NCVER

National Centre for Vocational Education Research

NCVER Breakfast **Briefings**

Reading between **the lines**

Summing up **adult literacy** and numeracy research

Exhibits

This set of exhibits provides information that relates to the presentation given at the Breakfast Briefing in May 2006.

www.ncver.edu.au

Context

Exhibit 1: What is language, literacy and numeracy – definitions and concepts

Definition – Department of Education, Science and Training

> Literacy provision must be available to all so that adults can fully participate in the labour force, use literacy skills at work, participate in adult education and training and use literacy at home and in the community. Literacy is not only about skills acquisition but the application of these skills in multiple environments for multiple purposes. Language, literacy and numeracy are crucial underpinnings to learning to learn and generic skills and essential skills for the Australian population.

Source: <www.dest.gov.au/literacynet> (accessed April 2006)

Literacy in the new millennium

Those consulted during the project by Lonsdale and McCurry identified the following capacities as being most relevant to a new millennium literacy. They are, to a greater or lesser extent, the abilities to

➢ 'read' a range of printed, electronic and visual texts

➢ master the new communications technologies via spoken and written language

➢ locate, manage, evaluate and use information or knowledge

➢ engage critically with media and other texts.

Source: *Literacy in the new millennium*, Michele Lonsdale and Doug McCurry, NCVER (2004), p.32

United Nations Literacy Decade 2003–2012

> Literacy is about more than reading and writing—it is about how we communicate in society. It is about social practices and relationships, about knowledge, language and culture. Literacy—the use of written communication—finds its place in our lives alongside other ways of communicating. Indeed, literacy itself takes many forms ... it comprises other skills needed for an individual's full autonomy and capacity to function effectively in a given society. Those who use literacy take it for granted—but those who cannot use it are excluded from much communication in today's world.

Source: UNESCO (2003)

Different concepts across the world

➢ language, literacy and numeracy (worldwide)

➢ generic skills (worldwide)

➢ employability skills (AUS)

➢ essential skills (CAN, AUS in the future)

➢ basic skills (older UK)

➢ skills for life (newer UK)

➢ foundation skills (NZ)

➢ equipped for the future (US)

➢ 21st century skills (US)

Australia's employability skills framework

The Australian Chamber of Commerce and Industry (ACCI) and the Business Council of Australia (BCA) have developed a framework of employability skills. Underpinning this framework is the concept of literacy and numeracy as essential skills supporting many, if not all, of the employability skills. The Department of Education, Science and Training (DEST) also supports the importance of English language, literacy and numeracy as 'essential underpinnings to learning to learn, generic skills and essential skills for the Australian population' (DEST 2005).

Employability skills are the broad, generic skills we need to gain and maintain employment including:

Communication: skills that contribute to productive and harmonious relations between employees and customers

Team work: skills that contribute to productive working relationships and outcomes

Problem-solving: skills that contribute to productive outcomes

Initiative and enterprise: skills that contribute to innovative outcomes

Planning and organising: skills that contribute to long-term and short-term strategic planning

Self-management: skills that contribute to employee satisfaction and growth

Learning: skills that contribute to ongoing improvement and expansion in employee and company operations and outcomes

Technology: skills that contribute to effective execution of tasks

The eight employability skills now replace the seven Mayer key competencies in training packages. If you have worked with key competencies, you might find the following comparison useful.

Employability skills	Mayer key competencies
1. Communication	Communicating ideas and information
2. Teamwork	Working with others and in teams
3. Problem-solving *	Solving problems
	Using mathematical ideas and techniques
4. Initiative and enterprise	
5. Planning and organising	Collecting, analysing and organising information
	Planning and organising activities
6. Self-management	
7. Learning *	
8. Technology	Using technology

* Note: The new international survey (ALLS) picks up problem solving (see exhibit 5) and the revised National Reporting System picks up on learning strategies (see exhibit 6).

Source: <http://www.ibsa.org.au/content/currentprojects/employability_skills.html>

Exhibit 2: Conceptions of literacy – under-pinning models and implications for policy-making

The research confirms the highly problematic nature of literacy definitions. Literacy conceptions today are no longer limited simply to reading and writing. There is a general recognition that the changes which have so transformed the world in recent years demand a reconceptualisation of literacy to encompass a broader range of capabilities than in the past, and in recognition of its contingent qualities.

Based on the research, there appear to be three main conceptions of literacy with currency in Australia today, with implications for policy-making and teaching/learning:

> ➢ a cognitive, individual-based model associated with a psychometric tradition, quantifiable levels of ability, and a deficit approach to 'illiteracy', which is assumed to be both an outcome of individual inadequacy, and a causal factor in unemployment
>
> ➢ an economics-driven model generally associated with workforce training, multiskilling, productivity, 'functional' literacy and notions of human capital
>
> ➢ a sociocultural model which is most commonly associated with contextualised and multiple literacy practices, a valuing of the 'other', and a strong critical element.

Conceptualisations of literacy have changed over time. In general, literacy today is perceived to be social by nature rather than merely an individual's set of skills, and there is consensus among literacy researchers that the meaning of literacy depends on the context in which it is being used.

Reflecting the external changes which have taken place in the world in recent decades, the traditional autonomous model has been largely superseded by the 'ideological' model. While other conceptions of literacy have existed and continue to exist, most fall into one of these categories.

The 'autonomous' model:

➢ views literacy as evidence of human progress and a new kind of intellectual thinking

➢ views literacy as separate from its context

➢ has a unitary conception of literacy

➢ assumes literacy to be a neutral activity

➢ views illiteracy as an individual responsibility

➢ assumes literacy to be a cognitive, technical skill

➢ makes use of psychometric approaches

➢ views the skills of reading and writing as fundamental to individual and national economic productivity

➢ assumes literacy is print-based and about the acquisition of written skills

➢ encourages inculcation into dominant ideologies and discourses.

The 'ideological' model

➢ views literacy as a social practice and recognises that different cultures have different literacies

➢ recognises the situatedness of literacy

➢ recognises that there are multiple literacies

➢ recognises its own ideological assumptions

- ➢ views illiteracy as a social responsibility

- ➢ assumes literacy to involve a complex range of skills

- ➢ makes use of ethnographic approaches

- ➢ sees the skills of reading, writing and enumerating as social practices

- ➢ assumes literacy is largely electronic-based and about the acquisition of a whole range of understandings and skills, including visual and non-verbal

- ➢ encourages interrogation of dominant ideologies and discourses

The research shows there is a gap between current conceptions of literacy and current approaches to literacy at a policy level, as outlined in the table below.

Current conceptions of literacy for policy-making and teaching/learning

Aspects of literacy	Implication
Conceptions of literacy have broadened. Literacy is recognised as making meaning (that is, making sense of the world).	Policies which imply or function as though literacy can be defined as a specific set of skills should be critically questioned.
There is no universal definition of literacy.	Policies which imply or function as though there is one primary model of literacy need to be reviewed.
Literacy is context-specific.	There can be many kinds of literacy development which takes place in many different ways.
	Policies which depend on benchmarking, literacy surveys or testing need to be critically questioned.
Literacy is multiple.	There can be no single or superior method of literacy development.
	Policies which validate some literacies and not others need to be reviewed.
Literacy is a social practice.	Policies which focus only on individual skilling and not community capacity-building need to be reviewed.
Literacy begins with the needs of the learner.	Policies framed primarily in terms of vocational outcomes need to be critically questioned.
The literacy needs of learners change over time.	Policies and programs which do not actively support lifelong learning need to be reviewed.
Literacy means an ability to critically assess aspects of the learner's world.	Policies need to support teaching/learning practices which enable learners to make meaning of their world.
Literacy has multiple purposes.	One purpose for literacy development must not obstruct other purposes.
There are more or less dominant literacies (for example, a dominant literacy would be associated with learning undertaken at a TAFE college or university, while a less dominant or 'vernacular' literacy is that associated with the after-school teaching by foreign language communities to members of these communities).	One kind of literacy development must not be allowed to obstruct the development of other kinds of literacy.
Literacy is multi-disciplinary.	Policies which imply or function as though literacy is a matter for language teachers rather than for all teachers need to be reviewed.

Source: Literacy in the new millennium, Michele Lonsdale and Doug McCurry, NCVER (2004)

Exhibit 3: International trends in adult literacy policy and programs

A summary of an extensive study of policies and practices in adult literacy and adult basic education in Canada, the Republic of Ireland, New Zealand, the United States of America, the United Kingdom and Australia was conducted by Rosa McKenna and Lynne Fitzpatrick in 2003. The study concluded the following in relation to adult literacy provision and policy in Australia:

➢ Australia has achieved considerable success in the integration of literacy with vocational education and training (VET) which operates within national qualifications and quality assurance frameworks. It also has a strong base for developing national policy settings and putting in place an effective national reporting system on the outcomes of literacy provision.

➢ Australia has not refreshed its literacy policy since 1991, unlike the other countries studied, to take into account the new dimensions and approaches to literacy that have emerged in recent times. It is also unclear how these literacies relate to other recognised generic skills.

➢ Australia needs to pay closer attention to literacy teaching workforce issues and build the capability of the existing workforce in the light of an expanding range of teaching methods, new technologies, emerging new literacies (such as effective use of technology) and the diverse range of contexts for delivery. In fact, it appears that in Australia opportunities for professional development are decreasing. Improving certification to enhance professionalism might also be needed to aid the replacement of practitioners who are leaving or about to leave due to age.

➢ Efforts are needed to develop a better understanding of current literacy provision—in all its forms—and rates of success compared with apparent levels of literacy need. The best documented programs are those offered through the VET sector as accredited stand-alone courses, while Australia's provision through informal non-accredited courses is not documented. In addition, the effectiveness of literacy teaching that is integrated within VET skills programs is not currently measured.

The following table summarises the major features of language, literacy and numeracy policies and systems in each of the countries studied.

Features of adult literacy and numeracy policies and systems in countries studied

	Features	Australia	Canada	Ireland	New Zealand	United Kingdom	US
National policy	Policy	p	✓	✓	✓	✓	✓
	Strategy	p	**x**	✓	✓	✓	✓
National leadership	Government unit	✓	✓	✓	✓	✓	✓
	National coordinating authority	p	✓	✓	✓	✓	✓
	Consultative body	**x**	✓	✓	✓	✓	✓
Research and development	Needs	p	✓	**x**	✓	✓	✓
	Resources	✓	✓	✓	✓	✓	v
	Evaluation	**x**	✓	✓	✓	✓	v
	Innovation	✓	✓	✓	✓	✓	✓
Referral /information	Hotline/ database	✓	✓	✓	✓	✓	✓
Funding	Increasing	unclear	✓	✓	✓	✓	✓
Delivery options systemically available	Community	✓	**x**	✓	✓	✓	✓
	Workplace	✓	**x**	✓	✓	✓	✓
	Workforce /labour market	✓	**x**	✓	✓	✓	✓
	Youth	**x**	**x**	✓	✓	✓	✓
	Older groups	**x**	**x**	✓	**x**	**x**	**x**
	ESOL	✓	**x**	✓	✓	✓	✓
Qualification system		✓	**x**	✓	✓	✓	**x**
Reporting framework		p	**x**	✓	✓	✓	**x**
Building capacity	Teacher certification	p	**x**	✓	✓	✓	**x**
	Accredited prof. dev.	**x**	**x**	✓	✓	✓	**x**
Quality assurance		✓	**x**	✓	✓	✓	**x**

p – partial; ✓– yes; **x** – no

Partial rating applied to Australian data only. Data compiled for other countries did not permit this degree of differentiation.

Source: *Building sustainable adult literacy policy and provision in Australia: A review of international policy and programs,* Rosa McKenna and Lynne Fitzpatrick, NCVER (2004), unpublished table

Exhibit 4: Australia's literacy and numeracy policies, strategies and systems

National initiatives

The *Australian Language and Literacy Policy (ALLP)* adopted in 1991 aimed to provide the means for all Australians to maintain levels of spoken and written English appropriate for a range of contexts, and to have access to training which would suit their particular needs. To this end, the Commonwealth Government of the time applied additional funding to help state governments to provide literacy training for adults who required it. This policy no longer drives the provision of language, literacy and numeracy training, but its philosophical underpinnings have had a major influence on provision and access.

The *Australian Framework of Adult English Language, Literacy and Numeracy Competence* developed in 1993 was designed to inform curriculum development and to support the development of a national reporting system on language, literacy and numeracy competence. This framework organised the achievement of competence according to complexity of a task, and the amount and nature of help received by individuals in performing the task.

The *National Reporting System* (NRS) was developed in 1995 for use as a mechanism for reporting on the outcomes of LLN provision. It provides a set of standards that describe the reading, writing, numeracy, oral communication and learning strategies required by adults to function effectively within community, workplace and social contexts. The NRS is currently being reviewed. Refer to exhibit 6 for further details.

The *National Collaborative Adult English Language and Literacy Strategy* of 1993 had an early influence on the integration of adult literacy within reforms to mainstream VET provision. In addition, the *Australian Quality Training Framework* first adopted in 2001 and reviewed in 2005 also specifically highlights the importance of addressing the needs of special groups (including adults with low basic skills) in delivery and assessment strategies.

A *National Framework for Professional Development of Adult Literacy and Basic Education Personnel* was adopted in 1993 to provide a systematic and national approach to professional development for this group of workers and for newly recruited teachers. It also aimed to provide staff with an opportunity to upgrade the quality of teaching and management of adult literacy and basic education programs within the government technical and further education sector.

The *Literacy and Numeracy Training Program* (LANT) adopted in 1998 to improve the employment prospects of unemployed jobseekers also helped to support the Commonwealth Government's 'Mutual Obligation' policy. This policy ensured that 18 to 24-year-olds in receipt of government benefits had to engage in training or labour market schemes to maintain access to unemployment benefits (DEST 2002).

The *National VET Strategy (Shaping our future 2004–2010)* priorities are concerned with ensuring that all Australians have the competencies to function effectively in employment (DEST 2003). Two of the priorities specifically apply to adults who may also have difficulties in functioning effectively in the modern workplace. These relate to increasing the participation of mature-age workers in training, and encouraging Australians who are not fully participating in labour markets to engage with training. These priorities will have a continued impact on the extent to which language, literacy and numeracy skills training—especially for adults with low basic skills— continues to remain an essential part of VET training. It will also have a major impact on the type of assessment strategies used.

State and territory initiatives

State and territory governments have also developed strategies aimed at improving the language, literacy and numeracy of their adult citizens. They make funds available for adults with low language, literacy and numeracy skills to engage in training which will help them move into the labour market.

The Tasmanian Government's *Tasmania a State of Learning - Ensuring Essential Literacies Strategy* (2003) is a long-term strategic plan for post-Year 10 education and training. As part of this plan, the government has also established an adult literacy taskforce in conjunction with the Commonwealth Government. It has conducted an environmental scan of literacy provision in Tasmania and found that what was required was a more consistent and coordinated approach to providing adults with quality literacy support .

The Western Australian government's *State Training Strategy* acknowledges the role of both formal and informal learning in addressing the needs of adults with low basic skills. However, there is a concern that some groups (for example, the long-term unemployed) are not participating in formal training and, because they are not in work, they are also excluded from many informal learning opportunities that are encountered in the workplace.

South Australia's *New Ways, New Times and New Skills Strategy* (2003) comprises a ten-point action plan which highlights improved partnerships between the adult and community education (sector) and technical and further education (TAFE) in the provision of language and literacy skills for those who have been socially, economically and educationally disadvantaged.

Victoria's *Maintaining the Advantage* skills strategy (2006) aims to build the skills of Victorians to 'respond to future challenges presented by social change, economic growth and international competition'. The government has allocated $10.88 million dollars to fund 1800 places for Victorians aged between 35 and 64 years who do not have a Year 12 qualification or equivalent to enrol in courses at certificate III level or above.

The Queensland Government has also launched its *Queensland Skills Plan (2006)* which identifies training strategies to ensure that labour supply is aligned with the current and future needs of its industry. One of the components of this plan is to provide training that 'works for individuals'. This involves a better understanding of each individual's particular skill needs, and strategies for the needs of special groups (including Indigenous Queenslanders, people with a disability, and older workers).

The 2002–2004 strategic plan for Australian Capital Territory VET (*ACT Vocational Education and Training*) has one of its key focus areas (key focus area no. 3) devoted to achieving equitable outcomes. This includes promoting the customisation of training for equity groups, and the availability of assistance to students and employers. It also encourages people from equity groups to complete training, and supports the development and implementation of ACT and national equity strategies. The 2005–2009 plan also had as one of its key goals to 'identify and respond to particular needs of learners including those in equity and target groups'.

The Northern Territory has in place a *Technical and Vocational Skills Learning Support Modules Policy* to assist training organisations in customising training to the needs of adults with low levels of required underpinning knowledge (which may also include low language, literacy and numeracy skills). These modules have been developed in recognition of the fact that there are many clients from remote area communities (mainly Indigenous Australians) who speak English as a second, third or fourth language, and may live in areas that have been disadvantaged in terms of lack of access to appropriate schooling. In addition, there are also other Territorians who may not have reached a functional literacy standard equivalent to Year 10. The learning support modules are specific to the Northern Territory and are only to be used in conjunction with nationally recognised courses and programs.

The New South Wales Government has traditionally had a major commitment to addressing the training needs of individuals from special groups (and especially those with low language, literacy and numeracy skills). TAFE NSW (the government provider of vocational education and training) is responsible for managing the Reading Writing Hotline, which provides a national referral service for adults seeking to improve their language, literacy and numeracy skills. The government has also supported programs for migrants from non-English speaking backgrounds which prepare them to enter general and vocational courses, and for retrenched and mature-age workers to build self-confidence and develop team work skills. In addition, it has funded 'equity reviews' of training packages. It has also established a new Equity Strategy Group to coordinate decisions on equity and strategy policy in TAFE NSW.

Source: Country background report: *Addressing the training and assessment needs of adults with low basic skills in Australia*, Josie Misko, NCVER (forthcoming)

Measuring progress

Exhibit 5: International adult literacy survey components and results – 1996 and 2006

The Adult Literacy and Lifeskills Survey (ALLS) will be conducted in Australia in 2006, with results available in 2007. It builds on its predecessor, the 1996 International Adult Literacy Survey (IALS), which was the world's first internationally comparative survey of adult literacy. Like the IALS, the ALLS conceptualises proficiency along a continuum that denotes how well adults use information to function in society and the economy.

The ALLS will measure proficiency in four domains. Two of them, prose (continuous text such as the type found in books and newspaper articles) and document literacy (such as graphs, charts and other written information of a discontinuous nature), are defined and measured in the same manner as in the IALS survey.

The ALLS adds two new domains. The first is numeracy, which expands the quantitative measure used in the IALS survey by adding mathematical concepts and, in some instances, removing the textual aspect of the measure. The second is problem-solving, or analytical reasoning.

Survey domains

Prose literacy – the knowledge and skills needed to understand and use information from texts including editorials, news stories, brochures and instruction manuals.

Document literacy – the knowledge and skills required to locate and use information contained in various formats, including job applications, payroll forms, transportation schedules, maps, tables and charts.

Numeracy – the knowledge and skills required to manage effectively the mathematical demands of diverse situations.

Problem-solving – problem-solving involves goal-directed thinking and action in situations for which no routine solutions exist. The problem-solver has a more or less well-defined goal, but it is not immediately obvious how to reach it. The incongruence of goals and admissible operations constitutes a problem. The understanding of the problem situation and its step-by-step transformation, based on planning and reasoning, constitute the process of problem-solving.

The survey scores range on a scale from 0 to 500 points for each domain. Each of the scales is split into five different levels from level 1 for the lowest literacy proficiency to level 5, the strongest level of literacy proficiency.

Survey scales

Level 1 – People at this level have very poor skills, and could be expected to experience considerable difficulties in using many of the printed materials that may be encountered in daily life. Some people at this level display the ability to locate a single piece of information in a relatively short piece of text, to enter a piece of information onto a document, or to perform simple arithmetic operations using numbers provided. However, Level 1 also includes those who could not successfully complete such tasks.

Level 2 – People at this level could be expected to experience some difficulties in using many of the printed materials encountered in daily life. While they would be able to use some printed material, this would generally be relatively simple, short and clearly structured, or require simple arithmetic operations to be performed on numbers that are easily determined from the source text.

Level 3 – This level represents the ability to cope with a varied range of material found in daily life and at work. People at this level would not be able to use all printed material with a high level of proficiency, but they would demonstrate the ability to use longer, more complex printed material. They would be able to take conditional information into account, to make inferences, to compare and contrast information, and to extract numbers embedded in complex displays and perform more varied arithmetic operations.

Level 4 – People at this level have good literacy skills, and display the ability to use higher-order skills associated with matching and integration of information, with making higher-order inferences and with performing arithmetic operations where either the quantities or the operation to be performed are not easily determined.

Level 5 – People at this level have very good literacy skills, and can make high-level inferences, use complex displays of information, process conditional information and perform multiple operations sequentially.

Source: Statistics Canada <http://www.statcan.ca/start.html> (accessed April 2006) and
           <http://www.abs.gov.au/Ausstats/abs@.nsf/0/887AE32D628DC922CA2568A900139365?Open> (accessed April
           2006)

Survey findings – comparative performance between Australia and Canada

The results of the International Adult Literacy Survey (1994 in Canada and 1996 in Australia) impacted significantly, although variably, in each of the countries studied.

Australia's results were fairly similar to Canada's, as can be seen in the following table (comparing level 1 and 2 Australian data with level 1 and 2 Canadian data in particular).

Comparative performance between Canada and Australia—per cent of population aged 16–65 at prose and document skill levels

Prose scale	Survey year	level 1	level 2	level 3	level 4/5
Australia	1996	17.0	27.1	36.9	18.9
Canada	1994	16.6	25.6	35.1	22.7
Canada	2003	14.6	27.3	38.6	19.5
Document scale	**Survey year**	**level 1**	**level 2**	**level 3**	**level 4/5**
Australia	1996	17.0	27.8	37.7	17.4
Canada	1994	18.2	24.7	32.1	25.1
Canada	2003	15.6	27.0	36.9	20.5

Survey findings – Canadian results 2003

It is interesting then to consider the results from Canada's participation in the ALLS a decade on (2003), which shows that:

➤ Overall, there has been little change in literacy performance between 1994 and 2003.

➤ The established patterns of literacy proficiency continue to prevail, with higher performance among the young and the educated.

➤ Proficiency of Canadians, aged 16 to 65, in literacy, numeracy and problem-solving is clearly linked to their labour market outcomes. The average proficiency scores of those employed are higher than those who are either unemployed or not in the labour force.

➤ Respondents reporting poor health score lower on the document literacy scale compared with those reporting fair, good or excellent health.

➤ Although the nature of this relationship needs to be explored further, the evidence suggests that health issues and literacy issues intersect.

➤ Higher levels of prose literacy are associated with higher engagement in various community activities. Literacy may be a key factor in building a socially engaged community, while such a community in turn may be more likely to develop a literacy rich environment to sustain and improve its literacy base.

Source: Statistics Canada, Building on our Competencies: Canadian Results of the International Adult Literacy and Skills
           Survey 2003 <http://www.statcan.ca/english/freepub/89-617-XIE/89-617-XIE2005001.pdf> (accessed April 2006)
           and Aspects of Literacy: Assessed Skill Levels Australia 1996 <http:www.abs.gov.au> (accessed April 2006)

Survey findings – comparative performance among all countries in first round of data collected (2003–2006 survey)

Learning a living and earning skills is the first report from the Adult Literacy and Life Skills Survey. It provides a comparative perspective on the levels and distributions of adult skills in four domains—prose literacy, document literacy, numeracy and problem-solving—for the countries that collected data in the first round (Bermuda, Canada, Italy, Norway, Mexico, Switzerland and the United States). Changes in the distributions of prose and document literacy skills over time for the countries (Canada, Norway, Switzerland and the United States) that participated in both ALLS and its predecessor, IALS, can be made.

Findings point to large differences in the average level and population distribution of skills both within and between countries. Low skills are evident among all adult groups in significant—albeit varying—proportions. Skills vary substantially even at similar levels of educational attainment. Hence some countries are more successful than others in building skills beyond initial schooling. These differences matter because literacy and life skills are closely associated with economic life chances and quality of life.

> ➢ Measured by the difference in average scores between the 5th and 95th percentiles, all countries in the ALLS display less inequality in skill between the highest and lowest performing groups than in the IALS. The exception is Norway, where skill inequality was already low in the IALS (see figures below).

> ➢ Changes in mean country performance are not substantial, but the results show some improvement among the five per cent of adults with the lowest scores.

➢ The results confirm the IALS findings that many adults have difficulties coping with literacy and numeracy-related demands that are common in modern life and work. Although relative proportions vary, there are significant numbers of adults with low skills in all the countries surveyed.

➢ Depending on the country, between one-third and over two-thirds of adult populations do not attain skill Level 3, the level considered by experts as a suitable minimum level for coping with the increasing demands of the emerging knowledge society and information economy (OECD and Statistics Canada 1995).

➢ Both the average performance levels and the distributions of skills among adult populations differ substantially between countries. Some perform better than others in terms of average performance, with Norway performing among the highest on all four scales.

➢ The spread in literacy scores between adults at the lowest and highest skill levels is significantly smaller in some countries (Norway and Switzerland) and larger in others (Italy and the United States).

➢ Some countries have a relative advantage in a particular skill domain. For example, Switzerland performs comparatively well on the numeracy scale whereas Bermuda scores better on the prose scale. Norway is a country that does consistently well in all four skills domains.

➢ Only the German speaking population in Switzerland has recorded an increase in its average performance on the prose and document literacy scale between the IALS and ALLS periods.

➢ Age and skills are inversely related in all countries. Younger cohorts tend to score higher on average and have larger proportions at higher levels of skills. Even after controlling for educational attainment, the relationship remains negative. There is also wider variation in performance among older cohorts.

- The relationship between age and skills is complex because age represents an accumulation of life experiences that are likely to impact on the development and even loss of skills throughout the lifespan.

- Gender interacts with the distribution of adult skills and confirms previously observed patterns. In general, men tend to display an advantage in numeracy and document literacy skills, while women tend to display an advantage in prose literacy. Although women in Bermuda show a noticeable advantage in problem-solving, these types of skill appear gender neutral in Canada, Italy, Norway and Switzerland (German and French speaking populations).

Differences between IALS 1994/1998 and ALL 2003 in the per cent of adults aged 16 to 65 at each skills level

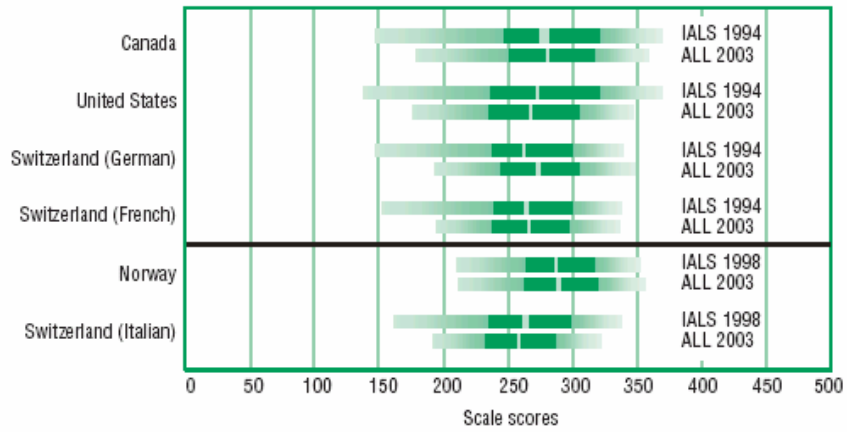|	Level 1	Level 2	Level 3	Level 4/5	Levels 1 and 2	Levels 3 and 4/5
A. Prose literacy scale						
Canada	-2.0	+2.5	+2.2	-2.8	+0.5	-0.6
United States	-0.8	+8.1 [1]	+1.8	-9.1 [1]	+7.3 [1]	-7.3 [1]
Switzerland (German)	-4.3 [1]	+0.4	-0.5	4.4 [1]	-3.9	+3.9
Switzerland (French)	-1.6	+6.1 [1]	-3.7	-1.0	+4.5	-4.7
Switzerland (Italian)	+0.3	+9.3 [1]	-4.6	-5.1 [1]	+9.6 [1]	-9.7 [1]
Norway	-0.6	+1.4	-2.9	2.1	0.8	-0.8
B. Document literacy scale						
Canada	-2.4	+3.3	+4.2	-5.2 [1]	+0.9	-1.0
United States	-3.4 [1]	+7.5 [1]	+1.0	-5.0 [1]	+4.1	-4.0
Switzerland (German)	-4.3 [1]	+5.7 [1]	-1.0	-0.4	+1.4	-1.4
Switzerland (French)	-1.4	+8.1 [1]	-1.7	-4.9 [1]	+6.7 [1]	-6.6 [1]
Switzerland (Italian)	+0.6	+11.2 [1]	-2.2	-9.6 [1]	+11.8 [1]	-11.8 [1]
Norway	0.2	+2.4	-0.8	-1.8	+2.6	-2.6

1. p<.05 statistically significant
Sources: Adult Literacy and Life Skills Survey, 2003.
International Adult Literacy Survey, 1994–1998.

Changes in distributions of skills scores

Mean scores with .95 confidence interval and scores at the 5th,
25th, 75th and 95th percentiles on skills scales ranging from 0 to 500 points,
populations aged 16 to 65, IALS 1994/1998 and ALL 2003

A. Prose literacy scale

Canada	IALS 1994 / ALL 2003
United States	IALS 1994 / ALL 2003
Switzerland (German)	IALS 1994 / ALL 2003
Switzerland (French)	IALS 1994 / ALL 2003
Norway	IALS 1998 / ALL 2003
Switzerland (Italian)	IALS 1998 / ALL 2003

Scale scores: 0 50 100 150 200 250 300 350 400 450 500

B. Document literacy scale

Canada	IALS 1994 / ALL 2003
United States	IALS 1994 / ALL 2003
Switzerland (German)	IALS 1994 / ALL 2003
Switzerland (French)	IALS 1994 / ALL 2003
Norway	IALS 1998 / ALL 2003
Switzerland (Italian)	IALS 1998 / ALL 2003

Scale scores: 0 50 100 150 200 250 300 350 400 450 500

Mean and .95
confidence interval
for mean

5th percentile 25th percentile 75th percentile 95th percentile

Sources: Adult Literacy and Life Skills Survey, 2003.
International Adult Literacy Survey, 1994–1998.

Source: Learning *a living: First results of the Adult Literacy and Life Skills Survey*, Statistics Canada, (2005)
<http://www.statcan.ca/english/freepub/89-603-XIE/89-603-XIE2005001.htm> (accessed April 2006)

NCVER Breakfast Briefing – Reading between the lines: Summing up adult literacy and numeracy research

Exhibit 6: A revised Australian National Reporting System – towards an essential skills framework (working title)

The National Reporting System has been revised with a trial now underway of the new framework document.

The framework provides a set of standards that describe the reading, writing, numeracy, oral communication and learning strategies required by adults to function effectively within community, workplace and social contexts. It provides a common language for articulating the increasingly broad repertoire of literacy practices that are used to generate meaning from texts within a range of communication contexts.

Revised NRS indicators of competence

Below is the overall schema to describe the development of the indicators of competence across five levels.

10 INDICATORS OF COMPETENCE IN TOTAL, WITH 2 INDICATORS FOR EACH MACROSKILL

Reading	.01 The 1st indicator at each level deals with ways of deriving meaning from different text types. This includes the application of critical literacy skills
	.02 The 2nd indicator at each level deals with the conventions of reading, e.g. skimming, scanning, locating, sorting, categorising, word attack skills, graphaphonics, syntax
Writing	.03 The 1st indicator at each level deals with meaning making strategies in different text types and aspects of communication
	.04 The 2nd indicator at each level deals with the conventions of writing, e.g. spelling, grammar, punctuation, vocabulary as defined by context and medium
Numeracy	.05 The 1st indicator at each level deals with the identification and meaning of the numeracy in activities and texts
	.06 The 2nd indicator at each level deals with the ways the mathematics is used in problem-solving
Oral communication	.07 The 1st oral communication indicator at each level deals with speaking
	.08 The 2nd oral communication indicator at each level deals with listening
Learning strategies	.09 The 1st indicator at each level deals with goal-setting based on an awareness of own learning in various learning contexts
	.10 The 2nd indicator at each level deals with engagement in, and acquisition and application of, learning processes

Revised NRS learning strategies

An increased awareness of the interrelated nature of social capital outcomes and education and learning has been incorporated into the revised NRS through an expanded set of learning strategies, and through mention of these outcomes in the features and performance strategies and sample activities.

The project consortium of Linda Wyse and Associates, CAE and Kulu Pty Ltd quote the NCVER study, *Reframing adult literacy and numeracy course outcomes: A social capital perspective,* in the introduction to the revised NRS, stating that 'students' literacy skills improved when their membership of networks provided them with the opportunities to learn or to implement what they had learnt' (Balatti, Black & Falk, 2006).

The addition of expanded learning strategies acknowledges that these strategies provide the vehicle through which the other macro skills (reading, writing, oral communication and numeracy) are developed.

The revised NRS now allows a practitioner to trace confidently the development of learning strategies as a group of skills, qualities and understandings which comprise a separate and crucial language, literacy and numeracy entity, regardless of an individual's performance in reading, writing, oral communication or numeracy.

Below is a summary of the new learning strategy indicators at each level. The first learning strategies indicator deals with goal-setting based on an awareness of own learning in various contexts. The second learning strategies indicator deals with the learner's engagement in, and acquisition of, learning processes.

1.09	Begins to demonstrate awareness of self, including short-term goals, within a learning/training context
1.10	Engages in basic learning processes in highly familiar environment where risk-taking is minimal

2.09	Formulates an achievable learning plan based on an awareness of learning roles and responsibilities in immediate learning/training context
2.10	Engages in a variety of learning tasks and processes within a structured and familiar context

3.09	Plans further learning/training drawing on knowledge of learning roles and responsibilities in current learning environment and their relationship to broader learning contexts
3.10	Engages in a variety of learning tasks using a range of problem-solving strategies and information resources

4.09	Refines further learning/training and pathways drawing on knowledge of self gained from formal learning in sustained learning contexts
4.10	Refines learning practices using a range of problem-solving processes and information resources

5.09	Informs, reviews and evaluates learning/training and pathways drawing on skills, roles and responsibilities gained from sustained formal learning in broad and specialist learning contexts.
5.10	Engages in a variety of learning tasks which may be sustained or specialised drawing flexibly on a wide range of problem-solving processes and information resources

> **If you are interested in commenting on the fully revised NRS document please email the project team at: <linda@lwa.au.com>. The trial is underway until the end of 2006.**

Measuring outcomes and benefits

Exhibit 7:   Measuring outcomes and benefits – economic

Learning a Living – first results of the Adult Literacy and Lifeskills survey
(ALLS) – skills and economic outcomes

Economic outcomes associated with differences in observed literacy skills has been analysed for
the first round countries participating in ALLS, by examining the extent to which the skills
measured are rewarded by labour markets. Labour market returns attributable to skill are
compared with those accruing to schooling. Results are obtained in a multivariate model that
specifies the joint determination of earnings, education and skills. Because prose and document
literacy, numeracy and problem solving skills are highly correlated, four models, each focusing on
a particular skill domain, are estimated. Each adjusts for years of schooling and several other
factors such as age, experience, community size, language status and gender. The findings
confirm labour markets are unique in the sense that they reward schooling and skills differently.
When interpreting the results it is important to note that the potential effects of education on the
development of skills measured in ALLS are fully taken into account. Each additional year of
schooling is estimated to raise an individual's ranking in the distribution of skills by a substantial
amount. Thus for the purposes of this analysis, it is useful to attribute any remaining effects of
education on earnings to other unobserved skills not measured in ALLS, such as communication
skills, leadership or entrepreneurial skills, as well as attitudinal factors.

Key findings of these analyses are:

➤ Skills have a large effect on earnings in the majority of countries. The extent to which
economic rewards are attributable to either skill or education is mixed and varies by
country.

➤ In Bermuda and Italy, the returns to skill overshadow the effect of education. After
accounting for individual skills, wage returns to education are either zero or negative.
This suggests that adults with additional years of schooling who do not display a
commensurate level of skill are not rewarded for their additional schooling on the labour
market.

➤ In Canada and the United States, the labour market appears to reward separately both
the skills measured in the ALLS and additional schooling.

➤ In Norway, the findings indicate that both education and skill are valued, but with a
higher relative return accruing to the latter. In fact, the labour market returns to
numeracy overshadow the return to education. Hence, if well-educated adults lack
numeracy skills, then they derive no benefit from any additional years of schooling.

➤ Results suggest that the labour market in Switzerland does not reward prose, document,
numeracy or problem-solving skills separately from years of schooling. Skills are only
rewarded in so far as adults who have completed additional years of schooling also have
higher skill proficiencies.

➤ Despite the strong associations between skill and economic outcomes reported above,
there are significant proportions of workers who have medium to high levels of skill but
who nevertheless occupy low paying jobs. Naturally, the opposite is also true. There are
low to medium-skilled workers who are nevertheless well paid.

➤ Low-skilled respondents are more likely than high-skilled respondents to receive social
transfers in half of the countries surveyed. This is the case in Canada, Norway and the
United States, even after adjusting for education as well as age, gender and household
income. This relationship is not significant in Bermuda, Italy and Switzerland.

➤ Not surprisingly, since medium to high-skilled adults tend to be paid higher wages, they
also have more opportunity to accumulate capital. Hence they are more likely than low-

skilled workers to have investment income on top of their wage earnings. This is the case in Bermuda, Canada, Switzerland and the United States. In Italy, however, this relationship is not significant once the effect of education and household income have been taken into account.

Source: *Learning a living: First results of the Adult Literacy and Life Skills Survey*, Statistics Canada, (2005)
<http://www.statcan.ca/english/freepub/89-603-XIE/89-603-XIE2005001.htm> (accessed April 2006)

Economic returns to education and training for adults with low numeracy skills

This study examined the economic returns to different levels of education or types of training for adults with low numeracy skills.

Previous research demonstrates that adults with lower skills are less likely to receive training, and that individuals with higher numeracy or literacy skills are likely to have higher wages. This research shows that disadvantaged adults with low skills are least likely to receive specific training, are most likely to be in jobs with minimal opportunities for general training, and are most likely to choose lower levels of education or training. The implication from both the previous research and the results from this study is that public policy can be developed to encourage adults with low literacy or low numeracy skills to invest in higher amounts of education and training, and thus to receive higher rates of return.

Source: *Economic returns to education and training for adults with low numeracy skills*, Lynne Gleeson, NCVER (2005)

Learning numeracy on the job: A case study of chemical handling and spraying

In the workplace the priority and intended outcome are to get the job done as effectively and efficiently as possible, assisted by numeracy as but one tool. In a formal education setting the intended outcome is the learning of mathematics. Unlike a formal education setting, the results obtained in the workplace really matter in terms of public and personal safety, the environment, economic costs and maintaining one's job.

Source: *Learning numeracy on the job: A case study of chemical handling and spraying*, Gail FitzSimons and Susan Mlcek, NCVER (2005)

STEPS[1] program: Families in focus – mobile literacy mentoring project, TAFE NSW Riverina Institute

This DEST-funded Adult Literacy Innovative Project demonstrates the value of careful program planning, innovative use of a variety of measurement tools and effective capture of data to make a strong case for program efficacy.

The STEPS program began when representatives from TAFE NSW Riverina Institute, Wagga Wagga Campus, Department of Community Services, Wagga Wagga City Council, Kooringal Public School and the Regional Office of the Department of Education and Training met to develop innovative ways to provide community capacity-building and literacy connections for particular Indigenous and non-Indigenous families. These families have very limited contacts in their community due to limited literacy skills, and have primary-school or pre-school aged children with learning disadvantages.

The broad strategies of the project were based on a holistic intergenerational, interagency approach and the application of adult learning principles. It was supported by a socio-cultural

---

[1] The Families in Focus program was given the title 'STEPS' to reflect the steps that people take through participation in the program.

model of literacy as a social practice encompassing a diverse range of literacies arising from the needs and realities of the individual clients.

The STEPS program has generated transformational change among isolated people in the Kooringal community who were struggling to cope with their own lives and to support and nurture for their children. The success of the program ranges from significant growth in literacy and numeracy skills to the more complex inter-relation of skills, knowledge and attitudes required for social capacity-building reflected in the aims of the program.

While the Steering Committee did not have the capacity to evaluate a dollar 'return on investment' for this program, we do believe that it has made significant savings to support costs for these people as well as generating employment opportunities for people who absolutely lacked this potential at the beginning of the program. Three examples give some idea of the scale of these cost savings.

➢ The child of a client who had been removed from the client's care by the Department of Children's Services (DOCS) was returned after the client was able to demonstrate that she had learnt the skills and knowledge to provide proper care. An unofficial estimate of the cost of DOCS care per child in these circumstances is between $9000 and $14 000 per year.

➢ In a second case, three children from one family were assessed as needing one-on-one or small group learning support. As a consequence of their mother developing the skills needed to support their learning at home, they have remained in mainstream classes where they are functioning well.

➢ A third client moved from social isolation to full employment, preparing meals for a pre-school due to the support she received from the STEPS program. Her employer has provided additional training that has given her certification in menu planning and safe food handling.

The STEPS program has generated transformational change among marginalised families to overcome barriers to learning, progress language and literacy skills, and develop skills for the more complex interrelation of skills, knowledge and attitudes required for capacity-building. Given the program's significant success in developing client independence in the major skills defined by its aims, it is reasonable to claim major returns on the program's costs in terms of reduced support needs alone. This doesn't take into account opportunity costs, improved education and the likely permanent and cross-generational benefits of the training provided.

Source: 2005 Adult Literacy Innovative project, <http://www.dest.gov.au/literacynet/resources1.htm#Community>

Exhibit 8:   Measuring outcomes and benefits – workplace

WELL programme evaluation

In 2006 the Department of Education, Science and Training (DEST) is conducting an evaluation of the Workplace English Language and Literacy Programme (WELL). As a first step to inform subsequent stages of the evaluation, DEST contracted NCVER to undertake a review of literature—focusing on the outcomes and benefits of workplace literacy and numeracy programs.

Some of the principal benefits observed in the available research from raising the basic skills levels of the workforce include:

> ➢ improved communication skills and greater confidence

> ➢ better earning capacity and employability

> ➢ increased ability to handle training on the job

> ➢ better team performance and improved labour-management relations

> ➢ increased productivity and quality

> ➢ better health and safety record.

More specifically, studies show the Workplace English Language and Literacy Programme is regarded as being of great importance in supporting provision for literacy and numeracy in training packages by:

> ➢ enabling access to literacy training

> ➢ improving communication

> ➢ creating a better understanding of the advantages of incorporating communication skills in training

> ➢ promoting a training culture

One of the most widely quoted Australian studies in the field is Pearson's 1996 report on 30 workplaces—*More than money can say*: *The impact of ESL and literacy training in the Australian workplace*. It found that language and literacy training was considered to have had a positive effect on five aspects of the workplace:

> ➢ direct cost savings

> ➢ access to, and acceptability of, further training

> ➢ participation in teams and meetings

> ➢ promotion and job flexibility

> ➢ the value of training (which included issues such as worker morale and confidence to communicate).

The OECD (2002) has highlighted the importance in times of strong employment of continuing to address the needs of low-skilled workers. This is important to enable economies to compete globally in the post-industrial era and to ensure the adequacy of the labour force to meet the drive for future growth. For the individuals, improved literacy and numeracy will contribute to their prospects of remaining in work and sharing in the benefits of prosperity.

Source: *Review of literature: Workplace English language and literacy*, **draft** report prepared for the Strategic Analysis and Evaluation Group, DEST by NCVER and Francesca Beddie & Associates (forthcoming)

The impact of a basic skills program on Canadian workplaces (ABC Canada)

This study ventures where few others have—into quantitative recording of the data gathered from a study of 53 workplaces. Within that sample half of workplace basic skills programs were coordinated by joint labour-management committees, a further 47% were coordinated by the company alone. In 96% of the workplaces surveyed, employees entered the basic skills programs on a voluntary basis. Over half the programs were held in a combination of employer and employee time. In 32% of the workplaces, programs were held on employee time alone and the remaining 17% of programs were on employer time. The authors note that every effort was made to interview an employer and an employee representative at each workplace.

The findings show that:

> ➢ 94% of respondents stated that basic skills programs positively influenced participants' reading, writing and oral communication skills in ways that benefit the workplace.

> ➢ Close to 80% of the respondents reported their workplaces had seen increased productivity because of the basic skills programs.

> ➢ 87% of respondents believed basic skills programs exerted an independent, and positive influence on participants' ability to problem-solve.

> ➢ 87% of respondents said that programs impacted positively on participants' ability to use workplace-based technology.

> ➢ Two-thirds of respondents had seen reduced error rates in people's work.

> ➢ 85% of respondents had seen increases in the quality of people's work.

> ➢ 73% of respondents had seen increases in work effort.

> ➢ 82% of respondents linked increased health and safety with their workplace's basic skills program.

> ➢ 100% of respondents agreed that workplace basic skills programs were a good training investment and would recommend them to other workplaces.

> ➢ 97% of respondents reported that basic skills programs increased the confidence level of program participants.

> ➢ 90% of respondents indicated that employees who took basic skills programs had an increased ability to work independently.

> ➢ 85% of respondents reported that basic skills programs enhanced participants' ability to work within a team-based model.

> ➢ Close to 90% of respondents indicated that employees were more promotable as a result of basic skills programs.

> ➢ 63% of respondents reported that basic skills programs helped workplaces to retain employees over time.

> ➢ 93% of respondents reported that basic skills programs helped to increase employee morale. Program participants felt better about their workplace, and about the unions that represented them.

➢ Many respondents stated that basic skills programs help remove barriers in the workplace based on age, sex, race and language.

➢ 85% of company and employee representatives concurred that basic skills programs had improved labour relations in their workplaces.

Exhibit 9:   Measuring outcomes and benefits – social capital

Integrated literacy learning contributes to social capital and community capacity-building

The purpose of Rosie Wickert's and Jenny McGuirk's study was to explore the potential for extending opportunities for integrated or embedded adult literacy learning beyond the education and training sector.

Their review of workplace literacy programs confirmed the success of initiatives in Australia. They also confirmed that there are other, perhaps less expected, outcomes from workplace literacy programs that have a wider impact and can be said to build social capital and contribute to community capacity-building. Workers report:

➢ improved self-confidence

➢ a willingness to take on further training or leadership roles

➢ that the benefits transfer to other areas of their lives, such as greater confidence in dealing with their children's schooling and participation in family and community activities.

The development of trust between trainer and organisation and between trainer and workers, and the partnerships that are formed between local training and other community organisations, also contribute to social capital.

> The frameworks and case studies reported in the literature offer a number of ways of understanding how literacy skills and literacy learning opportunities can contribute to social (and human) capital, which in turn contribute to community capacity-building. These include the networks, relationships, trust and engagement that can build from the confidence that grows from increased capacity to learn, wherever and however that might occur. Social capital and community capacity-building provide important 'bridging' concepts by suggesting how the oft-quoted gains from literacy learning (of increased confidence and self-esteem) can have benefits beyond the individual learner. Anecdotal evidence from the community sites and workplace programs confirms the relevance and importance of this relationship. These findings support literature that advocates a broader approach to documenting literacy learning outcomes than the acquisition of technical skills.

Source: *Integrating literacies: Using partnerships to build literacy capabilities in communities*, Rosie Wickert and Jenny McGuirk, NCVER, (2005)

Reframing adult literacy and numeracy course outcomes: A social capital perspective

This study examined the social capital outcomes experienced by students as a result of their participation in accredited adult literacy and numeracy courses undertaken through the vocational education and training sector. The study also examined how these outcomes contributed to the socioeconomic wellbeing of students, and considered the implications for educational practice and reporting of outcomes from language, literacy and numeracy courses.

The key findings were:

➢ Participation in accredited adult literacy and numeracy courses produced social capital outcomes for 80% of the students interviewed.

♦ Students reported changes in the number and nature of attachments they had to existing and new social networks, and spoke of changes in the way they interacted with people in their networks.

♦ Students valued social capital outcomes highly because they contributed to their socioeconomic wellbeing.

♦ There was evidence that social capital outcomes had an impact in areas such as students' social environments; education and learning; employment and the quality of working life—although improved literacy and numeracy skills were not necessarily present.

➢ Literacy and numeracy improvement often required the social capital outcomes noted above as a prerequisite or co-requisite. For example, students' literacy skills improved when their membership of networks provided them with opportunities to learn, or to implement what they had learnt.

➢ Social capital outcomes were realised as a result of specific teaching strategies, such as promoting interaction with peers and through the new networks and relationships experienced in the course. Reframing adult literacy and numeracy teaching/learning to include the idea of the student as a member of networks would make the social capital-building function of the courses more explicit.

➢ Current reporting frameworks, including the National Reporting System for language, literacy and numeracy, do not specifically account for social capital outcomes*. Recognising the importance of those outcomes, and perhaps reporting them, is likely to result in a more accurate picture of the contribution that adult literacy and numeracy courses make to individuals and communities.

* Note: The NRS is being revised, refer to exhibit 6.

Measuring effort

Exhibit 10:   Reading Writing Hotline data – a profile of demand

The characteristics and needs of callers to the Reading Writing Hotline provide a rich source of information about who is seeking language, literacy and numeracy support.

Number of callers 2002–2005
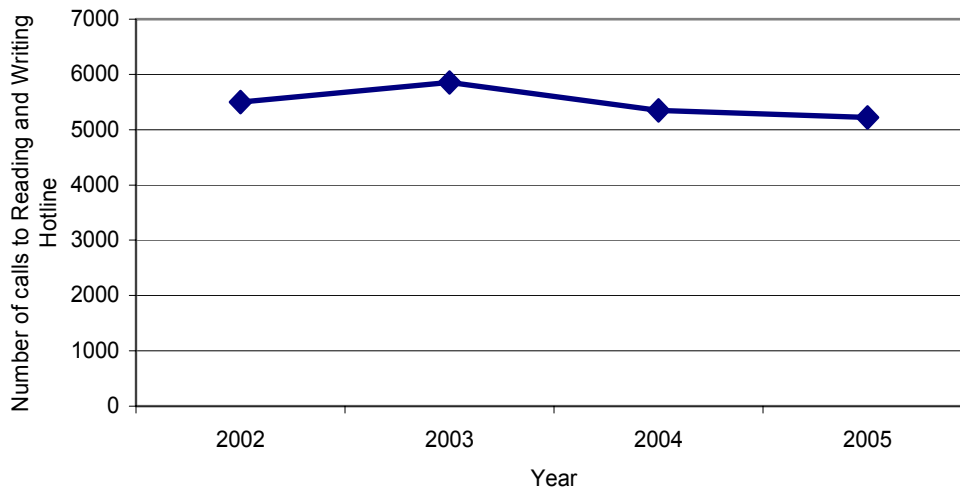
Profile of callers

Reading and Writing Hotline caller profile, 2005

A growing number of callers are:

- ➢ seeking help for the first time (between 2004 and 2005, callers seeking help for the first time increased from 80% to 84%)

- ➢ under 30 years and have completed Year 12 or higher (background notes: these callers are seeking help with university tasks/study skills or high-level workplace writing tasks)
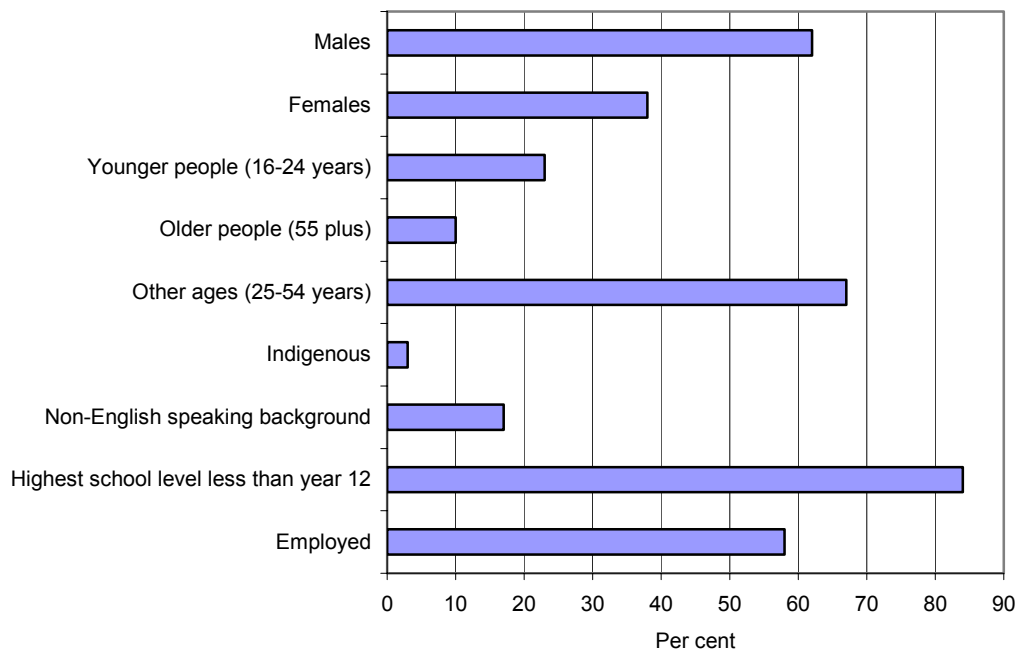
- ➢ employed
  - ♦ employed callers increased by 9% from 2004 to 2005. In 2005, there were a number of enquiries from mining company employees.

Reasons for calling

- ➢ The majority call for employment-related reasons. (In 2005, 57% called for employment-related reasons, 36% called for general/personal and social reasons, 6% called for study-related reasons.)

- ➢ School-aged callers typically call because they are thinking of leaving school due to lack of academic success. (School-aged callers are typically aged 14–16 years and at school.)

- ➢ Most callers enquiring for reasons related to being a volunteer tutor are 35 years and over and female.

- ➢ Callers aged 55 years and over tend to call for personal or social reasons. (Where employed callers over 55 years cite wanting to improve literacy or numeracy skills, at least 80% are male and concerned about losing their place in the workforce.)

Reasons for seeking help again

In 2005, 12% of callers had previously enrolled in an adult literacy program and 3% were currently receiving assistance.

Main reasons why seeking help again:

- ➢ Previous course did not offer flexibility needed for callers working irregular or long hours.

- ➢ Previous course was too short.

- ➢ Caller relocated and was seeking a new provider.

- ➢ Caller's employment or personal circumstances initially forced him or her to discontinue study but those circumstances have since changed.

Source: Statistics on the Reading Writing Hotline were sourced by NCVER from NSW TAFE Access and General Education Curriculum Centre reports

Exhibit 11:   Types of provision

Provision of language, literacy and numeracy training

In Australia at present the provision of adult literacy, numeracy and English as a second language education primarily falls into the following five types:

- ➢ 'front-end' (or stand-alone) programs which explicitly target language and literacy

- ➢ vocational education and training (VET) programs which provide integrated literacy or numeracy training as part of a vocational training package qualification

- ➢ workplace-based programs, including the Workplace English Language and Literacy (WELL) program, in which training can either be integrated into specific work-related training or offered as a parallel program

- ➢ provision through labour market programs for people who are unemployed via the Language, Literacy and Numeracy Program (LLNP)

- ➢ community-based programs, that are often informal non-accredited programs delivered in community environments

Adult language, literacy and numeracy education programs and activities are funded independently or jointly by Commonwealth and State and Territory governments, community organisations, and individuals. Commonwealth and State and Territory governments provide funding aimed at improving access to education (including basic skills education) of all Australians. In addition, providers across states and territories may independently tender for government funding to deliver such programs. Funding is also available which prepares individuals to learn other basic life skills including food preparation and budgeting. Individuals who require basic skills training may also access such training from commercial providers, family and friends and local community organisations. In some states and territories, local libraries also provide at no cost English language skills for beginners. The Commonwealth (federal) government funds the provision of the Language, Literacy and Numeracy Program, the Workplace English Language and Literacy Program, and the Adult Migrant English Program (AMEP).

Modes of delivery – integrated VET programs

Modes of delivery
Off the job
Training and assessment delivered predominantly off the job by a vocational generalist
Off the job with literacy, language and numeracy support
Training delivered predominantly off the job; language, literacy and numeracy support provided by a language, literacy and numeracy specialist
On the job
Training and assessment delivered on the job by a vocational generalist
On the job with literacy, language and numeracy support (Workplace English Language and Literacy [WELL] Programme-funded)
Training and assessment delivered on the job; language, literacy and numeracy support by a language, literacy and numeracy specialist

Source: *Integrated approaches to teaching adult literacy in Australia: a snapshot of practice in community services*, Rosa McKenna and Lynne Fitzpatrick, NCVER, (2005)

Exhibit 12: Total provision of language, literacy and numeracy training

There is still not a complete picture of the total provision of language, literacy and numeracy training in Australia.

However, research is currently underway (Foley & Cavallaro, forthcoming and Schueler, in progress) on the extent of literacy and numeracy provision through 'standalone' courses and the extent of literacy and numeracy units of competency that are 'embedded' in vocational subjects and courses. A survey is also underway to determine the extent of community-based non-accredited LLN provision (Dymock, in progress).

Australian vocational education and training statistics: Adult literacy and numeracy courses 2002–2004

This report tabulates data on general education programs, social skills courses, employment skills courses and other mixed field programs. These programs cover what would conventionally be described as literacy and numeracy programs, plus some other activity, hence the findings overstate in part the level of standalone literacy and numeracy activity. The report does not include data on literacy and numeracy embedded in other vocational courses or English language courses.

➢ There were 188 300 students enrolled in literacy and numeracy courses in 2004, which represents 11.8% of total VET students.

➢ In recent years there has been an overall growth in literacy and numeracy activity, at a time when total publicly funded VET activity has marginally declined. In 2002, all literacy and numeracy courses represented 11.3% of total VET annual hours. This increased to 12.8% of total hours in 2004.

➢ Six out of every ten literacy and numeracy students (115 300 or 61.2%) were enrolled in general education programs, with a further 21.6% (40 600 students) in employment skills courses and 15.9% (30 000 students) in other mixed field programs. The remaining 1.3% of literacy and numeracy students (2500 students) were enrolled in social skills courses.

➢ Literacy and numeracy activity continues to be dominated by:
  ♦ females (54.8% in literacy and numeracy courses, 47.7% in VET)
  ♦ persons aged between 30 and 49 years (38.5% in literacy and numeracy courses, 35% in VET)
  ♦ persons from English speaking backgrounds (58.9% in literacy and numeracy, 69.0% in VET).

➢ The majority of literacy and numeracy course enrolments are in non-AQF (Australian Qualifications Framework) areas - 33.6% in miscellaneous education and 21.9% in non-award courses. Within the AQF, activity is dominated by certificate I (20.8%), with also significant numbers of certificate II (11.4%).

➢ Although literacy and numeracy students have somewhat lower levels of achievement from their courses and subjects than the average for the total national VET student, they report higher levels of satisfaction with the overall quality of their training.

Number of annual hours for literacy and numeracy courses, by field of education, 2002–2004

Field of education course		Total hours of delivery ('000)			% change 2002–2004
Number	Description	2002	2003	2004	
1201	General education programs	25 239.7	31 664.5	31 940.2	26.5%
1203	Social skills courses	311.8	256.5	404.9	29.8%
1205	Employment skills courses	12 928.4	10 039.5	9 572.8	-26.0%
1299	Other mixed field programs	570.6	1 023.7	1 953.3	242.3%
TOTAL literacy and numeracy hours		**39 050.5**	**42 984.2**	**43 871.1**	**12.3**
TOTAL VET hours in courses*		**339 279.9**	**347 632.6**	**338 724.4**	**-0.2**
TOTAL VET hours (all enrolments)		**345 065.9**	**351 714.7**	**342 396.7**	**-0.8**

*Total excludes subject-only enrolment hours

Literacy and numeracy courses: student profile, 2004

Literacy and numeracy student profile, 2004
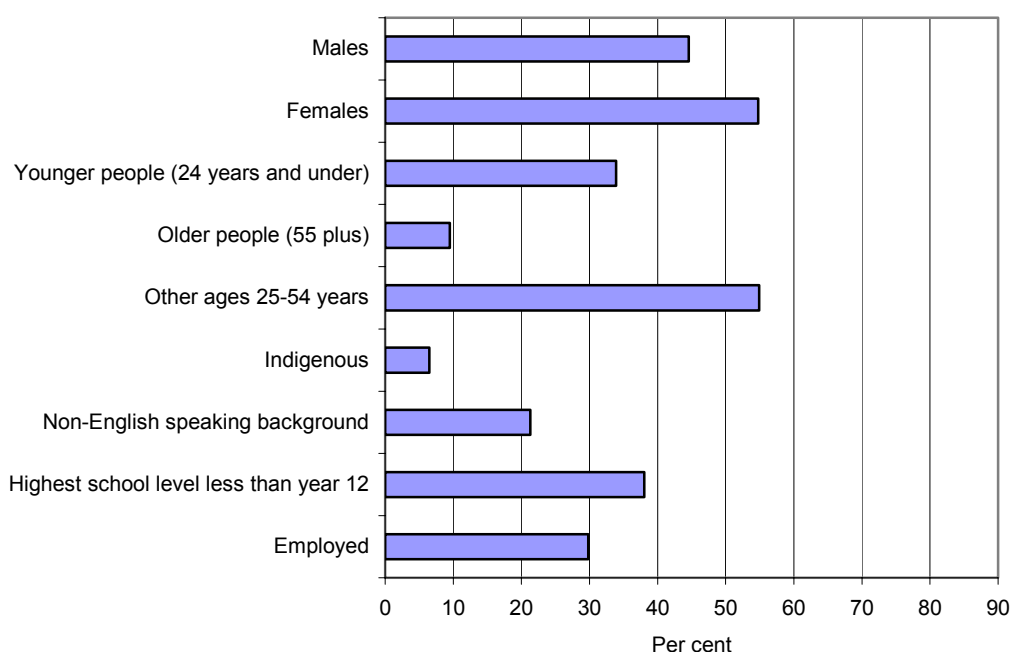
Caveat: The literacy and numeracy student data has unknown data (unknowns not shown in graph). The unknown proportions are particularly high for Indigenous status (20%), highest educational level (32%), employment status (28%) and language spoken at home (20%).

Number of annual hours of literacy and numeracy activity, by outcome, 2004

Outcome	L&N course programs[1]		L&N subject programs[2]		Total VET	
	No.	%	No.	%	No.	%
Achieved/pass	482,986	48.8	1,006,443	60.0	8,117,190	68.0
Not achieved/failed	119,385	12.1	149,595	8.9	922,572	7.7
Withdrawn	153,150	15.5	149,202	8.9	1,045,686	8.8
Recognised prior learning	8,005	0.8	44,443	2.7	355,349	3.0
Credit transfer	0	0.0	0	0.0	0	0.0
Continuing enrolment	25,873	2.6	105,807	6.3	760,405	6.4
Satisfactorily completed	183,083	18.5	205,506	12.3	669,356	5.6
Not completed	16,846	1.7	15,642	0.9	57,805	0.5
Total	**989,328**	**100.0**	**1,676,638**	**100.0**	**11,928,363**	**100.0**

L&N course programs is where the whole course is related to L&N

L&N subject programs is for individual subjects that are related to L&N

Source: *Australian vocational education and training statistics: Adult literacy and numeracy courses 2002–2004*, Paul Foley and Toni Cavallaro, NCVER (forthcoming)

Adult language, literacy and numeracy provision embedded in VET courses

A current NCVER study (Schueler) will identify language, literacy and numeracy activity in vocational education and training courses by using modules and units of competency. This will result in a more in-depth analysis of 'embedded' language, literacy and numeracy activity in vocational education and training.

As an example—an analysis of the associated courses in the Qualification Field of Education for Building identified by modules/units of competencies coded to literacy and numeracy shows the content of embedded literacy and numeracy courses and the enrolments.

0403 Building Qualification Field of Education by Course Name, Module/UOC name and module enrolments within 120103 Literacy and Numeracy Field of Education, 2004

Course name	Module/UOC name	Enrolments
ADVANCED DIPLOMA OF BUILDING SURVEYING	NUMERACY AND MATHEMATICS – INTRODUCTORY	17
ADVANCED DIPLOMA OF BUILDING SURVEYING	READING AND WRITING – INTRODUCTORY	28
CERTIFICATE I IN BUILDING & CONSTRUCTION (PLUMBING)	NUMERACY & PROBLEM SOLVING	225
CERTIFICATE I IN CONSTRUCTION	READING AND WRITING – INTRODUCTORY	5
CERTIFICATE I IN CONSTRUCTION	READING AND WRITING I	1
CERTIFICATE I IN CONSTRUCTION	REMEDIAL (20 HRS)	8
CERTIFICATE I IN INTRODUCTION TO CONSTRUCTION	CGEA1 – NUMERICAL & MATHEMATICAL	53
CERTIFICATE I IN INTRODUCTION TO CONSTRUCTION	CGEA1 – READING & WRITING	45
CERTIFICATE I IN INTRODUCTION TO CONSTRUCTION	CGEA2 – NUMERICAL & MATHEMATICAL	21
CERTIFICATE I IN INTRODUCTION TO CONSTRUCTION	CGEA2 – READING & WRITING	21
CERTIFICATE II IN HOUSING REPAIRS & MAIN ATSI	LITERACY AND NUMERACY	19
CERTIFICATE III IN CARPENTRY & JOINERY	REMEDIAL (20 HRS)	16
CERTIFICATE III IN FLOOR COVERING AND FINISHING	CARRY OUT MEASUREMENTS AND CALCULATIONS	27
CERTIFICATE III IN FLOOR COVERING AND FINISHING	COMMUNICATE IN THE WORKPLACE	24
CERTIFICATE III IN GENERAL CONSTRUCTION (BRICK/BLOCK)	REMEDIAL (20 HRS)	2
CERTIFICATE III IN GLASS AND GLAZING	CARRY OUT MEASUREMENTS AND CALCULATIONS	45
CERTIFICATE III IN GLASS AND GLAZING	COMMUNICATE IN THE WORKPLACE	25
DIPLOMA OF BUILDING	NUMERACY & PROBLEM-SOLVING	1

What is clear from this analysis is that modules/units of competency with language, literacy and numeracy related names are identifying qualifications/courses in areas other than the traditional mixed field programs, general education, social skills, employment skills and other mixed fields. Therefore it could be misleading only to include mixed field programs as the basis for literacy and numeracy course analysis.

The example shown above only focuses on one field of education. Analysis of the other language, literacy and numeracy related module/unit of competency fields of education to identify LLN embedded courses will provide an extensive insight into the spread of language and literacy across other areas.

In addition to modules/units with titles that explicitly identify language, literacy or numeracy content there are numerous units that contain LLN content at performance criteria or single learning outcome level. This is a level of literacy content and effort that is unquantifiable.

Source: *Identifying language, literacy and numeracy activity in VET courses*, Jane Schueler, NCVER, (forthcoming)

Adult literacy provision in community settings: diverse approaches and outcomes

The purpose of this research project is to obtain as full a picture as possible of non-accredited adult language, literacy and numeracy provision across Australia. In addition to basic demographic data about the students, information will be obtained about their motivations and outcomes, what forms of assessment are used, pathways to other education, training and employment, and quality control and professional development. The result will be a national database of community language, literacy and numeracy providers, providing the first comprehensive profile of this important sub-sector, along with a report on their students' characteristics, motivations and outcomes.

A nationwide questionnaire (predominantly web based) is being conducted during April – May 2006. To date there has been excellent support from a range of organisations (see table). Some organisations have provided databases; others have offered to send the questionnaire out through

their own databases; others have provided advice on accessing databases or feedback on the draft questionnaire.

In addition, case studies will be conducted in Queensland, Victoria and Western Australia. The due date for the report is November 2006.

LIST OF ORGANISATIONS PROVIDING ADVICE AND/OR ASSISTANCE FOR NON-ACCREDITED COMMUNITY ALLN SURVEY (as at 14 April 2006)	
National	Adult Learning Australia
	Australian Council for Adult Literacy
	Reading Writing Hotline
	Migrant Resource Centres
	SPELD Australia
Australian Capital Territory	Home Tutor Scheme
	Links to Learning
	CIT Solutions
New South Wales	NSW Department of Education & Training ACE programs
	Home Tutor Scheme
Northern Territory	Home Tutor Scheme
	Community Settlement Services Scheme
Queensland	Department of Employment and Training
	Lifelong Learning Council QLD
	Migrant Resource Centres
	Queensland Council for Adult Literacy
	Caboolture Community Adult Literacy Group Inc
South Australia	Department of Further Education, Employment Science & Training : ACE & Community Partnerships Unit
	Home Tutor Scheme
	Home Tutor Enhancement Project
Tasmania	Home Tutor Scheme
	Department of Education
Victoria	ACFE – Regional Councils
	Victorian Adult Literacy & Basic Education Council
	University of Third Age
Western Australia	Home Tutor Scheme
	Read Write Now
	Learning Centre Links
	Adult Migrant Education Services
	Department of Education & Training

If you would like to participate in this study please contact Dr Darryl Dymock, Centre for Learning Research, Griffith University, <d.dymock@griffith.edu.au>. The end of the data collection period is 31 May 2006.

Source: *Diverse approaches and outcomes: community adult literacy provision in Australia*, Darryl Dymock, NCVER, (forthcoming)

What works

Exhibit 13: What works – agreed focus and parameters

STEPS program: Families in focus – mobile literacy mentoring project, TAFE NSW Riverina Institute

> A key strength of the STEPS project was the clear planning and focus of the project's purpose and operational framework. Below is an excerpt from the final report outlining features of an effective community-based project. The full report is available from <http://www.dest.gov.au/literacynet/resources1.htm#Community>

Why have a community-based program?

Families exist within a community. Jay (2004)[2] says that effective community-based learning programs share several factors that make them work. They:

➢ are 'life wide', blurring educational boundaries

➢ are dependent on multi-skilled partnerships and teams

➢ are multi-modal (move away from the emphasis on written text)

➢ are humanised as well as customised

➢ are project-based

➢ offer a 'back-door' approach to skills development

➢ often focus on shared narratives

➢ are situated in real-life contexts and focus on learner interests and needs

Similarly, the effective elements of community-based language, literacy and numeracy programs have been outlined by Peterson (2001). He says that they should meet the daily needs of learners, that learning should be fun and put learning into the real world. Learners should learn to value themselves and make connections with others, stepping out confidently in the world to learn from each other. Teachers should help participants to find the right key to open the door to new possibilities and pathways to further education and employment.

Source: 2005 Adult Literacy Innovative project; <http://www.dest.gov.au/literacynet/resources1.htm#Community>

Correctional services language, literacy and numeracy prisoner intake tool

> The development of this indicator tool was in response to a number of key issues identified nationally by correctional services educational managers and staff. The language, literacy and numeracy (LLN) skills of prisoners are an issue not just for prisoner educators. These skills impact on a prisoner's capacity to engage in educational programs and vocational planning, as well as their ability to engage actively in rehabilitation programs in prison.

> This LLN indicator tool is designed to provide a snapshot of the skill levels of prisoners entering facilities across Australia. It may be conducted by an officer or an educator, usually in the induction phase of prisoner admission. It assists in appropriate referrals of individuals to specialist language, literacy and numeracy evaluation and in broader institution-wide program planning. It was developed to provide the national correctional services with a common framework and language to describe their practice, using the National Reporting System as the base tool.

---

[2] Jay, R 2004 Rethinking models of literacy provision for the 21st Century, Knowledge Tree e-journal

Example – correctional services tool

CASE MANAGEMENT REFERRAL FORM

Report from LLN Assessor to Case Management Team   Today's Date

Prisoner's Name _____

ID Number   _____ Remand/Sentence Details_____

1. Initial screening indicates that this prisoner has sound Language, Literacy and Numeracy skills and has independently completed the attached education and training profile. No further action recommended.	
2. Initial screening indicates this prisoner has LLN skills detailed below.	
NRS Not yet achieved	
Prisoner has very limited English LLN skills and requires 1:1 support in a learning or interview setting. May need an interpreter. Recommend intensive LLN support to meet basic needs.	
NRS 1	
Reading	Has limited reading skills but may be able to recognise signs, symbols and day-to-day common words with assistance.	
Writing	May be able to complete personal information about self with assistance. May write a simple message or note.	
Numeracy	Can use maths with support in everyday life (may know the date, tell the time and can estimate or count out money).	
Prisoner needs assistance to read or write in most settings and requires support to understand very familiar texts, symbols or information. May require 1:1 support in a learning setting. Recommend LLN support to meet basic needs.		
NRS 2		
Reading	Can read and interpret short familiar texts and sentences which relate to everyday life experiences. Locates information from graph or diagram formats with support.	
Writing	Can write about a familiar topic with support. Writing can be understood by a sympathetic reader. Begins to plan and review own writing.	
Numeracy	Can use basic operations to solve mathematical problems. Recognises simple decimals and fractions. Interprets, compares and calculates money in personal contexts.	
Prisoner needs LLN support to read most instructions and study materials. May access AQF 1 level courses with LLN assistance. Recommend access to LLN support either 1:1 or small group setting.		
NRS 3		
Reading	Can read a brochure or booklet but may not understand fully if not directly related to own experiences. Can draw together many pieces of information to generate meaning.	
Writing	Can write in paragraphs which make sense. Able to plan, draft and edit own writing.	
Numeracy	Uses decimals, fractions and percentage in problem solving settings. Collects information and can present this in a graph or table format.	
Prisoner needs assistance to access AQF 1–2 level study. May have difficulty reading and writing in less familiar contexts. Recommend some LLN support for vocational training or prison programs.		

NRS 4		
Reading	Reads and interprets complex texts in specialised fields (e.g. Community Services, Accountancy or Horticulture) which may require some judgements. May distinguish fact from opinion.	
Writing	Matches writing style to various purposes and audiences. Writes clearly using specific vocabulary, range of styles, purpose and audience.	
Numeracy	Uses formulae to problem solve tasks for familiar settings; e.g. cooking, mixing chemicals, area and volume. Compares and analyses different products; e.g. quality and cost comparisons.	
Prisoner able to access AQF 1–3 level study. May need assistance with specialised texts or reports but generally able to independently participate in educational and work programs.		
NRS 5		
Requires little or no support to independently study across a broad range of contexts. Can evaluate complex, specialised information which may have multiple interpretations.		

Source: 2005 Adult Literacy Innovative project; <http://www.dest.gov.au/literacynet/resources1.htm#Assessment>

Exhibit 14:   What works – integrated learning

Integrating literacies: Using partnerships to build literacy capabilities in communities

The following key elements were identified amongst successful workplace programs in Rosie Wickert's and Jenny McGuirk's study. These are not exclusive to workplace settings and could transfer to and facilitate successful approaches in broader community partnerships.

They include:

➢ ensuring sustained targeted funding is linked to a deliberate and explicit strategy, with time to embed effective models and approaches

➢ obtaining commitment from all levels of the organisation and clear understandings of the various roles, responsibilities and outcomes

➢ acknowledging that there are various approaches to integrating literacy skill development, and that choice of approach is linked to the objectives of the organisation, and to local conditions

➢ ensuring participants are willing to be flexible and work as a team

➢ building the appropriate knowledge and skills in training workers in other sectors

➢ training literacy specialists in the context and culture of the community setting, and in expertise at building cross-sectoral partnerships, including using appropriate language

➢ finding skilled and flexible facilitators with broad life experiences who are able to apply up-to-date understandings of literacy theory

➢ providing the integrative infrastructure and frameworks that clarify how to recognise and credit literacy learning outcomes and potential learning pathways.

The most significant lesson is that integrating literacy in workplace training has been a deliberate top-level policy commitment for more than ten years. Many resources have been provided to support this and the VET system infrastructure provides the framework for this development to occur.

Source: *Integrating literacies: Using partnerships to build literacy capabilities in communities*, Rosie Wickert and Jenny McGuirk, NCVER, (2005)

Skills for Living Program – Bremer TAFE

This project created an effective learning environment for a group of unemployed women who had not achieved success within the mainstream schooling system. Many were isolated and at home with young children. The program integrated literacy content into a life skills and cooking course. Participants were encouraged to bring their children with them. Participants helped to shape the way in which the program was run resulting in a full retention rate and positive outcomes.

St Vincent De Paul Family Support Centre of Inala approached the Bremer TAFE in mid-2003 seeking assistance in making their clients less reliant upon their services. The clientele they were dealing with needed assistance with basic living skills. There was some concern, however, that the low literacy levels and commensurate low self-esteem levels would intimidate the students and prevent them from either engaging with, or finishing, a course. In response to this need, and these concerns, Bremer devised a short practical course that would be delivered at the centre in order to minimise the clients' anxiety, provide them with a positive learning experience and help them take more control of their lives in relation to budgeting and preparation of food.

Ten clients started the course and all ten clients finished the course. The course chosen was from the Certificate 1 in Vocational Access 15051 with the module being Lit 212 – Literacy for a Personal Focus. This unit has six outcomes and this structure eventually helped inform the decision to run the course for six weeks, doing one outcome per week. The feedback at the completion of the course from the clients was overwhelmingly positive, resulting in further requests from community groups in the Inala area for similar courses.

Gaining knowledge that would empower students to make decisions that would allow them and their families to lead a healthy and safe lifestyle was the main thread running through the units. The management of the community organisation centred their main service on food parcels, so it followed that the areas of food safety, economical shopping for food and keeping the family safe and healthy would be essential in the course development. Central to the theme of empowerment was assertiveness training and this was a skill that the management indicated was lacking in most of their clients. Not only did the students need to know when they were entitled to a refund, they also needed to know what to say or write to achieve a satisfactory result. Therefore written and oral communication was included in the program.

At each session a simple economical recipe was included in the resource booklet, which was based around the items that the organisation included in food parcels. During the morning tea break the meal was cooked and the students and their children ate what had been prepared. Many of the students indicated that this food was often their first meal of the day. The discussion around the kitchen table as the students and their children ate the prepared food was enlightening. Comments such as:

 'This tastes better than Macca's.'
'Now I won't have to eat for the rest of the day.'
'Can I take some home for the other kids – there is no food in the house.'

 In relation to their children eating:
'He normally doesn't eat food that doesn't come from Macca's'
'I can't believe she wants more – I can never get her to eat at home.'

Source: 2005 Adult Literacy Innovative project; <http://www.dest.gov.au/literacynet/resources1.htm#Community>

Literacy support for Indigenous people – systems that work

More Indigenous students in vocational education and training are now studying for lower-level qualifications than for non-award or enabling skills courses. However, their pass rates are low and withdrawal rates are high, compared to non-Indigenous students. General difficulties with literacy and numeracy, and English not being a first language, may be contributing to Indigenous underperformance in the VET system. This study examined literacy and numeracy support structures for Indigenous students.

One-on-one support was identified as the most effective method of literacy and numeracy support for Indigenous VET students. This can be either teacher–student or tutor–student.

The two systems that utilise one-on-one support are:

➢ in-class tutorial support

➢ peer tutoring—either formal or informal.

Where learning support centres are the only support system available, the teacher/trainer should personally take the student to the centre, introduce them to the tutors and follow up to ensure the student is attending sessions.

Adult learning best practice

➢ Respect student as an adult learner having prior knowledge and skills.

➢ Understand student's individual background, including cultural and educational background.

➢ Develop a positive relationship with each student.

➢ Seek student input to determine what the student wants to get from the learning experience.

➢ Encourage collaboration between literacy and numeracy specialists and vocational teachers.

➢ Administer relevant, pre-course assessment that specifically identifies literacy and numeracy levels in an informal environment that provides oral support as required.

Indigenous-specific best practice

➢ Understand cultural protocols and attitudes to family, time and community.

➢ Be aware that Indigenous students may not always ask for help or clarification; offer explanations in plain English and frequently ask if students understand.

➢ Be aware that, for many Indigenous students, English is their second, third or fourth language; employ English-as-a-second-language strategies.

➢ Undertake cultural awareness and cross-cultural competency training. Start with a cultural awareness course but ensure the process is ongoing by seeking out Indigenous advisors and mentors.

Appropriate resources

➢ Use relevant, real-life texts customised to individual needs.

➢ Ensure resources are culturally appropriate.

➢ Ensure resources are age appropriate.

➢ Ensure appropriate literacy and numeracy levels.

➢ Incorporate appropriate literacy and numeracy instructional design principles—font type and size, plenty of white space, wide margins, plain English.

- ➤ Build a working relationship with dedicated learning support centres and physically take students to the centre, introduce them to support staff and follow up with encouragement to attend sessions; encourage flexible arrangements.
- ➤ Recognise that the ideal class size is ten people.

Indigenous input/consultation

- ➤ Encourage Indigenous input at all stages (formal and informal) including design, development and delivery.
- ➤ Collaborate with Indigenous staff.
- ➤ Collaborate with the local Indigenous community.
- ➤ Seek out successful models of collaboration, including community advisory boards.

Resource list

Resources should be relevant, real-life texts customised to individual students' needs. Some suggestions are:

- ➤ newspapers
- ➤ magazines related to topic, trade area etc.
- ➤ advertisements
- ➤ yellow pages
- ➤ menus.

The exceptions to the above advice were the following two resources which were frequently recommended by teachers:

- ➤ *Strength in numbers: A resource book for teaching adult numeracy,* by R Goddard, B Marr and J Martin, Language Australia, Melbourne, 1996.
- ➤ *Numeracy on the line: Language based numeracy activities for adults,* by B Marr, C Anderson and D Tout, Language Australia, Melbourne, 1994.

Associations

- ➤ Australian Council for Adult Literacy and associated state councils <http://www.acal.edu.au>

Websites

- ➤ Literacy Net <http://www.dest.gov.au/literacynet/resources.htm>
- ➤ Literacy and Numeracy for VET: the nuts and bolts of vocational education and training <http://www.decs.act.gov.au/publicat/litnumVET/vet0005.htm#streams>
- ➤ National Adult Literacy Database—Canada's Adult Literacy Information Network <http://www.nald.ca>
- ➤ Online literacy and numeracy resource centre for trainers and assessors (no. 425 listed under Equity Toolboxes) <http://www.flexiblelearning.net.au/toolbox>
- ➤ Skillswise <http://www.bbc.co.uk/skillswise/>

Source: *Literacy support for Indigenous people: Current systems and practices in Queensland*, Narelle McGlusky, Lenora Thaker, NCVER, (2006)

Literacy support for people from a non-English speaking background – systems that work

This project investigated the participation and awareness of vocational education and training in six ethnic communities—Arabic, Bosnian, Cantonese, Spanish, Turkish and Vietnamese. A number of factors which impact on participation in, and completion of, training was identified.

➢ The primary preference is for vocational programs with integrated English language support.

➢ Enrolment and completion in vocational education and training are strengthened in programs that:

♦ provide clear pathways into employment

♦ provide language support

♦ acknowledge and address cultural issues

♦ have teachers who understand issues faced by trainees (cultural, language and settlement), and who have, in turn, the ability to explain cultural and professional values and practices to trainees

♦ acknowledge trainees' existing vocational skills

♦ include work experience in their training.

The research also highlights differences between, and amongst people from the different language groups. Communities are different and unique. It is not very useful to speak generically of 'people from a language other than English background'. Different waves of migration create differences within the same language group. There are pockets of multiple disadvantage within some communities. Some groups of people are seen to face greater difficulties in relation to participation and completion of VET programs.

Source: *Factors impacting on vocational education and training participation and completion in selected ethnic communities*, Judith Miralles, NCVER, (2004)

Exhibit 15:   What works – relationships

Newcastle Library - linking literacy to information literacy

This project identified a relevant reason for Indigenous community members to engage with library services. The results of increased literacy levels, strengthened community networks and new relationships between the learner group and the library combine human and social capital outcomes and illustrates many of the features of Indigenous specific best practice (see literacy support for Indigenous people in exhibit 14).

Linking Literacy to Information Literacy was a pilot project targeted to adult Aboriginal learners which aimed to combine literacy teaching with information literacy teaching in a public library setting. Based around the theme of family history, the selected course content of the project was designed to be culturally affirming for participants and appropriate to their needs.

The objectives of the project were not only to improve the literacy and information literacy skills of participants, but also to demonstrate the practical applications of these skills, allow participants to become familiar with the library and its services, and build partnerships between the Aboriginal community and the library.

Participants benefited from the project in a multitude of ways—their literacy skills were tested and built upon, they became familiar and comfortable in the library, they learnt how to find and use information to achieve set tasks, and benefited from the cross-generation social interaction. The project also allowed the library to build valuable and lasting partnerships with Aboriginal organisations and community members.

 This is a project that could be easily replicated by public libraries across Australia wishing to provide targeted training opportunities for their Aboriginal communities.

Overall, all involved with this project felt that it was an extremely valuable exercise and, despite the challenges faced by the organisers, that it was a success.

While only half of the participants registered an improvement in their literacy levels at the completion of the 10-week course, the value of this training should not be under-estimated. In his summary of the course, the literacy trainer made the following comments:

> The real benefit for these people was reflected in their confidence and desire to learn and research more about their family histories. Even the difficulties with utilising technology through computers in the beginning became something that was not as intimidating towards the end. This was a good achievement in itself for these elders to access technology to tell and record their stories.

> You could see the confidence and pride in these people in telling stories of the family and youth growing up in their communities. This has been the tangible outcome of the project making learning interesting and instilling confidence through their identity.

This point was reflected in the participants' own evaluation of the course. Several comments centred on how much it meant to them to have been able to use the skills they learnt during the program find out about their ancestors, and to have this information recorded in a way they could share with their families.

Source: 2004 Adult Literacy Innovative Project; <http://www.dest.gov.au/literacynet/resources1.htm#Community>

Exhibit 16:   What works –capabilities of learner focus

Contradicting the stereotype

This study set out to investigate how successful people with limited literacy have achieved and sustained employability. The researchers were interested in participants' resilience in the face of significant setbacks and whether their strategies are transferable to the contemporary and often fluid worlds of work and employment. The researchers were also interested in whether literacy teaching had been of assistance, and what teaching approaches, interventions and resources have assisted in achieving sustainable employability.

Employability, resilience and transferability

In relation to questions on employability, resilience and transferability, the findings highlight the importance of:

➢ the individual's sense of personal autonomy, self-direction and identity

➢ the ability of the individual to accept responsibility for his/her own life and learning

➢ the capacity for critical and independent thinking—which is not dependent upon literacy skills

➢ the role of family, friends, employers and others in providing strategic support to enable individuals with literacy difficulties to maintain self-esteem and develop positive strategies for learning and personal development. In many cases, these relationships have sustained individuals in spite of the corrosive effects of their experiences in education

➢ the need for assistance to employers and educators to help them enable people with limited literacy to make contributions commensurate with their potential.

Literacy, teaching strategies and resources

In relation to questions on literacy, teaching strategies and other resources, the findings highlight the importance of:

➢ the relative and subjective nature of 'literacy'—which takes different forms and has different meanings (and value) according to the lives people lead

➢ the relative importance of other (non-literacy) skills which might be characterised as 'generic' and/or employability skills

➢ the role of multiple intelligences (Gardner 1985, 2003), particularly those other than linguistic intelligence which provide 'alternative' strengths, strategies and pathways

➢ the value of appropriate technological aids, including digital technologies which enable individuals to function more independently (for example, speech recognition software).

Technological assistance can overcome many of the barriers, but the technology is not promoted as an option to employers, educators or people with literacy difficulties (as, for instance, it may be for people with more recognised disabilities). Some helpful technologies are also expensive and no assistance is available to defray the cost.

One of the significant findings of this study is its reinforcement of the observation that schools and adult education providers teach particular literacy/ies. Teachers' expectations of learners may

be shaped within relatively narrow, scholastic interpretations of what counts as successful reading and writing. When these expectations are not met, for whatever reasons, it is often the learners (rather than the expectations) who are deemed to have failed. The lives of the individuals

represented in this study show that broader interpretations and multiple pathways to success are possible.

The study also suggests the value of re-thinking assumptions about what is 'essential' or 'necessary', and asking whether, in some circumstances, there might be equally legitimate, but quite different ways to move forward.

Issues and implications

The study raises issues and implications for diverse groups with interests in adult literacy, vocational education and employment. These audiences include: adult literacy and vocational educators; academics, researchers and teacher educators; adults with literacy difficulties; school teachers; employment/careers advisors (the pathmakers); education policy-makers and employers/human resources personnel (the gatekeepers). The implications for each of these particular audiences are discussed in the report. However, taken as a whole, and in brief, the study found the following issues and implications to be the most important.

> It is important to focus on the positive and on a person's capabilities (rather than perceived deficits). This approach opens up possibilities for learning, personal development, and vocational success.

> While it is increasingly significant, literacy is not the only criteria for personal, vocational or employment success and critical thinking; education and achievement are not dependent upon literacy (although it may help).

> Literacy takes many legitimate shapes and forms—the teacher's literacy is not the only one.

> People with minimal formal literacy may have exceptional skills (including entrepreneurialism and creative capacities), which may be hidden behind a veil of uncertainty and apprehension.

> There is value in identifying, developing and celebrating multiple forms of intelligence and capability within learners and recognising that the 'new basics' include developing diverse capacities for 'learning how to learn'. A key dimension of this is developing a positive sense of self as a learner—an identity, self-concept and self-confidence which enables robust learning and the capacity to rebound from setbacks.

> Employees not practising conventional or expected literacy skills are likely to conceal their non-compliance unless employment relationships are open and trusting.

The study also suggests the value of:

> recognising the strategic role of social, kinship, and other relationships within which the learner is embedded. Literacy is a social practice. Hence the value of others—friends, family, partner, workmates etc.—who can provide a web of support, both personal and practical, should not be ignored

> re-thinking and broadening the concept of 'disability' and 'disability/learning support services' to enable adults with literacy difficulties to access appropriate support services. This is particularly important in the context of initiatives to address lifelong learning, the retention of older workers and the needs of an ageing population

> helping learners in some instances to disconnect their sense of self-worth from literacy achievement, thus lifting the 'weight' from literacy, making it easier to bear and to learn

> recognising and legitimating 'para-literacy' skills which may help to build autonomy and independent learning

> recognising the importance of supportive technologies, including digital technologies, not only to facilitate literacy learning, but to provide tools which facilitate 'alternative'

strategies (which may actually involve less reading and less writing in the conventional sense), but which will support the learners in their journeys towards their goals

➢ undertaking further research to illuminate the diverse para-literacies in action within workplace and educational settings, thereby providing more appropriate advice, resources and information to employers and educators to accommodate workers and learners who cannot easily decipher or produce text.

Source: *Contradicting the stereotype: Case studies of success despite literacy difficulties*; Peter Waterhouse and Crina Virgona, NCVER, (2005)

Practitioner needs

Exhibit 17 : Professional development activities, needs and attitudes

Professional development activities

There are currently no national databases which record the professional development activities of language, literacy and numeracy practitioners in Australia. It is also difficult to get information on engagement with professional development of the VET workforce in general. Some information is available from the New South Wales TAFE Access Division study (New South Wales TAFE Access Division 2001) and more current research of the professional development activities of the adult literacy and numeracy workforce. The New South Wales study indicates that managers and teachers keep up with what is happening in their field through the accessing of informal networks, conferences and professional reading. In addition, teachers' most recent involvement in professional development activities included moderation workshops for the Certificate of General Education for Adults (CGEA), National Reporting System training or moderation workshops and computer training sessions. In the main, these courses lasted one day or less and were delivered by external providers. This often provided difficulties for teachers in remote or regional locations in terms of cost and distance.

However, the Australian government has funded and continues to fund a number of national professional development initiatives to assist practitioners in the VET system to participate in professional development activities.

Source: Country background report: *Addressing the training and assessment needs of adults with low basic skills in Australia*, Josie Misko, (forthcoming), NCVER

Professional development by practitioner type

The biggest influence on professional development needs and attitudes is the sector in which the practitioner is located – specialist trainer, vocational trainer or volunteer. Even within the sectors there are significantly different experiences. Language, literacy and numeracy specialist teachers in community organisations, for example, operate under very different conditions from their colleagues employed by major VET providers. Teachers in major capital cities have very different access to professional development opportunities to that of their counterparts in small regional or isolated areas, and employment status has professional development implications for all paid language, literacy and numeracy workers.

Commonalities and differences in professional development issues across the sectors are highlighted in the following table.

Summary table – professional development by LLN practitioner type

	LLN specialist teachers	Vocational trainers	Volunteer tutors	WELL
Entry pathways	Teaching qualifications and postgraduate qualifications in English language, literacy and numeracy (LLN)	Industry qualifications and teaching qualifications	Minimum of initial volunteer training program	Industry qualifications and/or teaching qualifications
Attitudes to professional development	Keen to attend professional development which will develop teaching practice Limited interest in professional development focusing on administrative and workplace systems issues	Interested in awareness-raising, but many competing priorities and language, literacy and numeracy professional development not top priority	Want to improve teaching skills to better assist students, but are volunteer tutors not paid professionals	Want both formal and informal opportunities for professional development (PD) which will support teaching and learning practice. Believe there are few opportunities available—either when entering the field or ongoing.
Responsibility for professional development	Shared	Shared	Shared, but realistic about extent to which volunteer organisations can fund professional development	Shared, but believe the Workplace English Langauage and Literacy (WELL) secretariat could provide relevant infrastructure
Barriers to professional development	Time due to other work duties, especially reporting Funding constraints Relationship between employment status and access to professional development	Time due to competing work priorities Funding constraints Relationship between employment status and access to professional development	Time due to paid work and other life commitments Funding constraints	Time due to competing work priorities Funding constraints Relationship between employment status and access to professional development Tend to work in isolation outside of professional networks
Preferred professional development modes	Short hands-on practical sessions Limited interest in gaining further formal qualifications	Short hands-on practical sessions Improved lines of communication with language, literacy and numeracy specialist teachers	Informal support structures, such as opportunities for networking and information sharing with other volunteers and language, literacy and numeracy teachers	On-the-job shadowing and mentoring for new entrants Informal support structures, such as opportunities for networking and information sharing and reflecting on practice

	LLN specialist teachers	Vocational trainers	Volunteer tutors	WELL
Current and future skill gaps	Improving teaching practice	Improving teaching practice	Improving teaching practice	Balancing the PD needs of practitioners vis a vis managers—practioners want PD around the practical development and application of teaching materials and managers want practitioners to have the capacity to work more closely with industry, have better IT skills & better customise resources to needs of learners
	Dealing with needs of specific learner groups and changing learner profile	Dealing with needs of specific learner groups and changing learner profile	Dealing with needs of individual learners and specific learner groups	
	Accessing and developing appropriate learning materials	Accessing and developing appropriate learning materials	Accessing and developing appropriate learning materials	
	Information and communication technology skill development	Information and communication technology skill development	Information and communication technology skill development	
	Consistent and reliable assessment practice	Consistent and reliable assessment practice		A minimum qualification may be required for practitioners wishing to be involved in WELL in the future
	Skills to comply with increasing reporting requirements	Implementing training packages		

In addition, research indicates a number of key skills and attributes required by practitioners over and above language, literacy and numeracy qualifications. These include:

➢ experience in working with adults

➢ understanding and responding to cultural sensitivities

➢ flexibility

➢ integrity

➢ empathy

➢ ability to work independently

➢ ability to deal with a range of stakeholder needs

➢ good communication skills

Source: Adapted from Current and future professional development needs of the language, literacy and numeracy workforce, Sandra Mackay, Ursula Burgoyne, Diane Warwick & Jackie Cipollone, NCVER, (2006) and The professional development requirements of Workplace English Language and Literacy Programme practitioners, Tina Berghella, John Molenaar and Linda Wyse, NCVER, (2006)

Exhibit 18 : Professional development qualifications

Certificate IV Training and Assessment Package unit TAALLN401A - Address language, literacy and numeracy issues within learning and assessment practice

This unit is an elective. It was designed to support the practice of vocational teachers and workplace trainers and assessors. It is not designed as a literacy specialist unit. The following extract from the National Training Information Service (NTIS) is of elements and performance criteria only and is included as an indicator of the unit content only. The entire unit should be read in conjunction with the TAA packaging rules and assessment guidelines.

This unit specifies the competency required to recognise the language, literacy and numeracy (LLN) demands of training and assessment and tailor training and assessment to suit individual skill levels, including accessing relevant support resources.

Competency field

Language, literacy and numeracy practice.

Application of the unit

This unit addresses the skills and knowledge that trainers and assessors must possess to provide appropriate instruction and assessment to learners with language, literacy and numeracy needs within their vocational program drawing on the expertise of relevant professionals as required.

In this unit, 'learner' is used to mean the person wishing to improve their language, literacy and numeracy skills.

Relevant professionals include specialist adult language and literacy or numeracy practitioner.

Competence in this unit does not indicate that a person is a qualified specialist adult language, literacy or numeracy practitioner.

Elements of Competency and Performance Criteria

Element

TAALLN401A/01

Determine the language, literacy and numeracy requirements of the workplace training specifications, the learning program and assessment process

1.1 The level of key language, literacy and numeracy skills is determined from the training specification

1.2 The level of key language, literacy and numeracy skills required in the workplace and reflected in the learning program and planned assessment methods, are identified

1.3 Learner's individual learning plan is developed taking into account language, literacy and numeracy requirements

1.4 The assistance of LLN professionals is sought where necessary

Element

TAALLN401A/02

<u>Drawing on the assistance of specialist advice when required, interpret and apply validated tools and other sources of information to determine the language, literacy and numeracy</u>

2.1 The existing literacy skills of learners are determined using validated tools and other sources of information

2.2 The language proficiency of the learners is determined using validated tools and other sources of information

2.3 The existing numeracy skills of the learners are determined using validated tools and other sources of information.

Element

TAALLN401A/03

Develop vocational learning program and assessment methodology to take account of learner's language, literacy and numeracy skill levels and those required in the training specification

3.1 Vocational learning programs are customised to take account of individual learner's language, literacy or numeracy skills and the level of skills required within the training specification

3.2 Assessment methods and materials are selected and customised to take account of the learner's language, literacy or numeracy skills and the level of skills required within the training specification

3.3 Learning materials are selected, customised or developed that are appropriate for the language, literacy or numeracy skills of learners

Element

TAALLN401A/04

<u>Deliver and monitor a vocational learning and assessment program which takes account of learner's language, literacy and numeracy skill levels and those required in the training specification</u>

4.1 Learning support strategies are applied to assist learners to develop the reading, writing, speaking, listening and numeracy skills required within the training specification to achieve competency

4.2 Appropriate types of workplace communication are demonstrated in the learning and assessment context consistent with level of language, literacy or numeracy skill required within the training specification

4.3 Learning program and assessment methods are monitored and evaluated continuously to determine areas for improvement

4.4 Learner progress towards the achievement of language, literacy and numeracy skill levels required in the workplace for competent performance as determined by the training specificationare recorded in order to implement appropriate strategies

Element

TAALLN401A/05

<u>Access specialist learning support where required on the basis of evidence</u>

5.1 The need for specialist language, literacy or numeracy assistance for the learner is determined based on the scope of the training and assessment role and collected evidence about particular needs of the learner

5.2 Appropriate strategies for collaboration with specialist language, literacy or numeracy services are applied using organisational policies, protocols or guidelines

Source: The complete unit is available from the NTIS <www.ntis.gov.au> or contact Innovation and Business Skills
            Australia (IBSA) <http://www.ibsa.org.au/contactUS.jsp>

Advanced Diploma in LLN practice in VET 40499SA

This is a South Australian accredited course to be implemented in 2006. It provides a specialist VET qualification in adult language, literacy and numeracy.

The Advanced Diploma of Language, Literacy and Numeracy Practice in VET comprises nine units packaged as:

> ➢ (4) four core language, literacy and numeracy units; plus
>
> ➢ minimum (1) one elective unit from Group A; plus
>
> ➢ minimum (2) two elective units from Group B; plus
>
> ➢ (2) two additional elective units from Groups A, or B, or C.

All four (4) core and five (5) elective units must be undertaken to be awarded with the Advanced Diploma of Language, Literacy and Numeracy Practice in VET.

Unit title	National code	TAFE SA code	Nominal Hours
Core (all required)			
Conduct initial assessment for placement within an adult language, literacy and numeracy program	TAALLN601A		120
Apply adult literacy methodologies to develop literacy skills	TAALLN606A		120
Apply adult numeracy methodologies to develop numeracy skills	TAALLN607A		120
Apply adult TESOL methodologies to develop English language skills	TAALLN609A		120
Electives			
Group A (select one minimum)			
Apply strategies to assist learners develop English language, literacy and numeracy	TAALLN401A		120
Coordinate adult English language, literacy and numeracy tutors	TAALLN501A		120
Group B (select two minimum)			
Design courses for adult language, literacy and numeracy and general education	TAALNN602A		120
Design workplace strategy for adult language, literacy and numeracy	TAALLN603A		120
Provide specialist adult language, literacy and numeracy services in a workplace learning environment	TAALLN604A		120
Provide specialist adult language, literacy and numeracy services in an institutional environment	TAALLN605A		120
Develop general education through an accredited course	TAALLN608A		120
Group C: units from the Training and Assessment (TAA) 04 Training Package (A minimum of 100 hours (i.e. at least 2 units) may be chosen from this section)			
Design and develop learning resources	TAADES502A	NFPA	40
Research and design e-learning resources	TAADES503A	NFPB	40
Provide advanced facilitation to support learning	TAADEL503A	NFPG	50
Lead and coordinate assessment services	TAAASS503A		
Tender for projects/services	TAATAS502A	NFPT	40
Coordinate provision of training/assessment service	TAACMQ503A	NFPN	50

Source: Accreditation document TAFE SA;
Proponent details are on the NTIS at <www.ntis.gov.au/Default.aspx?accreditedcourse/40499SA>

Exhibit 19: Professional development frameworks and programs

National frameworks and programs

The provision of specific professional development activities for adult literacy and basic education practitioners can be traced back to the early 1990s with the implementation of the Training Reform Agenda. The principles which underpinned this provision continue to be important for the provision of professional development in the VET system.

Frameworks

In 1991 the National TAFE Staff Development Committee undertook a study to explore the professional development needs of this group. The findings of the study led to the development of the *National Framework for the Professional Development of Adult Literacy and Basic Education Personnel* (TAFE Staff Development Committee 1994). The main aim of the framework was to provide a nationally consistent approach to planning, developing and evaluating professional development for this group for 1993 and 1994. The framework also aimed to ensure the development of processes for the recruitment and induction of personnel and promotion of opportunities for practitioners to develop additional competencies. Other aims were to increase the competencies of practitioners so that they could deliver training in a broad range of situations and contexts, and to ensure that current teaching practice was informed by relevant research and theoretical developments.

A set of 13 principles to be applied to the provision of professional development for this group underpinned the framework. They highlighted the importance of providing learning activities which mirrored the main features of the new VET training system (for example, competency-based training, recognition of prior learning, flexible delivery, technology and resource-based learning, open learning, choice of learning activities). In addition, programs should focus on a combination of theory and practical experience. In particular, they should help practitioners develop additional knowledge on how 'people become literate and numerate ... and apply 'the most advanced knowledge of how language and mathematics should be taught' (TAFE Staff Development Committee 1994, p3.). Although the framework does not specifically talk about the need for practitioners to develop their knowledge of assessment, including formative assessment, the strategies associated with appropriate induction included the use of mentors and peer review and support groups which are often used in formative assessment.

National programs

There are three major programs that provide for the professional development of trainers and assessors in the VET system. These are:

> ➢ Reframing the Future

> ➢ Flexible Learning Initiatives

> ➢ Professional Development for Equity

Currently, there are a two small projects being funded under the Reframing the Future program which are aimed at improving the skills of vocational trainers to embed language, literacy and numeracy within their training package programs, and to meet the needs of the AQTF. One project uses an action learning methodology and the development of a 'community of practice' and is being run by South Bank TAFE in Queensland. Another uses a work-based learning methodology and is being run by RMIT University Post-Compulsory Education and Training Research Centre. Both use coaching and mentoring techniques as main professional development tools (techniques which use 'a community of practice' approach to mentoring and coaching).

There is also 'increasing diversity' in the types of professional development activities being funded and accessed (Mackay, Burgoyne, Warwick and Cipollone 2006).

The Flexible Learning Framework for 2005 is collaboratively funded by Commonwealth Government and state and territory governments, and is concerned with providing the VET sector with e-learning skills, professional development opportunities, resources and support networks. In 2005 it also aims to meet the e-learning needs of industry groups, students and communities, Indigenous Australians, and those with a disability.

The Professional Development for Equity Program comprises a set of nine government-funded projects which are aimed at supporting equity issues in a wide variety of contexts. These include developing resources to support equity issues in the delivery of training in the Training and Assessment Training Package, and monitoring changes in professional development practices relating to training people with a disability. There is also a project which provides examples of how to advance equity issues in the National VET system, and another aimed at helping industry skills councils to build Indigenous issues into their strategic planning. Three guides for working with equity groups were also developed under this program. These include Working with Diversity: A guide to Equity and the AQTF, Working with Diversity: Quality Training for Indigenous Australians, and Working with Diversity: Quality Training for People With a Disability. The project also provides funding for recognition of prior learning (RPL) and recognition of current competency for Indigenous VET practitioners. The Billabong website <http://www.billabong.gov.au> was also created to support professional development for Indigenous VET staff.

In addition, there are a number of programs that provide for the professional development of volunteers:

> The use of volunteers is common across Australia in the federal government-funded Adult Migrant English Program (AMEP). The Home Tutor Scheme matches trained volunteers to migrants or refugees who want to learn English in their own home. Providers of AMEP programs in all states and territories will provide or make arrangements for the training of volunteer tutors.

> The TAFE Tasmania Adult Literacy and Basic Education (ALBE) program has delivered volunteer tutor training sessions for those interested in becoming adult literacy volunteers.

> The South Australian government funds an adult literacy tutor training program which addresses the skills and knowledge required by tutors of adults with low levels of basic skills. The program is for volunteer tutors working in community centres, those who develop individual teaching plans for students, and those who have the time to spend improving their own learning. South Australia has also introduced a qualification for literacy professionals. The Certificate IV in Language, Literacy and Numeracy Assessment and Training. It is directed at those who train or tutor in the community, supervise or mentor others, or work as a language, literacy and numeracy trainer or tutor, a workplace vocational trainer, or as a specialist tutor working with adults with disabilities. There is also a course in adult numeracy teaching for practitioners in the adult literacy and basic education sector to improve their understanding of methodologies teaching numeracy and basic mathematics to adults.

> The Western Australian government also provides support to the Read Write Now organisation which provides free literacy and numeracy tutoring for adults. Training is provided by volunteers in local libraries, neighbourhood learning centres and community centres.

Key providers of professional development

Key providers of professional development for language, literacy and numeracy practitioners include national, state and territory-based conferences, workshops and seminars held by national bodies, education and training institutions, and industry stakeholders. Key providers of professional development for the general VET workforce dealing with adult basic skills are the TAFE institutes themselves, industry associations, industry skills councils, and various agencies connected with the provision of employment services.

Key providers of professional development (identified in four states by Mackay, Burgoyne, Warwick and Cipollone 2006) for the language, literacy and numeracy workforce include:

➢ the National Centre for English Language Teaching and Research

➢ The Australian Council for Adult Literacy

➢ The Australian Council of Teachers of English as a Second Language Associations

➢ the Victorian Adult Learning and Basic Education Council

➢ the Queensland Association of Teachers of English to Speakers of Other Languages

➢ the New South Wales Association of Teachers of English as a Second Language Delivery Support Service Workplace Education TAFE SA

➢ Dare to Lead South Australia

Source: Country background report: *Addressing the training and assessment needs of adults with low basic skills in Australia*, Josie Misko, (forthcoming), NCVER

Exhibit 20: Good practice models for professional development

Features of good practice in professional development that LLN teachers, trainers and tutors nominated were reiterated by program managers. Such features included:

➢ good facilitation

➢ content that relates to teaching practice

➢ the opportunity for networking with other practitioners.

One program manager gave the example of a one-day regional workshop that started with a plenary session, then split into parallel sessions for smaller groups and finished with a regrouping of participants. As the interviewee said 'it satisfies the needs of the continuum of teachers, practical teaching ideas from peers, opportunities to network and share good practice'.

Three quite different examples nominated as good practice by participants are described briefly below. These three have been chosen, as they exemplify not only the features of good practice identified by study participants, but also principles of good practice professional development identified in other research into the professional development needs of adult educators. These include:

➢ a coordinated and planned program

➢ work-based learning

➢ systematically determined needs

➢ mentoring

➢ learner-centred teaching practice

➢ shared responsibility for learning between the organisation and staff

Model 1 - Back to basics using a 'bottom-up' approach

This professional development model originated in an assessment and validation project linked to the employing organisation's need to meet the standards for registered training organisations at external audit. With the gradual dismantling of support for teachers over the years through the repeated restructures of the employing organisation, it was found that many English language teachers were teaching to their own repertoire, with scant reference to any curriculum documents or any accepted frame of reference relating to language development. A dedicated staff member with extensive discipline expertise was assigned the role of providing a systematic program of mentoring for all English language teaching staff, with a particular focus on new or inexperienced part-time staff. In a number of sessions over a few months the mentor worked with groups of between five and ten teachers to develop their understanding of:

➢ the structure of their employing organisation and the teachers' place in that structure

➢ the curriculum that teachers were expected to use

➢ how to use related resources such as the teacher's guide and the assessment guide for that curriculum, so that their classroom practice was pitched appropriately to the learners.

The mentor and teachers also worked together to develop units of work that clearly reflected the language learning outcomes of the curriculum they were using.

The program has been very successful, with the mentor earning the trust of teachers through her non-judgemental approach and eagerness to share her expertise. To date, she has worked with

75% of the English language teaching staff in her organisation (n=152) and the program has been positively evaluated by all stakeholders.

Model 2 - Action learning to integrate language, literacy and numeracy into vocational programs

This model has been developed in response to the need for registered training organisations to address language, literacy and numeracy in the delivery of training package qualifications. It aimed to translate theory into practice, using work-based action learning as the vehicle. The project involved 18 participants from a mix of 'hard' and 'soft' vocational teaching areas within the same employing organisation. These teaching areas included nursing, plumbing, meat processing, horticulture, aged care, visual arts, children's services, bricklaying, fire fighting, retail and carpentry.

One of the benefits of this diversity was the development of genuine collegiality among staff members who, irrespective of the presumed status of their vocational area, discovered a common level in their shared learning experience. Under the guidance of a language, literacy and numeracy specialist mentor, the participants worked through the five stages of the project. These were:

> ➢ identifying language, literacy and numeracy requirements of a unit or a course

> ➢ developing and applying initial language, literacy and numeracy assessment tools for new entrants

> ➢ developing teaching strategies for responding to language, literacy and numeracy requirements of the unit or course

> ➢ developing models and processes for student referral to specialist language, literacy and numeracy support

> ➢ integrating language, literacy and numeracy assessment into assessment of the vocational competence.

At the beginning of the project there were varying individual expectations of the relevance and usefulness of such a project. But the action-learning methodology and practical hands-on approach coupled with skilled facilitation resulted in improvements in individual teaching practice and also in improved lines of communication between vocational and language, literacy and numeracy specialists across the organisation.

Model 3 - A nationally coordinated approach to professional development

The Adult Migrant English Program professional development website, *Professional Connections*, provides a good example of a coordinated national approach to professional development. As part of their contractual obligations, providers who successfully tender for Adult Migrant English Program provision must undertake to provide relevant professional development for their personnel. The *Professional Connections* website provides evidence of a comprehensive range of professional development opportunities available to program staff. The site includes a calendar of a variety of professional development events, workshops, conferences, national forums and discussion lists. The site also contains useful resources, such as a bank of assessment tasks, links to professional reading, an e-bulletin facility and much more. The courses promoted on the site are offered in different states and are on diverse topics such as 'Culture, content and language teaching' and 'Meeting youth settlement needs in the AMEP' (Adult Migrant English Program Research Centre 2005).

Source: *Current and future professional development needs of the language, literacy and numeracy workforce*, Sandra Mackay, Ursula Burgoyne, Diane Warwick & Jackie Cipollone, NCVER, (2006)

Possible future needs

Exhibit 21: Information and communication technologies

Different generations have differing exposure to, and experience with, technology. As a result, they have differing literacy practices and norms.

Generation Y (people born in 1980's or 1990's) use of information technology

- ➢ the world wide web (about 1995 onwards)

- ➢ search engines—Google, Yahoo, online information engines Wikpedia (where this information came from!)

- ➢ PCs with mouse-based point-and-click operating systems requiring less keyboard skills (early to mid-1990s onwards)

- ➢ sophisticated computer graphics in many video games, animated movies and television shows (and the related non-keyboard interfaces)

- ➢ cellular phones (mid '90s and onwards)

- ➢ instant messaging (late '90s)

- ➢ DVDs (1997 and onwards)

- ➢ digital audio players, especially iPods (1998 and onwards)

- ➢ digital/Smart TV recording devices (1999 and onwards)

- ➢ HDTV (1999 and onwards)

- ➢ broadband internet (1999 and onwards)

- ➢ digital cameras (late '90s)

- ➢ online telephone technology (Skype) (2000–)

Source: <http://en.wikipedia.org/wiki>

A dilemma ... information and communication technologies professional development and practice

> There was some concern about having to gain skills … with not many teachers in the age group who grew up with computers and the new technology. Most at the college don't know much more than how to turn them on.

Source: *Current and future professional development needs of the language, literacy and numeracy workforce*, Sandra Mackay, Ursula Burgoyne, Diane Warwick & Jackie Cipollone, NCVER, (2006)

> It makes little sense to continue to think and talk about literacy practices and the use of information and communication technologies as if they were separate activities: literacy education is equally and simultaneously digital literacy education.

Source: *Using information and communication technologies in adult literacy education: New practices, new challenges,* Ilana Snyder, Anne Jones, Joseph Lo Bianco, NCVER, (2005)

Exhibit 22: What we need ... numeracy ... the new black

Defining maths in the workplace

In light of the case study findings, the definition of numerate behaviour by Coben seems the most appropriate in the context of teaching and learning numeracy on the job:

> To be numerate means to be competent, confident, and comfortable with one's judgements on *whether* to use mathematics in a particular situation and if so, *what* mathematics to use, *how* to do it, what *degree of accuracy* is appropriate, and what the answer means in relation to the context.   (Coben 2000, p.35 cited in Coben et al. 2003, p.10)

The findings of this project support the messages from the international literature on mathematics/ numeracy in the workplace; for example, that mathematical elements in workplaces are subsumed by workplace routines, structured by mediating artefacts (such as tools and equipment, calibration templates, record sheets), and are highly context-dependent. In other words, the priority is to get the job done as efficiently as possible—not to practise and refine mathematical skills.

Source: *Learning numeracy on the job: A case study of chemical handling and spraying*, Gail FitzSimons, Susan Mlcek, Oksana Hull, Claire Wright, NCVER, (2005)

The importance of numeracy in today's workplace

Recent research indicates that owing to globalisation and the introduction of technology, workplace numeracy demands are growing rapidly (Hoyles et al. 2002) and will continue to increase in the coming years (National Research and Development Centre for Adult Literacy and Numeracy [NRDC] 2005). More workers are now engaged in maths-related tasks of increasing sophistication (Service Skills Australia 2005). Numeracy is now recognised as an essential skill in the workplace and one of the most important in enhancing business goals (Balzary 2004, Dingwell 2000).

The invisibility of numeracy in the workplace

Researchers such as FitzSimons et al. (2005), FitzSimons and Wedege (2004), Kanes (2002), Fownes et al. (2002), Wedege (2000, 2003, 2004), and Zevenbergen (2000) have found that endeavours to research the mathematics-related skills valued and used in workplaces are complicated by the phenomenon of 'invisibility' of numeracy. By this they mean that workers are not conscious of using mathematical skills at work, even when they use them frequently. For example, a café worker who said in a preliminary interview that she used no mathematics in her job, was observed frequently calculating change and capably estimating appropriate serving portions for effective distribution of the available food (Hansen 2005). Similarly, the Essential Skills Research in Canada found that workers focused on tasks, without necessarily recognising the maths within them (HRSDC 2005).

Personal perception of adults in relation to mathematics

Coben's research into adults' 'mathematics life histories' reveals that many adults have such negative perceptions of themselves in relation to mathematics as experienced at school that what they *cannot* do they regard as mathematics, whilst what they *can* do they see as 'common sense' or non-mathematics. The mathematics that they *can* do, such as such as measurement or numerical calculations, is taken for granted because to recognise it as mathematics would contradict their self-image as unsuccessful mathematics learners (Coben 2000b). At the same time as negating their own personal use of mathematical skills, almost all of the people interviewed by Coben and her colleagues remarked that mathematics was important, as was success in school mathematics exams. At the same time they found that many adults see themselves as competent adults without the need to use mathematics in their lives or their work.

Source: *Numeracy in the workplace*, Beth Marr and Jan Hagston, NCVER (forthcoming)