

# Construction and Property Services ISC



Australian Government  
Department of Education, Employment and Workplace Relations



## CPSISC WELL STRATEGY

May 2009





**Australian Government**

**Department of Education, Employment and Workplace Relations**

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**Developed by:**

The strategy was developed by the Construction and Property Services Industry Skills Council.



**Construction and Property Services  
Industry Skills Council**

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## Foreword

The economic and social benefits of participation in workforce learning and development are well documented, as are the negative impacts of low literacy and numeracy skills on learning and development outcomes.

Differences in levels of literacy matter both economically and socially: literacy affects, inter alia, labour quality and flexibility, employment, training opportunities, income from work and wider participation in civic society.<sup>1</sup>

The National Centre for Vocational Education Research (NCVER) provided a recent overview of the benefits of addressing literacy and numeracy<sup>2</sup>:

Hartley and Horne (2006) point out the significant relationship between investments in human capital (literacy levels) and a country's subsequent economic growth and labour productivity. Coulombe, Tremblay and Marchand (2004) concluded that a rise of 1% in a country's literacy score relative to the international average (that is, their average literacy and numeracy skills level as measured by the International Adult literacy Survey [IALS]) is associated with an eventual 2.5% relative rise in labour productivity and a 1.5% increase in gross domestic product.

Australia took part in the recent international literacy survey (the Adult Literacy and Lifeskills Survey) to determine whether the Australian adult population had the literacy skills needed to participate in a knowledge-based society and meet the demands of work and life. The survey revealed significant literacy and numeracy challenges for workforce skilling in Australia. There is a raft of data from the survey<sup>1</sup>, but of significance to those of us in the construction and property services industries is that we were found to have large proportions of the workforce with literacy and numeracy skills at the lowest measurable levels.

The Construction and Property Services Industry Skills Council (CPSISC) considers literacy and numeracy skills to lie at the heart of successful learning, and indeed full participation in life and work. This integrated national workforce literacy strategy arose from the challenge facing CPSISC to address the ALLS findings.

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<sup>1</sup> Source: OECD (accessed 23.2.09)  
[http://www.oecd.org/document/2/0,3343,en\\_2649\\_39263294\\_2670850\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/2/0,3343,en_2649_39263294_2670850_1_1_1_1,00.html)

<sup>2</sup> NCVER Adult language, literacy and numeracy wiki:  
<http://www.adultliteracyresource.edu.au>

The strategy was a collaborative effort; its roots firmly based in extensive consultation and validation with key stakeholders. The initiatives in this strategy will benefit a wide range of vocational education and training stakeholders, including employers and training organisations who may need to have the benefits of literacy and numeracy training ‘sold’ to them. Its outcomes will particularly benefit reluctant or disengaged learners who have language, literacy and numeracy issues.

CPSISC acknowledges the generous support of the Department of Education, Employment and Workplace Relations (WELL program) in developing this strategy.

The active involvement of project steering committee members throughout the life of this project has meant that the strategy has a practical, industry perspective. CPSISC and the project manager, Kristen Sydney, thank the project steering committee members:

- Vince Ball, Executive Officer, Construction Industry Training Council
- Anne Duggan, representing the Construction, Forestry, Mining and Energy Union (CFMEU) and the Building Industry Consultative Council Industry Advisory Body (BICCIAB)
- Steve Endor, representing the Australian Environmental Pest Managers Association (AEPMA)
- Neil Gow, National Manager – Training Policy, Master Builders Australia
- Paul Sherry, Building and Construction, Gordon Institute of TAFE
- Paul Stalio, General Manager, International Security Training Academy (ISTA)
- David Uren, National Traineeship Manager, ISS Facility Services Aust. Ltd.

CPSISC would also like to thank the principal consultant on this project, Jana Scomazzon of LTG, whose research, consultation and development work underpin this WELL strategy.

## 1 Executive summary

This Workplace English Language and Literacy (WELL) strategy has been developed by Construction and Property Service Industry Skill Council (CPSISC) in the context of a very challenging economic environment for all industries. The financial downturn affecting economies globally is still playing out in the Australian marketplace, with few pundits able to accurately predict the future position of virtually any industry. The strategy has been developed with these challenges in mind, but also based on the best available intelligence and expert industry views that the construction and property services industries, representing as they do a workforce of approximately 1.8 million workers (full and part-time) respectively, project continued investment and growth.

Greater emphasis on language, literacy and numeracy (LLN) programs integrated with skill development to address the needs of workers with low-level or interrupted education or from non-English speaking (NESB) and migrant backgrounds was identified as a medium-term priority in CPSISC's 2008 environmental scan (E-scan). In addition, statistics had shown a quite significant percentage of construction apprenticeships were not completed (up to 50% in some jurisdictions), meaning that the number of formally recognised tradespeople will decline if apprenticeship retention is not substantially improved. While there are many likely causes for this, low LLN levels are seen to be a contributing factor.

This WELL-funded project was the first of CPSISC's planned projects aimed at meeting this E-scan priority by first researching LLN needs across its sectors and then identifying strategies to embed those skills across all its training specifications, seeking to identify and extend available and relevant tools and resources for registered training organisations.

The project was timely, reflecting as it did the aspirations of the skills and workforce development agenda of COAG's Participation and Productivity Framework. It came at a time when the construction industry had been particularly targeted for new training places in the Rudd Government's 2008–09 budget.

COAG, in late April 2009, also agreed to establish a Compact with Young Australians, anticipated to provide up to 135,000 young people with higher qualifications. These recent policy decisions are intended to put education and training front and centre to ensure Australia's future productivity. The Compact highlights the need to ensure that LLN strategies are embedded into vocational training, and so fits well with the key initiatives in this WELL strategy.

The WELL strategy will allow CPSISC to source or develop and then disseminate available LLN information and advice – focussed on the different LLN needs of its respective industry sectors – to ensure that all training participants have the LLN support required to meet course demands. LLN skill development across a range of levels will be covered; particularly high risk jobs and higher level jobs with their increased focus on communication and literacy skills (e.g. report writing, negotiation, estimating and calculating costs, reading contracts and legal documentation, etc.).

It will also provide the ISC with the opportunity to promote the use of already developed WELL resources within its proposed new e-resource centre and the financial and human resources to address the results from the Adult Literacy and Life Skills Survey (ALLS).

## 2 Defining literacy

There are as many definitions of *literacy* as there are conceptual frameworks and world views.

The Organisation for Economic Co-operation and Development (OECD) defines it as:

... a particular capacity and mode of behaviour: the ability to understand and employ printed information in daily activities, at home, at work and in the community – to achieve one's goals, and to develop one's knowledge and potential.<sup>3</sup>

The fluidity and breadth of what *workplace literacy* means was captured by Hull (1995):

To be literate in a workplace means being master of a complex set of rules and strategies which govern who uses texts, and how, and for what purpose. (To be literate is to know) ...when to speak, when to be quiet, when to write, when to reveal what was written and when and how to respond to texts already written.

The CPSISC WELL strategy is based on the premise that there is no one measure of a person's literacy or numeracy and that a person's attitudes, beliefs, culture and experience shape his or her current and future literacy; all of which may change depending on context and interaction with a range of new and emerging technologies. This interdependency fits well with the CPSISC view that literacy and numeracy skills should be viewed along a continuum, rather than at a fixed point.

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<sup>3</sup> OECD web page (accessed 23.2.09)  
[www.oecd.org/document/2/0,3343,en\\_2649\\_39263294\\_2670850\\_1\\_1\\_1\\_1,00.html](http://www.oecd.org/document/2/0,3343,en_2649_39263294_2670850_1_1_1_1,00.html)

## 3 Literacy and numeracy in Australia

### 3.1 COAG's Participation and Productivity Framework

The CPSISC WELL strategy has been designed to reflect the aspirations of the skills and workforce development agenda of COAG's Participation and Productivity Framework.

Principal targets in COAG's Policy Framework for Participation and Productivity is:

- halve the proportion of Australians ages 20-64 without qualifications at Certificate III level and above by 50% between 2009 and 2020
- double the number of higher qualification completions (diploma and advanced diploma) between 2009 and 2020.

The industry consultation implicit in the strategy initiatives will allow CPSISC to gather intelligence on effective approaches for supporting the LLN skills development required to underpin these and future COAG targets, including the recent Compact with Young Australians.

### 3.2 The Adult Literacy and Lifeskills Survey

The Adult Literacy and Lifeskills Survey (ALLS) was conducted in Australia to determine if the adult population had the literacy skills needed to participate in a knowledge-based society and meet the demands of work and life. Part of a wider international survey aimed at measuring literacy levels in a number of countries, ALLS was a large scale, cooperative effort by governments, national statistical agencies, research institutions and the OECD.

The ALLS in Australia was conducted between 2003 and 2006 and was jointly funded by the then Department of Education, Science and Training (DEST) and the Australian Bureau of Statistics (ABS), with assistance from the Department of Employment and Workplace Relations (DEWR).

In every country, nationally representative samples of adults aged between 15 and 74 were interviewed and tested at home, using the same literacy test. The main purpose of the survey was to assist in answering questions of whether Australians' literacy skills are adequate for the challenges they face in work and daily life.

Another aim was to investigate the factors that influence literacy proficiency and to compare these among countries.

### 3.2.1 ALLS findings

ALLS data revealed significant challenges for workforce skilling that will impact on participation and productivity.

While the literacy demands of work and life are increasing, 46% of the Australian adult population was found to have literacy skills below those required for participation in a knowledge-based society, and there has not been any significant improvement over the last decade.<sup>4</sup>

There is a raft of ALLS findings, but key to this strategy paper are the findings that some CPSISC industries have large proportions of their workforce with literacy and numeracy skills at levels 1 and 2 (below level 3 was described as the ‘minimum required for individuals to meet the complex demands of everyday life and work in the emerging knowledge-based economy’).

The ALLS results<sup>5</sup> were reported in five levels<sup>6</sup> across four domains: a prose, a document, a problem solving and a numeracy scale. A fifth domain measuring health literacy was produced in the ALLS as a by-product of the above domains. ALLS levels 4 and 5 are the highest; levels 1 and 2 are considered to present significant challenges in daily work and life.

While the ALLS findings are extensive in quantity and complex in nature, the following ‘snapshots’ are indicative of findings. It is worth noting that due to ALLS sampling methodology, data specific to property services is not available.

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<sup>4</sup> *Implications of the ALLS findings for workforce skilling*, ISC Workplace Communication Network’s response paper to DEEWR

<sup>5</sup> *Adult Literacy and Life Skills Survey, Australia* ABS (cat. no. 4228.0) (2007)

<sup>6</sup> These levels do not correlate to Australian Core Skills Framework (formerly NRS) levels

- Construction industry workers have lower overall prose literacy<sup>7</sup> levels than any other industry (Figure 1)

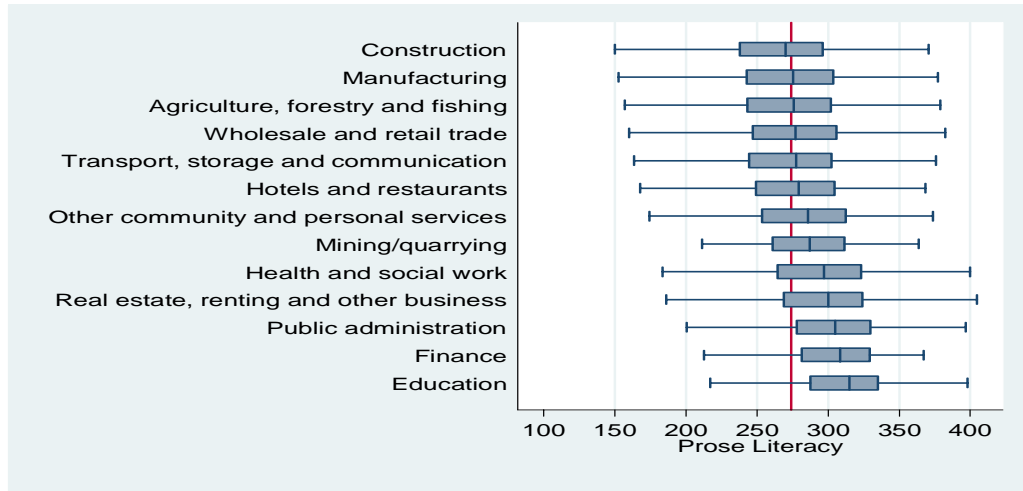


Figure 1: Prose literacy by industry

- Construction industry workers have a greater proportion of workers than any other industry with prose literacy at low levels considered 'at risk' (Figure 2)

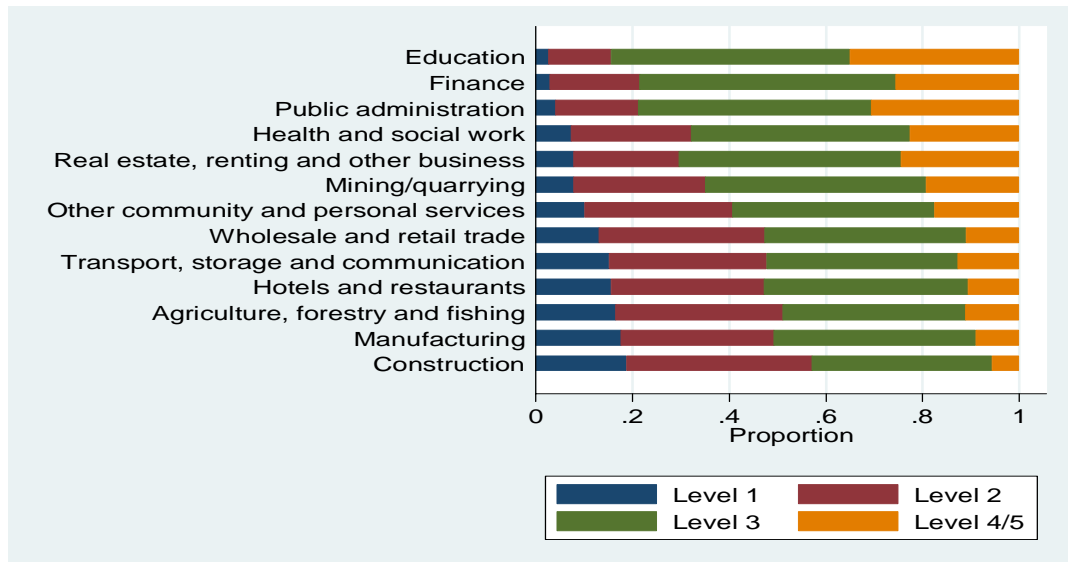


Figure 2: Prose literacy levels by industry

<sup>7</sup> Prose literacy was seen as the ability to understand and use information from various kinds of narrative texts, including texts from newspapers, magazines and brochures.

- The upper limit of numeracy levels in the construction industry was lower than in any other industry (Figure 3)

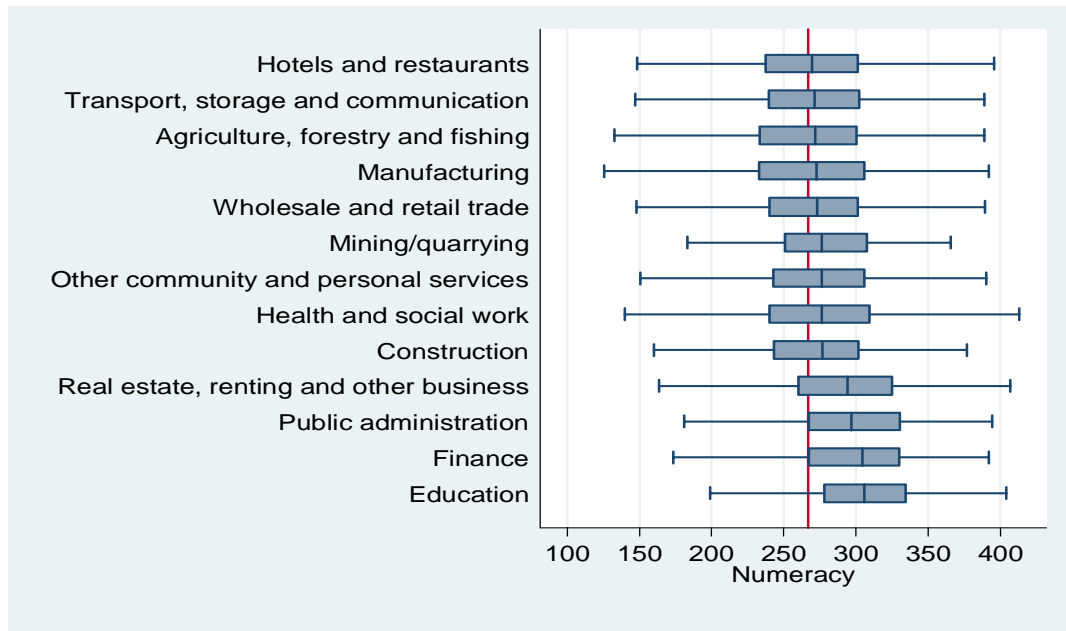


Figure 3: Numeracy levels by industry

- Of those Australian born respondents in the survey, those in construction have the lowest level of prose literacy than in any other industry (Figure 4)

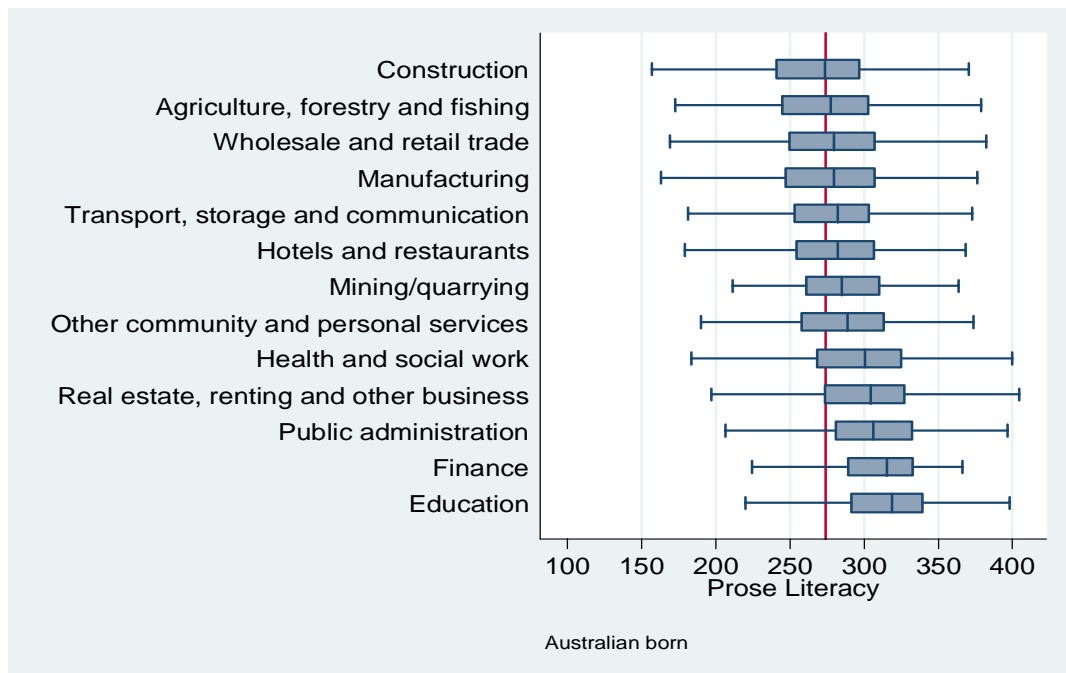


Figure 4: Prose literacy by industry and birthplace (Australian born)

- Overseas born construction workers have a comparably higher level of prose literacy in respect to some other industries (Figure 5)

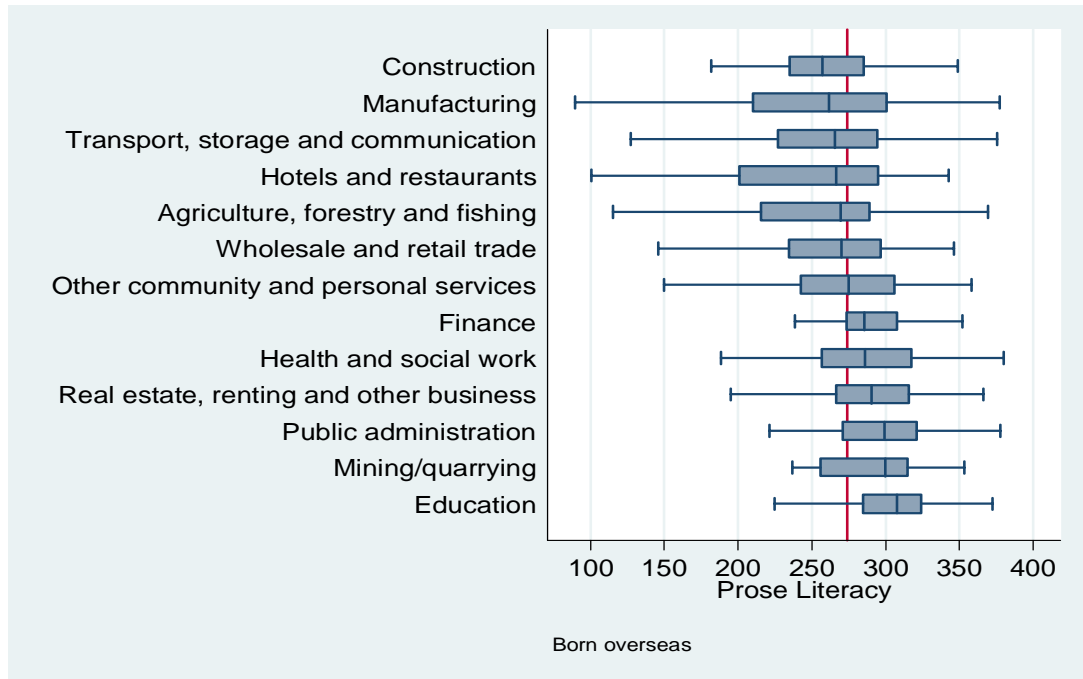


Figure 5: Prose literacy by industry and birthplace (overseas born)

## 4 Literacy in our industries

"We often bluff it at work, or ask mates. We don't judge each other in this industry, because we all are in the same boat — most of us left school early."

*(Construction worker talking with researcher about literacy and numeracy, and his experience in going back to training, August 2008)*

The construction, plumbing and property services workforce profile is culturally and linguistically diverse, with high LLN need; consisting of workers for whom English is not their first language, early school leavers, and long-term workers in jobs that in the past have not required much, if any, higher order language and literacy capability.

In construction, this cohort is predominantly male subcontracting micro businesses with trade-qualified owner-operators in such areas as carpentry, joinery, bricklaying, roof tiling and plumbing. In property services, the security and cleaning cohort often lack trade qualifications and the language skills to obtain them.

Evidence shows that while a significant number of apprentices do not complete their training, many do continue to work in the industry. While many factors contribute to this phenomenon, CPSISC research and consultation with employers and registered training organisations (RTOs) during this project and CPSISC's Training Package review process, have indicated that literacy and numeracy issues are a significant impediment to training commencement and completion. Literacy and numeracy are frequently identified as the disincentive for these workers to undertake and complete training, which in turn limits the ability to meet demand for required services and infrastructure.

Additionally, consistent and widespread feedback indicates that:

- there are basic literacy and numeracy issues affecting entry-level trainees and employees from performing simple calculations and estimations (e.g. as seen in the need to calculate construction material quantities)
- there are also basic literacy and numeracy issues for long-term workers with workplace-specific tasks in areas such as commercial cleaning and security
- there are basic literacy and numeracy issues for current workers in the construction and a range of property services sectors, notably security, attempting to meet the rising reporting obligations associated with increasing compliance requirements of agencies, such as building regulators, environmental protection and sustainability, consumer affairs and fair trading

- basic literacy and numeracy issues are also impacting on the ability of existing skilled workers to progress to form their current roles of tradespeople or other operatives to supervisory roles due to their inability to comprehend and process the documentation associated with these types of roles
- the literacy and numeracy issues of Indigenous learners, often in remote locations, are significant impediments to participation in training and would benefit from funding to enable the development of targeted delivery methodology and supporting resources to suit the learner cohort, accessibility issues and the learning environment
- workers who have left school early or whose backgrounds are culturally and linguistically diverse (CALD) are experiencing language problems
- small business owner-operators are reporting difficulty in meeting compliance requirements in such matters as OHS, insurance, legislation and accreditation
- LLN is a significant factor impeding workers keeping up to date with ICT skills; a particular pressure with small business owner-operators.

## 4.1 Sector-specific LLN issues

### Construction and plumbing sector

The construction industry covers high LLN need occupations associated with residential and commercial building, plumbing, and support services such as surveying, building planning and aspects of design.

#### Construction workers and oral communication

Oral communication was identified frequently as an issue in the construction industry<sup>8</sup>.

"Spoken language is the most notable issue (with literacy and numeracy). A lot of this industry is a speaking industry - finding out information other than reading. Most workers don't find out what to do from safety plans - they hear about it at toolbox meetings. So they need to be able to express themselves coherently, but they're not good communicators - at work or at home."

*(Large employer round 2 survey ID#DB)*

<sup>8</sup> Where 'construction' includes plumbing workers.

## Construction workers and numeracy

Numeracy was also frequently reported as a significant issue for construction workers.

"A large percentage struggle with their level of numeracy. For example, sole operators have to be able to do estimating. They've got a trade background, been in the industry for at least 3 or 4 years, and they're out there and able to operate on the ground with stuff like measuring, but when it comes to things like estimating where they have to read to plans — they can't. They can't work from the plan and then do the estimates to get a good figure."

*(Private RTO round 2 survey ID#R64)*

## Construction workers and computer literacy

"Our literacy issues are mainly around computer literacy and the older generation, particularly small business owners who have 'lost the plot' and don't have the confidence to deal with computers. They left school early and work things out on the back of a cigarette packet and have never much gone past that. This holds their business back tremendously. And it holds the industry back because they don't want to take on an apprentice because of the literacy demands in that. So they're not passing on the trade skills. How do you take their fear of training — their fear of the unknown — away? They're often the same people who need the training the most."

*(Industry round 2 survey ID#I91)*

The plumbing and services workforce undertakes a wide range of plumbing activities from water and sanitary work, drainage, roof plumbing and mechanical services for air conditioning, through to gasfitting, fire services installation and maintenance. Plumbing occupations are experiencing skill shortages in most specialist areas, as well as general plumbing. There are possibly sufficient interested prospective recruits but take-up is limited by employer preparedness to indenture apprentices in some regions.

It is known that plumbing occupations are experiencing skill shortages in most specialist areas, as well as general plumbing. In addition, the skill and knowledge requirements for plumbing trades are quite demanding and young people with low literacy and numeracy abilities are unlikely to be able to meet the training outcomes required without significant intervention.

Most require adaptations and extensions to existing general plumbing skills to cater for the use of new technologies. There is an industry imperative to respond to increasing expectations of governments and the community regarding water and energy savings and the plumbing industry's skills capacity to meet that expectation. While employers can usually attract suitable apprenticeship candidates from pools of applicants, the work requires reading comprehension skills to develop and maintain knowledge around such things as product manuals and industry standards and codes, as well as mathematical skills that can test some school leavers without good numeracy skills. Plumbers must also have the written skills to ensure they meet regulatory reporting requirements. For this reason, some training organisations are screening prospective learners in plumbing courses to determine if they have the perceived necessary language skills.

### Plumbers and reading

"Plumbers have to be able to read a manual, standards and codes. But they have difficulty with that. It stems back to them not being able to comprehend what they're reading and interpret what it means. Every day they have to deal with rules, so it's a big problem."

*(Industry round 2 survey ID#163)*

### Property development, sales and management sector

The biggest impact on the property development, sales and management industry is technology, already showing up in real estate and property management services, where one third of agents see technology use as their top business priority. Buyers increasingly seek comprehensive data and virtual tours of properties to browse through online before even approaching an agency with an inquiry. The real estate workforce therefore needs to develop skills in the technological opportunities available and take advantage of e-alerts, SMS alerts, video tours, blogs, webinars, podcasts and other new opportunities that arise for reaching their clientele in innovative ways. This means a large cohort of workers in the property services sectors who are early school leavers, mature age return to workforce or with limited and interrupted education, may fail to thrive because of language, literacy and numeracy difficulties. The CPSISC WELL strategy will seek to address barriers to these workers coping with the demands of changing technologies and shifting from paper-based communication and reporting to computer-based.

## Spatial information sector

Spatial information can be used for planning and implementing the efficient administration and development of natural and built resources and has extensive application in emergency management. Spatial information services is a sector with a growing numeracy skills gap with geographic information system operators and technicians operating in a wide variety of skill levels from Certificate II up. Spatial information workers rely heavily on the application of computer technologies applied to geospatial data underpinned by mathematical understanding.

## Property services sector

### Asset maintenance

Asset maintenance is a high LLN need area in the property services sector, covering occupations in general residential and commercial cleaning; specialist carpet cleaning; installing, inspecting and maintaining fire protection equipment and fire safety systems; as well as pest management and waste management services. In these areas, the language and literacy limitations of workers or prospective recruits need to be dealt with through training, given the safety issues affecting many aspects of the work.

In the cleaning, pest and waste management sectors language and literacy limitations of workers or prospective recruits arise and need to be dealt with through training, given the safety issues affecting many aspects of the work; with understanding of OHS requirements essential in the use and disposal of chemicals, application of OHS processes and procedures.

"We did a training program for ten African women. They had a strong work ethic, but sub-standard literacy skills. Risk was the real concern – if they go to clean a building and there's a note in the communication book 'Don't touch the power point in the CEO's office because it's faulty' and they don't have the reading skills to understand the message, there can be trouble."

*(Private RTO round 2 survey ID#R89)*

These occupations are also characterised by increased use of mechanisation and IT with associated greater sophistication of process plant and operator skills.

## Security

Another high LLN need area is the security sector of property services, covering security operations (such as guarding, crowd control, control room operations and dog handling), investigative services as well as higher level security and risk management services. Technical security occupations, the fastest growing occupations in this sector, include those who install electronic alarm systems and provide security monitoring services.

Targeted LLN support is critical to security sector personnel working in high risk situations to enable them to meet industry and regulator compliance requirements and upgrade their skills. Communication and negotiation skills are essential to licensed security guards, particularly those carrying firearms, as is their knowledge and understanding of OHS and legislative requirements. This LLN support would target training provision for the guarding and crowd control sector of the industry to cater for large numbers of new entrants.

Guarding is the area with highest employment numbers, and airport security is one high-growth area where skill demands will continue in the medium term. LLN is a major issue with security regulators and some STAs with regard to security recruitment and training.

### Security workers and oral communication

The oral communication required of security guards to meet customer service requirements and to make themselves understood over two-way radios was frequently raised as a significant issue during project consultation within the security sector; compounded by the sometimes stressful conditions in which they're communicating.

"At the moment we're getting a lot of English as a second language applicants. The issue for us is their spoken English is not too bad, written English is poor. Much communication is over the radio. In a stress situation with offenders, their English gets worse. Then they have to report on it and their written English skills are very poor."

*(Large security employer round 2 survey ID#197)*

## Security workers and written reporting

Poor written skills were also frequently reported, which because of the need to compile incident reports, impacts on employers.

"Security workers often have low reading and writing skills, which don't get developed at home or at work. Their spelling is atrocious and their computer skills are still extremely poor. From the security perspective, where 90% of the work is compiling reports ... detailing full descriptions of incidents, this has a huge impact both from the perspective of insurance and from being able to allocate the staff you need, based on the incidents that are reported."

*(Employer round 2 survey ID#18)*

While solutions, such as 'buddying', are used where possible (pairing workers with poor writing skills with a native speaker transcribes the incident where necessary for his NESB partner), they are neither long-term nor time-efficient.

## 5 A strategy for communicating well

### 5.1 Aim

The CPSISC national workforce literacy (WELL) strategy aims to support construction and property services workers in developing a range of literacy and numeracy skills to participate fully and freely in work and life, using a range of new and evolving technologies that reflect the workers' culturally and linguistically diverse backgrounds.

### 5.2 Target group

The ALLS survey showed that no one characteristic defines people with lower level literacy or numeracy skills. Additionally, most people are not good at judging their own skill levels. The survey found that more than two million Australians who rated their English reading skills as 'excellent', in fact had literacy skills below level 3. *Core Skills for Business (2008)*

CPSISC believes that all members of the construction and property services industries will benefit from addressing literacy and numeracy: Australian born or from a non-English speaking background; new recruits, existing workers, job-seekers, employers and training providers.

### 5.3 Strategy framework

The framework of CPSISC’s national workforce literacy strategy is represented in Figure 6 below.

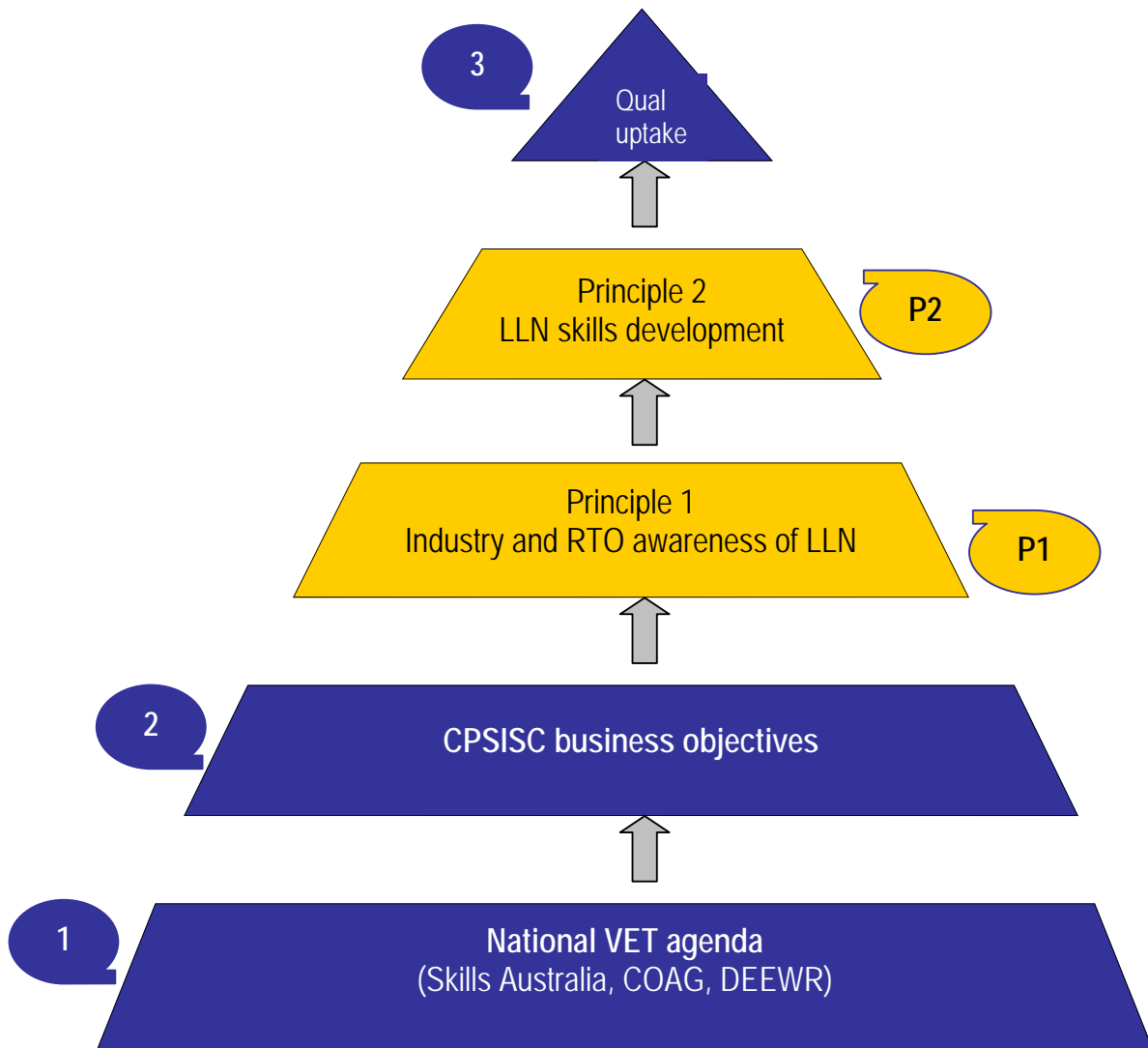


Figure 6: CPSISC’s WELL strategy framework

## 1 National VET agenda

The WELL strategy comes at a time when the construction industry has been particularly targeted for new training places in the Rudd Government's 2008–09 budget.

It reflects the aspirations of the national VET agenda, including the skills and workforce development agenda of COAG's Participation and Productivity Framework, which has as targets to:

- halve the proportion of Australians ages 20-64 without qualifications at Certificate III level and above by 50% between 2009 and 2020
- double the number of higher qualification completions (diploma and advanced diploma) between 2009 and 2020.

## 2 CPSISC business objectives

CPSISC plans to integrate LLN skills development into its overall business strategies, with a planned series of LLN professional development sessions for state-based CPSISC skills development coordinators, providing the ISC with the opportunity to develop internal capability around LLN to ensure that literacy and numeracy support is built into the government's *Skilling Australia for the Future* policy, the Productivity Places Program (PPP).

CPSISC will also ensure that LLN is built into its *Training Package Implementation Strategy*. Website development work underway, including the ISC's new e-resource centre, will include a range of LLN information and WELL resources.

In addition, the ISC will continue to ensure that LLN is built into the development and review process for its suite of Training Packages.

## **P** Principles of CPSISC's national workforce literacy strategy

The two foundation principles of CPSISC's WELL strategy acknowledge the critical role that qualifications play in ensuring that industry meets licensing and regulatory requirements. These foundation principles are:

- 1 That raising stakeholders' awareness of LLN issues will increase the likelihood that they address them.
- 2 That the skill development of workers in construction and property services will be enhanced if LLN are centrally positioned in training and development programs.

### **P1** Raise stakeholder awareness so that LLN issues are addressed in training programs

The consultation undertaken in this project revealed that:

- construction and property services employers often do not identify LLN as an issue to be addressed by the RTOs they use
- RTO trainers and assessors have variable skills in identifying and catering for learners with LLN issues.

While the benefits of investing in adult literacy and numeracy skills are largely under-researched, studies that have examined the costs and benefit of adult learning in general “point to the importance of taking into account factors such as age and gender; collective as well as individual benefits; the ‘sustaining’ benefits of learning that enable people to continue or improve what they do in their communities; and the more recognisable ‘transforming’ benefits, such as increased employability.” (Hartley and Horne, 2006)

For the construction and property services industries, improved learning outcomes as a result of addressing LLN provides tangible benefits: notably safer work practices. Risk – to workers and the public – is a constant and often significant concern in many of these industries' occupations (e.g. rigging and dogging) and jobs (e.g. scaffolding); and compliance with the associated safety requirements, often represented by regulations and licensing, brings its own inherent, often complex LLN demands.

So apart from broadening the available career paths for workers and increasing staff retention and productivity, improving workers' literacy and numeracy skills also improves safety and compliance.

Strategies to address this principle are detailed in Section 5.4 of this paper.

## P2 Enhance workers' skill development by building LLN into training implementation

The concept of building LLN into Training Packages is not new. As far back as the 1990s, there was growing recognition that LLN skills underlie all areas of work, to greater or lesser extents.

The '*built in not bolted on*' approach<sup>9</sup>, well-known within the VET literacy field, was first proposed by the now defunct Australian National Training Authority in 1998 as part of its *Workplace Communication in Training Packages* project. It promoted the integration of adult literacy and numeracy practice into real-life situations that relate to everyday needs and resulted in LLN being incorporated into Training Package development, delivery and assessment.

The approach has since been revised but its principal aim remains the same. Namely, to ensure that language, literacy and numeracy are incorporated into Training Package development, delivery and assessment.

The series of quality assurance processes, including access and equity reviews and employability skills summaries for qualifications, are either a direct or indirect result of this policy and ensure that LLN skills are well represented in units of competency. Much of this is linked to the Australian Core Skills Framework (formerly the National Reporting System), a nationally recognised resource that provides a tool for identifying LLN competencies in workplace tasks.

While AQTF 2007 standards continue to ensure that LLN are integral to Training Package development and implementation, LLN-sensitive training and assessment strategies are not always evident.

Strategies to address this principle are detailed in Section 5.4 of this paper.

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<sup>9</sup> *Built in not bolted on* may be downloaded at [http://www.dest.gov.au/sectors/training\\_skills/publications\\_resources/profiles/anta/profile/built\\_in\\_not\\_bolted\\_on.htm](http://www.dest.gov.au/sectors/training_skills/publications_resources/profiles/anta/profile/built_in_not_bolted_on.htm)

## 3

### More construction and property services workers enrolling in and completing a range of qualifications

Apart from the sustaining and transforming benefits of improved literacy and numeracy<sup>ii</sup>, building these skills can also significantly impact on productivity and growth.

We do know that raising a country's adult literacy by just 1% leads to a rise in productivity of 2.5% and a 1.5% increase in GDP. (Statistics Canada, 2004)

The CPSISC WELL strategy reflects the aspirations of the national VET agenda.

By raising stakeholder awareness of the central role LLN issues occupies in training programs and enhancing workers' LLN skill development, CPSISC aims to:

- improve training completion rates and increase the number of construction and property services workers enrolling in a range of qualifications, including higher level qualifications
- promote the integration of LLN skill development in vocational programs to address the needs of workers with low-level or interrupted education or from non-English speaking and migrant backgrounds
- support individual sectors in addressing sector-specific LLN issues and embedding strategies to address those issues in training specifications.

The national approach that CPSISC details in this paper is strategic, integrated and holistic. Its objectives include:

- building employers' LLN knowledge base
- increasing employers' access to LLN support in training and associated WELL funding
- providing professional development to build the capacity of its own staff and of training providers to address the needs of a culturally and linguistically diverse learner cohort
- disseminating information and advice regarding LLN
- identifying and extending available and relevant sector-specific LLN tools and resources for registered training organisations.

## 5.4 Proposed strategy initiatives

This CPSISC WELL strategy consists of an integrated suite of key initiatives based on the strategy's two foundation principles:

- P1 Raise stakeholder awareness so that LLN issues are addressed in training programs
- P2 Enhance workers' skill development by building LLN into training implementation

Each initiative is the result of broad industry consultation and has associated objectives and proposed outcomes.

An overview of the initiatives may be found in Table 1 on page 37.

### P1 Raise stakeholder awareness so that LLN issues are addressed in training programs

Research to date, supported by industry feedback from the consultation conducted over the past twelve months, has indicated that there is a demonstrated need to strategically promote the advantages of addressing LLN.

Our staff are from the lower end threshold of people coming into the workforce and they have poor literacy skills.

When you recruit, you need 10 staff and you only have 9 people applying, you're in a delicate position. What do you do? You look at their ability to perform the role, and if they can (*perform the role*) you take them, because you can always skill up a person.

We assume that the people we put through courses like first aid have the literacy and numeracy skills. We're surprised when we find that our staff don't have these skills and that they can't do the courses. We ask ourselves 'What are they taking in (*absorbing*) in the course?'

*(Large property services employer, round 2 survey ID#18)*

The extract above from an interview with a section manager of a large employer conveys the complex mix of issues facing the construction and property services industries: labour shortages, low status positions, poor literacy and numeracy skills and employers who, while supporting the concept of staff training, may not be aware of the range of LLN issues to consider when commissioning a training provider in order to facilitate a successful training outcome.

Issues like:

- Which learners might need LLN support during the training or on the job
- What difficulties the learners might have with the training
- How an RTO can (and should) help with learners' LLN issues
- What the employer could do when employees are having trouble with literacy and numeracy-related things (like maths or filling out reports).

There appears to be not just a need to promote to industry the advantages of addressing LLN issues, but also to promote the benefits and ways of involving RTOs in a partnership arrangement to do so.

The online survey in the preliminary stage of this project showed that of those employer respondents engaged in workplace training with an ongoing relationship with a training provider, only just over half had discussed LLN issues specific to their organisation's needs with the training provider.<sup>10</sup>

Raising employer awareness of the advantages of addressing LLN issues and the benefits and ways of involving RTOs in a partnership arrangement to do so, is critical.

The proposed initiatives addressing this principle are outlined below.

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<sup>10</sup> This figure was also indicative of all respondents, regardless of whether they had a relationship with a training provider or not.

## Initiative 1: Build employer LLN knowledge base

Project consultation showed that while many employers in construction and property services are aware of the need to address LLN, they would welcome further information and resources to assist them to do so, including information on WELL and other sources of funding.

This reflects the findings of a recent study by the National Centre for Vocational Education and Research (NCVER):

.... Some employers accept that it is both necessary and the employer's responsibility to provide learning and development opportunities for these [literacy, numeracy and employability skills] skills. However, employers are looking for support in doing this. The challenge for training organisations is in building capability and capacity to support this effort. Successful development strategies in the workplace tended to be part of the normal cycles of skills training and continuous improvement. (*Townsend and Waterhouse, 2008*)

### Objective

Raise employer awareness of:

- 1 the benefits of addressing LLN issues
- 2 how to identify workers with LLN issues
- 3 the range of literacy skills that workers can have.

CPSISC will employ a number of means to address this objective, including communicating via its website and state-based skills development officers, as well as targeted communication through its project database.

### Outcomes

Employer-targeted material to raise awareness and promote the advantages of addressing LLN issues, including:

- LLN 'what to look for' bulletins, promoting the provision of effective support and skill development for existing workers with LLN needs
- case studies highlighting where employers have successfully identified and addressed LLN needs.

## Initiative 2: Increase employer access to LLN support in training

Literacy and numeracy are considered to be significant issues in the construction and property services industries, yet employer access to the LLN support that training organisations can provide could be improved. As could employer awareness of WELL funding availability for apprentices and trainees, and available adult basic education courses that could be integrated into induction training.

Effective partnerships have been found to be a principal determinant in successful training outcomes. Particular attention will be focussed on partnering arrangements with community LLN providers in geographically isolated areas, to address the needs of those learners.

Industry associations and state bodies represent effective LLN support mechanisms in this regard.

### Objectives

Raise employer awareness of ways of involving RTOs in partnership arrangements to address workplace training needs, particularly focussing on LLN and different funding models.

Liaise with training providers to:

- develop case studies highlighting effective partnerships between employers and RTOs to address LLN
- provide industry-specific, purpose-built LLN bulletins that industry associations can distribute to their networks on a range of LLN advice, events and information.

### Outcomes

Increased partnerships between RTOs and employers

Enhanced industry connections with RTOs (e.g. communities of practice, etc.)

### Initiative 3: Facilitate access to WELL funding

The main aim of the WELL program is to assist organisations to train workers in English language, literacy and numeracy skills. Funding is available through this program for enterprises to partner with a registered training organisation offering specialist LLN services in order to develop custom-made training solutions.

Work-based trainers and assessors may not have any funded LLN assistance available. Often partnerships with other training organisations can be forged to provide such services.

The WELL funding is available on a competitive grants basis to organisations for English language and literacy training linked to job-related workplace training and is designed to help workers meet their current and future employment and training needs.

WELL resource funding is also available for the development and trialling of:

- training materials designed to enhance LLN skills that are aligned with endorsed Training Packages
- industry relevant LLN assessment and reporting methods
- professional development resources for industry trainers/assessors aligned with Training Packages.

A significant 63% of CPSISC survey respondents were not aware of the services and products offered by the WELL program.

#### Objective

Promote WELL to CPSISC stakeholders to:

- increase industry awareness of WELL funding, its purpose and requirements
- develop pilot models of training best practice
- provide information on and assistance in accessing the funding.

#### Outcome

Increased WELL funding uptake.

## P2 Enhance workers' skill development by building LLN into training implementation

The two main outcomes of this principle are working towards improving:

- completion rates
- access to higher level qualifications.

### Improving completion rates

"One of the major barriers [to people enrolling in accredited courses] is the perception that they'll have to read a lot of texts or learning guides. I know of people who DO enrol, are given a learning guide or a pile of reading in their first session, and are so put off that they don't come back."

*(Public RTO round 2 survey ID#R24)*

Compounding this barrier is that it is well known that workers can be reluctant to access literacy and numeracy support in training; embarrassment, fear of reprisal or reluctance to seek (learner) or be given (employer) time release from work factor large in this.

Removing the 'low literacy' stigma associated with LLN issues would be of obvious benefit; as would emphasising the vocational outcomes of integrated literacy programs as the reason for building LLN skills.<sup>11</sup>

### Improving access to higher level qualifications

"There's quite a jump from most Certificate IVs to Diplomas. Learners would need to have a reasonable level of literacy to operate at say the Diploma level. You would have to bring their literacy levels up to that level to get them to undertake a Diploma qual. You could give more time and focus to the LLN — couch it in industry qualifications — but the problem is that industry and employers aren't prepared to invest in the time that that would take."

*(Private RTO round 2 survey ID#R158)*

The proposed initiatives addressing this principle are outlined below.

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<sup>11</sup> CPSISC would like to acknowledge the work of the *ISC Workplace Communication Network*, a national WELL-funded network (of which CPSISC is a member), and particularly the network response paper to DEEWR on the ALLS data (to which CPSISC contributed), in informing this strategy.

## Initiative 4: Undertake LLN advisory role

The research and consultation undertaken in the second stage of this project identified an enthusiastic response to the ISC providing an LLN advisory role to employers and RTOs. Given the profile of learners in these sectors, we need fresh approaches to improving completion rates and promoting higher level training.

The proposed LLN advisory role would allow the ISC to assist employers to look at LLN skills identified in their training needs analysis and develop a training plan based on those needs. The ISC could, at the same time, continue to promote effective approaches to LLN skill development.

In research into higher-level VET qualifications, Foster et al. (2008) made the point that the situation regarding qualifications is industry-dependent; that ‘the value and role of these [higher level] qualifications differs (sic) across sectors studied.’ Engineering and electronics/electro-technology employers, for example, were found to value a relevant qualification together with workplace experience; preferring people with a degree or a trade background for associate professional jobs. Despite government policies supporting the uptake of these qualification levels, growth in these occupations is not matched by growth in participation in higher-level VET qualifications.

While this trend is consistent with the observed decline in enrolments in higher-level VET qualifications in recent years<sup>12</sup>, it is worth noting within this context anecdotal evidence from the round 2 interviews conducted to inform this developing WELL strategy: neither are construction and property services employers driving a demand for higher level qualifications.

In terms of assisting learners in the construction and property services industries to achieve higher level qualifications, the barriers relate to attitudes as well as to skills. Attitudinal, because many workers in our industries bring with them entrenched negative views of both themselves as learners, and the ability of learning environments to successfully meet their learning needs. The skill barriers are often low levels of literacy and numeracy attributable to a range of factors, including unsuccessful, low level or interrupted secondary education.

“Higher quals are needed, but many people have no interest in doing them. They don’t want to go back into a learning environment that they struggled with and didn’t enjoy, so online resources give them the chance to work through things at their own pace, and without feeling stupid.”

*(Private RTO, round 2 survey ID#R57)*

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<sup>12</sup> Refer figures cited in Karmel, T 2008 What has been happening to vocational education and training diplomas and advanced diplomas? NCVET, Adelaide

The effectiveness of online resources when dealing with learners who may have issues around self esteem and embarrassment at their LLN levels, was a common theme emerging from consultation. However an online learning environment may pose other issues for an older cohort of learners, who may lack or feel intimidated by the technical skills or resources required.

Research found that training organisations using online resources effectively, did so when their trainers provided additional learning support when needed, which raises a raft of funding issues.

### Objectives

Assist employers with training needs analyses and training plans.

Provide information on:

- useful resources and their application
- resource 'gaps' and resource development opportunities
- funding opportunities.

Promote the benefits and means of workers completing higher-level qualifications.

Promote the benefits to RTO business managers of assisting employers to access WELL-funded training.

### Outcomes

Dissemination of LLN and WELL information relevant to the construction and property services industries.

Ensuring that LLN needs are covered in training needs analyses.

## Initiative 5: Provide PD on LLN

LLN issues in VET are by now well recognised. Eighty-two per cent of industry respondents to the CPSISC round 1 survey reported that they were aware of LLN issues to do with employment or training in their sector.

For those working in the literacy field in VET, trainers and assessors responding to the LLN issue are often heard to say ‘learners should be able to spell and write before they come to us’ or ‘schools aren’t doing their job’.

*"I think that it is an absolute disgrace that we have to try and fix the problems that qualified educators and schools have created, or have neglected to do in their roles of educating young people."*

*(RTO round 1 survey ID#36)*

Obviously one can sympathise with this view, however when considering the skills and labour shortages that Australia faces, continuing to view literacy and numeracy issues from within this blame paradigm is not productive. It would appear more effective to approach LLN skill building from a strengths-based approach where trainers and assessors build literacy and numeracy from within a paradigm where the focus is on the broader skills that the learners have, rather on the LLN skills they don't have.

Trainers and assessors are aware of the challenges that literacy and numeracy pose. While literacy specialist support is often available, survey results showed that most RTO respondents (88%) would access professional development around literacy and numeracy if it were available.

*"There is often a difference in having staff with LLN experience and the broader vocational departments using them to assist students with LLN issues."*

*(RTO round 1 survey ID#13)*

Improving trainer and assessor ability to develop training and assessment practices that incorporate best practice approaches to literacy and numeracy in an integrated vocational learning environment will benefit all learners and is a major focus of the professional development proposed as part of this initiative.

## Objectives

It is generally recognised that the most effective way of addressing LLN in VET training is to have the literacy specialist working with the vocational trainer with the learners (e.g. CAVSS WA model).

*"You need a multi-pronged approach if you're going to help learners with literacy and numeracy issues to complete courses. So, more discussion of theory, than relying on them to read texts. If reading requires complex reading (e.g. MSDS), give them strategies on how to do it."*

*(RTO round 2 survey ID#24)*

CPSISC proposes to offer a series of professional development (PD) activities for:

- 1 Vocational and literacy practitioners: PD around good practice LLN teaching and assessing, including suitable available resources, and associated access and equity issues; PD that would upskill them in the area of LLN and also serve to establish and extend networks.
- 2 CPSISC state-based skills coordinators: identifying and integrating LLN into construction and property services training, so that in workforce development activities may also focus on facilitating partnerships with VET providers, industry enterprises and unions.

The objectives of the PD are to:

- provide professional development around integrated delivery and assessment strategies
- strategically promote a strengths-based approach to building literacy and numeracy so that members of the VET sector collectively assume responsibility for integrated literacy and numeracy skill building, rather than blaming the secondary sector for not delivering work-ready employees/learners or wanting to exclude learners with LLN issues through pre-induction screening
- assist in identifying the LLN demands in training specifications and providing equitable yet compliant assessment practices
- highlight industry and learner profiles and examples of good practice
- promote take-up of the TAA literacy elective unit of competency (TAALLN401B)
- promote existing useful resources.

## Outcomes

- 1 Options paper to use as the basis of consultation with RTOs delivering CPSISC qualifications or units aimed at:
  - examining ways that RTOs position themselves to meet the future demands of clients with LLN issues and improving LLN focus
  - canvassing RTO views on opportunities for ‘LLN-friendly’ assessment approaches within a compliance-focussed system.
- 2 Support training providers with the integration of literacy and vocational skill development through the provision of professional development (PD) for vocational and literacy practitioners that builds their capacity to make training and assessment more accessible to all learners, including those from identified groups at ‘LLN-risk’. This would involve:
  - providing professional development for vocational and literacy practitioners
  - promoting examples of good practice
  - promoting take-up of the elective literacy unit in TAA04
  - ensuring literacy continues to be built into Training Packages
- 3 Support CPSISC state-based skills coordinators to build LLN into workforce development activities.

## Initiative 6: Develop and promote sector-specific LLN resources

The many purpose-built resources addressing LLN needs are an effective means of addressing LLN issues. While understandably enterprises often opt for developing enterprise-specific resources that address their specific workplace processes and procedures, there is a raft of general material that could be customised or updated.

CPSISC is in the process of developing an industry-wide online resource bank. LLN resources will complement this resource centre and serve as a useful central repository for them. It should be noted however, that CPSISC is mindful that the suite of resources needs to reflect a broad delivery methodology so as not to disadvantage those learners who may not access online material (e.g. remote, Indigenous and older learners).

Project survey results showed that 36% of training organisations and 20% of industry respondents would be prepared to share resources. Where possible, such resources will be added to CPSISC's site. This resource sharing would have the secondary advantage of developing informal networks that could possibly lead to further information sharing around LLN.

### Objectives

Ongoing extension and dissemination of the CPSISC LLN Resource Evaluation Matrix.

Ongoing identification of suitable available resources, including identifying:

- gaps in resources
- flexible and innovative resources, responding to particular learner group needs (e.g. Indigenous).

### Outcome

Sectors aware of available relevant resources, matched to sector-specific needs (e.g. the recently released WELL security PD resource *A question of literacy*).

## 5.5 Strategy overview

An outline of the various initiatives that form the basis of the CPSISC WELL strategy may be found in Table 1 below.

CPSISC WELL strategy overview		
Foundation principle 1: Raise stakeholder awareness so that LLN issues are addressed in training programs		
Initiative	Objectives	Outcomes
1 Build employer LLN knowledge base	Raise employer awareness of: <ul style="list-style-type: none"> <li>the benefits of addressing LLN issues</li> <li>how to identify workers with LLN issues</li> <li>the range of literacy skills that workers can have.</li> </ul>	Employer-targeted LLN material, including: <ul style="list-style-type: none"> <li>LLN 'what to look for' bulletins, promoting the provision of effective support and skill development for existing workers with LLN needs</li> <li>case studies highlighting where employers have successfully identified and addressed LLN needs and using WELL funding.</li> </ul>
2 Increase employer access to LLN support in training	Raise employer awareness of ways of involving RTOs in partnership arrangements. Liaise with training providers to: <ul style="list-style-type: none"> <li>develop case studies highlighting effective partnerships between employers and RTOs to address LLN</li> <li>provide industry-specific, purpose-built LLN bulletins that industry associations can distribute to their networks.</li> </ul>	Increased partnerships between RTOs and employers Enhanced industry connections with RTOs.
3 Facilitate access to WELL funding	Promote WELL to CPSISC stakeholders.	Increased WELL funding uptake.

CPSISC WELL strategy overview		
Foundation principle 2: Enhance workers' skill development by building LLN into training implementation		
Initiative	Objectives	Outcomes
4 Undertake LLN advisory role	<p>Assist employers with training needs analyses and training plans.</p> <p>Provide LLN resource information.</p> <p>Promote the benefits and means of workers completing higher-level qualifications.</p> <p>Promote the benefits to RTO business managers of assisting employers to access WELL-funded training.</p>	<p>Dissemination of LLN and WELL information relevant to the construction and property services industries.</p> <p>LLN needs covered in training needs analyses.</p>
5 Provide LLN PD	<p>LLN PD program for trainers, assessors and CPSISC staff.</p>	<p>Options paper to use as the basis of consultation with RTOs delivering CPSISC qualifications or units.</p> <p>Integration of literacy and vocational skill development while building trainers and assessors' capacity to make training and assessment more accessible to all learners.</p> <p>Building of LLN into CPSISC workforce development activities.</p>
6 Develop and promote sector-specific LLN resources	<p>Ongoing extension and dissemination of the CPSISC LLN Resource Evaluation Matrix.</p> <p>Ongoing identification of suitable available resources, including identifying gaps in resources.</p>	<p>Sectors aware of available relevant resources, matched to sector-specific needs (e.g. the recently released WELL security PD resource A question of literacy).</p>

Table 1: CPSISC WELL strategy overview

## References

Adult Literacy and Lifeskills Survey sourced from <http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/4228.0?OpenDocument> August 2008.

Coulombe, S, Tremblay, J-F & Marchand, S 2004, *Literacy scores, human capital and growth across fourteen OECD countries*, Statistics Canada and Human Resources and Skills Development Canada, cat. no.89-552-MIE, Ottawa.

Council of Australian Governments Productivity Agenda Working Group, 2008, *Participation and Productivity Policy Framework*, COAG, Canberra.

*Core Skills for Business 2008*, WELL program, DEEWR, Canberra.

Foster, S, Delaney, B, Bateman, A & Dyson, C 2008, Higher-level vocational education and training qualifications: Their importance in today's training market, NCVET, Adelaide.

Hartley, R and Horne, J 2006 *Social and economic benefits of improved adult literacy: Towards a better understanding*, NCVET, Adelaide.

Hull, G 1995 "Controlling Literacy: the place of skills in 'High Performance' work" in *Critical Forum 3* (II & III), pp 3-26.

*Implications of the ALLS findings for workforce skilling*, National Industry Skills Council Workplace Communication Network's response paper to DEEWR, 2008.

Karmel, T 2008 *What has been happening to vocational education and training diplomas and advanced diplomas?* NCVET, Adelaide.

*Making literacy everybody's business*, Department of Further Education, Employment, Science and Technology, Government of South Australia, 2008.

Townsend, R and Waterhouse, P 2008, *Whose responsibility? Employers' views on developing their workers' literacy, numeracy and employability skills*, NCVET, Adelaide.

Wignall, L 1998, *Built in, not bolted on: Information kit for language, literacy and numeracy coordinators on incorporating communication skills into training packages*, ANTA, Melbourne.

## Endnotes

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<sup>i</sup> Summary results of the Adult Literacy and Lifeskills Survey (ALLS) may be found at <http://www.abs.gov.au/ausstats/abs@.nsf/PrimaryMainFeatures/4228.0?OpenDocument>.

<sup>ii</sup> Hartley and Horne (2006, NCVET) speak of the sustaining and transforming benefits of investing in adult literacy and numeracy skills. They report that studies that have examined the costs and benefit of adult learning in general “point to the importance of taking into account factors such as age and gender; collective as well as individual benefits; the ‘sustaining’ benefits of learning that enable people to continue or improve what they do in their communities; and the more recognisable ‘transforming’ benefits, such as increased employability.”