will develop linkages with state and territory government employment and training programs” (DEEWR, Request for Tender, p. 3).

Exploiting complementarity between Commonwealth and State programs and employment services will be increasingly important and I think there is considerable scope to “feed in” LLNP graduates into state training programs, vocational and pre-vocational courses and work experience with local employers.

### Council of Australian Governments (COAG)

COAG has recently endorsed a series of measures to bolster participation in education, training and re-training, including additional measures to overcome Indigenous disadvantage.

The measures include<sup>2</sup>:

- the alignment of income support (e.g., youth allowance and Family Tax Benefit A) to support the education and training entitlement to all 15-24 year olds who have not obtained a Year 12 or equivalent qualification;
- the provision of efficient and effective career and transition services to young people with an undertaking by the Commonwealth to transfer responsibility for these services to States and Territories;

<sup>2</sup> COAG: National Partnership Agreement on Youth Attainment and Transitions.  
COAG: Closing the Gap: National Urban and Regional Service Delivery Strategy for Indigenous Australians.  
COAG: Improving Productivity – Better skilling and job capability now and in the future.

- funding of the Youth Connections and School Business Community Partnerships Brokers (Community and Education Engagement) to be transferred to State and Territories;
- reforms to the Indigenous Employment Program (IEP) targeting regional areas and specific industries experiencing labour shortages;
- the new employment services (i.e., JSA, DES) will focus particularly on the disadvantaged and long-term unemployed; and
- employment service providers will be required to have a comprehensive Indigenous Employment strategy, including more tailored and individualised assistance.

### Scale of literacy challenge in South Australia

The Australian Bureau of Statistics (ABS) released the results of its Adult Literacy and Lifeskills Survey (ALLS) in 2007. Part of a wider OECD survey, ALLS measured the literacy and numeracy skills of South Australians. It grouped people according to five skill levels with Level 1 being the lowest. Level 3 was regarded as the minimum required for individuals to meet the complex demands of everyday life and work in an emerging knowledge-based economy<sup>3</sup>. The survey found that on the five-point scale, a significant proportion of South Australian adults were reported to have skills below the minimum level (i.e., Level 1 or 2).

#### SLIDE 5: Table 1

In 2006, 511,800 South Australians (45.2 per cent) aged between 15 and 74 did not have the prose literacy<sup>4</sup> abilities required to meet the complex demands of everyday life and work; 520,100 did not have the document literacy skills; 579,600 (51.1 per cent) did not have the numeracy skills; and 788,700 (69.6 per cent) did not have the problem solving skills to meet the complex demands of everyday life and work.

If we discount this figure by 50 per cent this still leaves one quarter of a million people who would benefit from improving basic literacy skills (i.e., below level 1 or 2 on the ALLS scale) and thereby enhance the productive capacity of the economy.

The findings from the ALLS Survey (relevant to this paper) can be summarised as follows:

- higher proportion of females have literacy scores above Level 3 for most age groups;
- those **employed** had the highest proportion of scores at Level 3 or above; those **not in the labour force** had the highest proportion at Level 1 or 2; the **unemployed** had the highest proportion of Level 1 scores for numeracy, health literacy and problem solving; and
- South Australia generally ranks third behind the ACT and then Western Australia on various literacy and numeracy measures with age structure, patterns of migration, labour force status and educational attainment acting as independent variables influencing State by State rankings.

#### SLIDE 6: Table 2

DFEEST (2009) summarised the ALLS survey in Table 2 indicating a significant proportion (higher than national standards) of working adults in South Australia with below Level 3. In addition, low literacy rates in South Australia's workforce are coupled with low qualification rates. COAG (2009, p.52)

<sup>3</sup> ABS, Adult Literacy And Life Skills Survey: User Guide, Cat. No. 4228.0.55.002.

<sup>4</sup> Prose literacy is defined as "the knowledge and skills needed to use various kinds of information from text" and document literacy as "the knowledge and skills required to locate and use information contained in various formats including job applications, payroll forms...". Numeracy is defined as "knowledge and skills required to effectively manage and respond to the mathematical demands of diverse situations" and problem solving as "goal-directed thinking action in situations for which no routine solution procedure is available".

commented that the proportion of the working age population without minimum level qualifications in South Australia (51.8 percent) is higher than the national average (48.1 percent). In addition, South Australia has the highest proportion of 35-44, 45-54 and 55-64 year olds who do not have qualification at or above Certificate III.

The ALLS Survey also documented that the “level of an individual's educational attainment is a key determinant of their likelihood to participate in the labour market ... [and] ... in aggregate, higher levels of education lead to better performance in the labour market”<sup>5</sup>. The correlation between low literacy rates, educational attainment and employment imply that the profile of those with low literacy rates are also those who are most at risk of long term unemployment and disadvantage.

Additionally, they are more likely to be geographically concentrated in the most disadvantaged socio-economic areas. Some 60 per cent of those in the most disadvantaged socio-economic areas have low literacy levels compared to 29.3 per cent in least disadvantaged areas (COAG, 2009) and further, South Australia has the highest proportion of people in the most disadvantaged socio-economic groups of all mainland States (21.6 per cent compared to the Australian average of 13.2 percent).<sup>6</sup>

Unemployment rates are correlated with educational attainment. Those with no post-school qualifications had an unemployment rate of 7.0 per cent when the trend unemployment rate for South Australia was 4.7 per cent at the time of the last Census (2006) and somewhat surprisingly those with a Certificate Level I or II experienced a higher average rate of unemployment (9 per cent) than those with no post-school qualifications.

However, difficulty with language, literacy and numeracy are not confined to this sub-population. In a recent employer survey<sup>7</sup> by AIG (2010), employers indicated that language, literacy and numeracy problems are apparent in their workforce regardless of educational attainment, qualifications or skill levels. Employers reported that language, literacy and numeracy (LLN) problems had affected their business and productivity through repetitive work and time wasting.

## SLIDE 7: population profile

If we combine all these measures to consider age groups with specific needs:

- Group 1** there are a sub-group of young people who are unemployed and experience barriers to employment who lack basic foundation skills including literacy and numeracy; they are unlikely to possess a range of “generic or employability” skills;
- Group 2** there is a significant group of middle age workforce participants who have no post school qualifications but who possess a solid work history;
- Group 3** there is a significant group of middle age workforce participants who do not have qualifications at or above Certificate III Level but have a solid work history; and
- Group 4** those not in the labour force and many unemployed persons had only Level 1 or 2 literacy and numeracy levels, they are likely to suffer social and economic disadvantage, possess limited or intermittent work history and have had limited opportunities to develop “generic or employability” skills.

## SLIDE 8: Diagram

<sup>5</sup> National Institute of Labour Studies (NILS), “Workforce Participation in South Australia: Barriers and Opportunities”, p. 32.

<sup>6</sup> “Skills for Jobs: Priorities for Developing South Australia’s Workforce”, Training and Skills Commission, November 2009.

<sup>7</sup> 338 companies across Australia were surveyed.

Responding to the needs of each of the four groups (and employers where relevant) could take the following form:

- Group 1** *South Australia Works* state-based prevocational work preparation programs, combined with ACE or some literacy and numeracy instruction;
- Group 2** Support for the individual, employer and industry through use of Commonwealth programs such as Workplace English Language and Literacy (WELL) with consideration of fee for service ACE provision to local employers and TAFE/VET enrolments;
- Group 3** Individual and employer support to raise qualifications identified by Industry Skill Boards, utilising PPP initiative and TAFE/VET enrolment; and
- Group 4** Community based engagement through community and adult education<sup>8</sup> developing literacy and numeracy skills and endeavours to build pathways to pre-vocational and vocational training.

A “Strategic Review of *South Australia Works* Program” (state-based labour market training programs) and a “Strategic Review of the Adult Community Education (ACE) Program” were recently undertaken for the Department of Further Education, Employment, Science and Technology (DFEEST), particularly addressing the needs of Groups 1 and 4.

The LLNP and Adult Community Education can address the specific needs of unemployed persons in Groups 1 and 4. Workforce development strategies are necessary to address the training needs of Groups 2 and 3, including workplace based English language programs such as the Workplace English Language and Literacy (WELL) program.

Combining the results of the ALLS survey and reflections and experience of employers illustrates that basic foundation skills such as language, literacy and numeracy are at the very *heart* of workforce development systems.

This is because the number of adults in the current workforce with no qualifications or low qualifications are significant in number. Many individuals with low basic skills are confined to low wages and limited employment opportunities.

The imperative to continually upgrade skills and knowledge implies a continuum of firstly acquiring literacy and numeracy and basic foundation skills, then generic skills to enable participation and to raise productivity in the workforce and then, acquiring more specialist skills through time in the workforce. Lifelong learning describes that continuum.

### Programs to improve Generic Skills

LLNP is an important program in contributing to Workforce Development and an important initiative in the significant challenge for individuals, employers, education providers and government in raising educational attainment to improve prospects of employment and reduce barriers to workforce participation. The underlying demand for basic/foundational skills in the national economy is high.

Early on I indicated some of the key elements or design principles in an ‘ideal program’ and language, literacy and numeracy is a key component, **enabling** individuals to acquire generic or employability skills and to participate in vocational/work training programs.

Where literacy and numeracy is conducted concurrently with vocational/work training then all the better, which I think is why it is pleasing to see LLNP now include a work experience component.

<sup>8</sup> SA:CAFE; South Australia Community Adult Further Education.

An ideal program should encourage active involvement of employers or supervisors (or in a community based setting) or a supportive workplace or work experience environment makes real, makes tangible the benefits of literacy and numeracy and the development and application for generic skills.

### **Economic Impacts**

There are a number of ways in which participation in LLNP courses could generate economic benefits. For the individual participants potential benefits include:

- the satisfaction of participating in the course (consumer surplus);
- increased feelings of connection with immediate others, family and society (social capital);
- the potential for participation in LLNP to act as a “stepping stone” into further education and training for some who would not have participated otherwise, which in turn increases expected lifetime labour income.

Data Angel (2009) report from Canada that:

“differences in literacy skills are associated with large differences in employability wage rates, income and reliance on social transfers. Adults with higher literacy skills work more, experience less unemployment, earn more, spend less time unemployed and rely less on government transfers” (p. 13)

The economic literature (Dowrick, 2002; Coulombe and Tremblay, 2006) find “strong, positive effects on both GDP per capita (1.4 per cent) and labour productivity (2.00 per cent) in a country that achieves a literacy score 1 per cent above the average ... and the average level of literacy is more important than the proportion attaining high levels of literacy”.

OECD (2000) in Literacy Skills for a Knowledge Economy report their finding that a 2 per cent increase in wages and earnings that would flow from improvements in national literacy could provide a 1.8 per cent increase in taxation revenue.

The Australia Productivity Commission and Access Economics find that average per capita incomes of Australians could increase by some 4-5 per cent if the workforce participation rate was to increase and the key to this goal was improvements in literacy and numeracy rates.

### **SLIDE 9: Table 3 - employment income**

Improving literacy can have substantial impacts on individual’s performance in the labour market. For example, Denny et al. in an analysis covering 18 OECD countries found that a one standard deviation increase in literacy level (effectively an increase of one IALS Level<sup>9</sup>) increased income by 5 to 18 per cent. Slides 8 and 9 summarise the results of a number of studies undertaken since 2000 (primarily drawn from Johnston 2004) on employment income and employment rate impacts of literacy programs. The results column reports the studies’ findings as they are reported; the following column ‘impact of shift from level 1 to 2’ was in most cases calculated by SACES from our review of ACE in South Australia.

### **SLIDE 10: Table 4 - employment rates**

In the Australian context, evaluation of community based literacy and numeracy programs – such as the Victorian ACE program – some 67 per cent of graduates had achieved a “market or economic benefit”, there was significantly increased labour force participation of those previously NLF and wage increases

<sup>9</sup> International Adult Literacy Survey.

ranging from \$8,000 to \$12,000 for men and \$1,300 to \$2,200 for women. Tax receipts and savings on welfare payments to the Commonwealth over a 25 year period were estimated at \$4.2 billion.

UK research estimates for a 1 standard deviation in literacy a 14 per cent increase in earnings and a 12 per cent increase for numeracy. Research papers conclude that LLN is significantly associated with the likelihood of being in employment and full-time employment.

When SACES evaluated the Economic Impact of the number of hours provided for literacy and numeracy training through the South Australian Adult Community Education sector (ACE) we reported that the actual cost of delivery per hour was \$4.73 but that

“the net present value of literacy courses was estimated to range from \$11.14 per hour to \$19.30 per hour with a gross benefit in the range of 2.4 to 4.1 times the actual funding provided to literacy courses (i.e., gain employment, income, benefits, social, etc).

### **SLIDE 11: economic impacts**

Both employment levels and employment income contribute to the benefits calculation. The literature also points to potential equity benefits of helping those on typically low incomes.

- all studies conclude economic benefits from literacy are very significant;
- studies show high returns for those in work;
- expenditure on literacy training generates high economic returns;
- increased in employment (12 per cent), move up the income scale, increased workforce participation;
- increase in tax receipts, decline in benefit payments;
- increase in workforce productivity (employer benefits!);
- tool to assist “no income households” with current and future generational benefits.

An additional benefit would be the longer time period in work in which individuals are able to contribute to superannuation thereby increasing their capacity for self-support in retirement. In addition, there are potential equity benefits of funding LLNP courses, as the participants are typically low income.

This available evidence points to improvements in literacy – as a proxy measure for improvements in human capital – as providing benefits to the individual, the firm/industry and the wider economy.

### **Social Impacts**

There are important social equity considerations in our determination to provide remedial education for literacy and numeracy not simply what they offer in prospect for future benefits, but that they offer opportunities to address passed circumstances and disadvantage that are often associated with family circumstances, poor schooling, early school leaving and intergenerational transfers.

As occupations disappear, as low skill, manual jobs contract, as opportunities to “learn on the job” decline there is a much greater premium to competency in literacy and numeracy.

It is the passport that takes you away from the margins of the labour force; it is the passport to the adult world, rich in history and culture it is the passport that breaks the deadweight of intergenerational disadvantage.

### **SLIDE 12: non-market benefits**

- social inclusion, civic and cultural engagement;
- improvement in personal confidence, sense of achievement;
- decline in anti-social behaviours, social problems;
- higher aspirations, participation in further training;
- improvements in health;
- intergovernmental benefits including less need for remedial education;
- improvements in LLN for adults is shown to have a positive effect on children's aspirations and abilities;
- increase in volunteerism, less social isolation;
- indirect benefits (externalities).

## Industry

In November 2008, the Council of Australian Governments (COAG) agreed to a new National Skills and Workforce Development Agreement. Under the Agreement, one of the four outcomes that the Commonwealth and State governments are working towards achieving is:

- the working age population to have gaps in foundation skill levels reduced to enable effective educational, labour market and social participation<sup>10</sup>

In the May 2010 budget, the Australian Government announced an investment of more than \$660 million as part of the Skills for Sustainable Growth strategy. The Skills for Sustainable Growth strategy includes, *inter alia*:

- improving and strengthening the Language, Literacy and Numeracy Program; and
- expanding the Workplace English Language and Literacy Program.

Foundation Skills include:

“... both the Core Skills (of reading, writing, oral communication, numeracy and learning) described by the Australian Core Skills Framework<sup>11</sup> (ACSF), and Employability Skills. Foundation Skills include language, literacy and numeracy (LLN)”.

Data from the ALLS showed that in 2006 over 45 per cent of the manufacturing workforce had literacy skills at a level that was below the level required to function effectively (i.e., **skill level 3**). In the area of numeracy skills, over 50 per cent of workers in manufacturing had inadequate numeracy skills. The area in which there was a major deficit was in the area of problem solving skills. Nearly 75 per cent of workers in the manufacturing industry do not have adequate skills in problem solving. This is more than double the national percentage.

In the utilities sector of the economy – energy, gas, water and desalination – it is the case that more computerised and highly technical systems are the norm increasingly developed from new processes, new products, scientific and technological advances and they require higher levels of knowledge and instruction.

Industry Skills Councils (ISC) consistently report that greater competency in language, literacy and numeracy skills are required to understand basic instructions, to communicate orally and in writing and to apply problem solving techniques.

<sup>10</sup> Council of Australian Government (n.d) *National Agreement for Skills and Workforce Development* (Fact Sheet) [http://www.coag.gov.au/coag\\_meeting\\_outcomes/2008-11/docs/20081129\\_skills\\_workforce\\_development\\_fact\\_sheet.pdf](http://www.coag.gov.au/coag_meeting_outcomes/2008-11/docs/20081129_skills_workforce_development_fact_sheet.pdf) accessed December 3 2010.

<sup>11</sup> DEST, 2008, *Australian Core Skills Framework* <http://www.dest.gov.au/NR/rdonlyres/C482CA52-D500-41AA-B0B4-B1F98609B325/23857/AustralianCoreSkillsFramework.pdf> accessed December 2, 2010.

The Electro-Communications and Utilities ISC were a contributing author to the recent report (April 2011) “No More Excuses” which claimed,

“Australia’s international competitiveness is under threat because up to 8 million Australian workers don’t possess the reading, writing and numeracy skills to undertake training for trade or professional jobs.

The report called for a national overarching blueprint for action on LLN because industry are confronting inadequately prepared school leavers, an ageing workforce struggling to cope with technological advances and overseas workers with English as a second language.”

The report (“No More Excuses”) called for industry training programs to be provided with specific funding to tackle LLN gaps faced by students and overseas-born workers with English as a second language.

The impact of low language, literacy and numeracy skills in the workplace

“The consequences of inadequate literacy and numeracy are significant both in terms of the number and depth. Poor completion of workplace documents and time wasting through repeated work are the most reported impacts at over 40%. But there is a long list of other important consequences including ineffective work teams, materials wastage, ineffective training, financial miscalculations, workplace injuries and unsafe work practices and recruitment difficulties. It is clear that inadequate levels of workplace literacy and numeracy are having negative impacts on productivity and workplace safety.” (Heather Ridout, Ai Group, May 2010)

### **SLIDE 13: industry impacts**

#### **Industry Impacts**

- more effective communication, increased productivity;
- improves take-up and application of new technologies;
- improves take-up of further training, more effective;
- raises employee retention/reduces turnover;
- reduce incidence of workplace accidents and illness and speeds return to work;
- able to work in teams, share ideas/concepts;
- reduce avoidable costs (e.g., re-work, reduce errors);
- better understand instructions, OH&S;
- follow company procedures; and
- less effort into “hiding the problem”.

#### **Impact on the work**

Employers reported worker issue such as;

- inability to read Standard Operating Procedures
- perform manual calculations
- select correct parts
- mistakes in ordering
- using appropriate email language with external customers
- using appropriate language in written material for websites and publications
- using appropriate communication methods for team based approaches to problem solving

- difficulty translating technical documentation into commercial language consistent with business needs.<sup>12</sup>

### Impact on the enterprise

According to the report, the impact of low level literacy skills on enterprises can be seen in a variety of ways. Some of the impacts reported were;

- poor completion rates of workplace documents;
- time wasting through work needing to be repeated;
- materials wastage due to incorrect calculations or misinterpreted instructions;
- recruitment difficulties;
- injuries;
- poor workplace relationships due to poor communication skills;
- reluctance to undertake training;
- resistance to workplace change;
- inability to benefit from workforce development opportunities;
- inability to participate in quality circles or team-type approaches used in lean manufacturing.

I'd like to end with reference to a recent article in *The Australian* newspaper (23 May 2011) which was titled "**Short courses put end to cycle of benefits**", which illustrates the importance of short, general interest courses as a way to engage disadvantaged learners and draw them back into a process of "investing in themselves".

"The Gillard government has put at the Centre of its budget the need to up-skill people into qualifications and boost literacy and numeracy in a bid to get people working and tackle skill shortages.

If it wasn't for a \$40 patchwork sewing course, single parent Kaylene Jones, 41, could still be unemployed at home and living on a "cycle of benefits".

"After leaving school at 14 and becoming a stay-at-home mum at 20, Ms Jones became isolated once the children went to school, with little hope of entering the workforce and shy of formal training.

She says a friend virtually forced her to take the sewing course at the local Neighbourhood House centre at Corio in Victoria's Geelong. From there she took a computing course, and then a Certificate III in business administration, and now she is the Centre's administrative assistant."

ALA Chief Executive Sally Thompson said formal courses can be too intimidating and narrow for disengaged learners, who she said fall in a hole between the formal training system and welfare dependence. "We have a very narrow industry-based system on the one hand and on the other we have a welfare system and very little in between for community development", she said.

Government funding for general interest courses to engage the disadvantaged is sporadic and a systematic approach is necessary to re-engage learners and ultimately for them to re-engage with the labour market.

<sup>12</sup> Australian Industry Group 2010 *National Workforce Literacy Project*, p. 5.

## Research

It is pleasing to see an increase in public funding for LLNP I'd like to see further evaluation of the program that includes before and after results of people's literacy skills, a comparative assessment of outcomes for similar groups – participants and non-participants – including on- and off- benefit for those who complete the 800 hours and those who leave earlier. A proper benefit-cost analysis over time would contribute to evidence based policy.

There are opportunities for pilot programs – including for family participation or no-income households.

LLNP provides the critically important foundation skills to enable individuals to **invest in themselves** and keep investing. It provides a platform for individuals to acquire generic, work and life skills and that is a measure of the value of LLNP – it **equips citizens to do things for themselves**.