

Let's Get Serious about Adult Literacy and Numeracy



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Introduction

Australia has a significant problem with adult literacy and numeracy.

The 2006/7 Adult Literacy and Lifeskills Survey indicated that between 46% and 70% of adults in Australia had “poor” or “very poor” skills across one or more of the five skill domains of prose literacy, document literacy, numeracy, problem-solving and health literacy. Further, that with the exception of the 15- 19 year age group, each generational group had lower literacy skills than its younger counterparts. In other words, lack of language, literacy and numeracy is not confined to the young or to job seekers but impacts across the lifespan.

It has been more than 20 years since the last national policy on Adult Language and Literacy.

While there has been much recent commentary on the size of the size of the problem, there has been less attention to the comprehensive solutions required and education professionals have been largely silent in the debate. Meanwhile fragmented, contradictory and ad hoc strategies and programs have emerged from State and Federal governments. Programs are increasingly narrow and targeted at a smaller and smaller group of the population.

Leadership from the Australian government and a comprehensive policy response developed in collaboration with state and territory governments, stakeholder organisations, community groups and educational professionals is long overdue.

Such an approach needs to be holistic and to encompass the following principles:

1. The right to literacy and numeracy is an inherent part of the right to an education. All Australians, regardless of their employment status, should be supported to develop their language, literacy and numeracy skills.
2. The foundation skills required to operate effectively in an advanced economy are constantly shifting. Today’s “foundation skills” won’t be enough to ensure Australia’s economic or social future. Australia can afford and should aspire to a workforce of innovators, manufacturers and creators with the high level language, literacy, numeracy and technology skills of the future.
3. Literacy development is intergenerational, with the skills of one generation impacting on the next. Literacy is an essential step on the pathway out of poverty. A concerted commitment is needed to build the literacy and numeracy levels of both adults and children in low SES communities.
4. Career shifting between industries and short periods of underemployment and unemployment are inevitable in a rapidly changing, high technology, globalised economy. Australians have the right to access a general education, and generic skills that will prepare them for career shifting as well as the technical skills required by particular industries.

5. As Australia's population ages, all Australians should have appropriate opportunities to develop the literacy and numeracy skills that they need to remain in paid work for as long as they choose and the skills to engage in Australian civic and social life when they choose to retire.
6. Those countries which have the highest levels of adult literacy and numeracy recognise that high level professional skills and qualifications are required by teachers to deliver formal adult and vocational education qualifications. Australia must become one of these countries.
7. Literacy development is lifelong and occurs in the community, in educational institutions and in the workplace. A whole of government response is required to enhance and support the institutions and community settings in which adults learn as well as programs that encourage employers to invest in the literacy and numeracy skills of their workforce.

The right to literacy is an inherent part of the right to an education. All Australians, regardless of their employment status, should be supported to develop their language, literacy and numeracy skills.

Since the early 1990s the policy discourse has framed adult literacy as a vehicle for productivity and the achievement of national economic goals. This “human capital” approach coincided with a development of Competency Based curriculum for Adult English language, literacy and numeracy and the establishment of the Vocational Education and Training System as the primary provider of accredited language, literacy and numeracy programs.

Alongside this emphasis on the real and important labour force participation and productivity benefits that can be gained from improved adult literacy and numeracy, there has always been a recognition that literacy serves a social and civic purpose by contributing to greater social cohesion and inclusion. There is recognition also that literacy has a broader economic role to play through reducing costs in the health, welfare and criminal justice systems. Literacy levels of those outside the workforce, (parents and grandparents raising children for example) indirectly impact on the literacy levels of the working population.

While research on the impact of literacy on civic and social participation in Australia is limited, an international comparison of 23 advanced economies in the 1996 International Adult Literacy Survey (IALS) found that literacy has a bearing on social and political participation (OECD 2000):

Higher levels of literacy are associated with participation in voluntary community activities. There is also a measurable association between literacy and female representation in government. More specifically, countries with higher average scores on the prose scale have a greater share of their parliamentary seats held by women. (OECD, Highlights, 2000, p. 11)

This broader approach to literacy can be seen in Goal 1 of the 1991 Australian Language and Literacy Policy, which reads:

All Australian residents should develop and maintain a level of spoken and written English which is appropriate for a range of contexts with the support of education and training programs addressing their diverse learning needs. (ALLP, 1991, p. 4)

In the May 2010 Budget—as part of the Skills for Sustainable Growth strategy—the Commonwealth government announced a \$120 million investment in adult literacy and numeracy activities, including the development and implementation of a national foundation skills strategy. This strategy has been welcomed as long overdue by LLN teachers and stakeholders. It comes 20 years after John Dawkins, the then Minister for Employment, Education and Training, in August 1991, released the last national policy on Australian language and literacy (1991, Australian Language and Literacy Policy) and 24 years after the 1987 National Policy on Languages, (Lo Bianco, 1987) which is widely recognised by literacy experts as the only significant attempt by government to come to policy terms with Australia’s language, literacy and numeracy needs in the context of globalisation, multi- culturalism and economic change.

The draft Foundation Skills Strategy has not yet been released. However, the adult literacy policy initiatives that currently exist and those that are being developed alongside it would suggest a

narrower and less ambitious approach than the 1991 ALL Policy, which was in turn a narrower and less ambitious approach than the 1987 NLP. The current approach and developing initiatives put into doubt the right of “all Australian residents” to literacy through the “support of education and training programs addressing their diverse learning needs”. For example:

- The Foundation Skill Strategy is confined to the education and training systems of the state, territory and Australian governments despite the obvious impacts of literacy across health, welfare, justice and community policy areas. If ever a “whole of government” approach were called for, this would be it.
- Government funding for foundation skills program is targeted to those who are 16 – 64, ignoring the growing cohort of Australians 65+ who are no longer required under Australian law to retire, and which the ALLS survey tells us have the lowest levels of literacy amongst the adult population.
- A centralised employer-driven Industry Training Package is currently being developed for Foundation Skills with compulsory vocational content even at the most basic level, when research into adult literacy and numeracy suggests that localised, and contextualised approaches work best and that a significant group of adults with very low literacy and numeracy are not working and not looking for work.

While well intentioned, these initiatives and approaches tie the right of all Australians to read and write and use numeracy at a basic level to their employment or job seeker status. They assume that those adults currently in the job market or actively looking for work are the only Australians worth investing in.

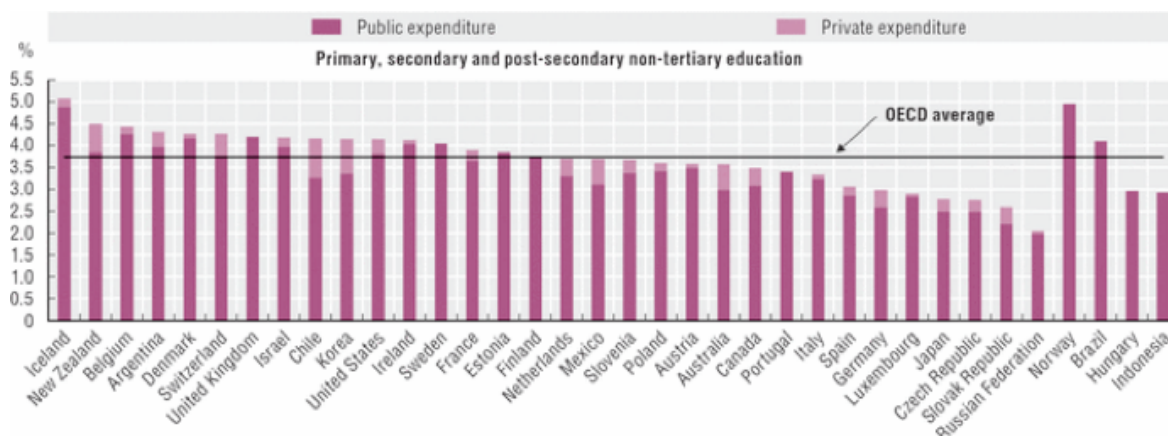
Such a narrow approach risks condemning to illiteracy and social disengagement the many thousands of adult Australians who are too old to work, too sick to work, too occupied with caring responsibilities to work as well as those who want to work, but have given up hope of being accepted into the labour market.

The foundation skills required to operate effectively in an advanced economy are constantly shifting. Today’s “foundation skills” won’t be enough to ensure Australia’s economic or social future. Australia can afford and should aspire to a workforce of innovators, manufacturers and creators with the high level language, literacy, numeracy and technology skills of the future.

It has been long acknowledged by Australia’s political leaders, that in a technology enhanced globalised world, our economic competitiveness relies on a highly skilled and educated workforce. We compete in the international market with a number of countries that spend significantly larger amounts of money on education and who invest in a higher percentage of the adult population than we do. These countries have significantly higher levels of adult literacy and numeracy as a result.

Australia’s investment as a percentage of GDP is below the OECD average and well below that of New Zealand, Canada and the Nordic countries.

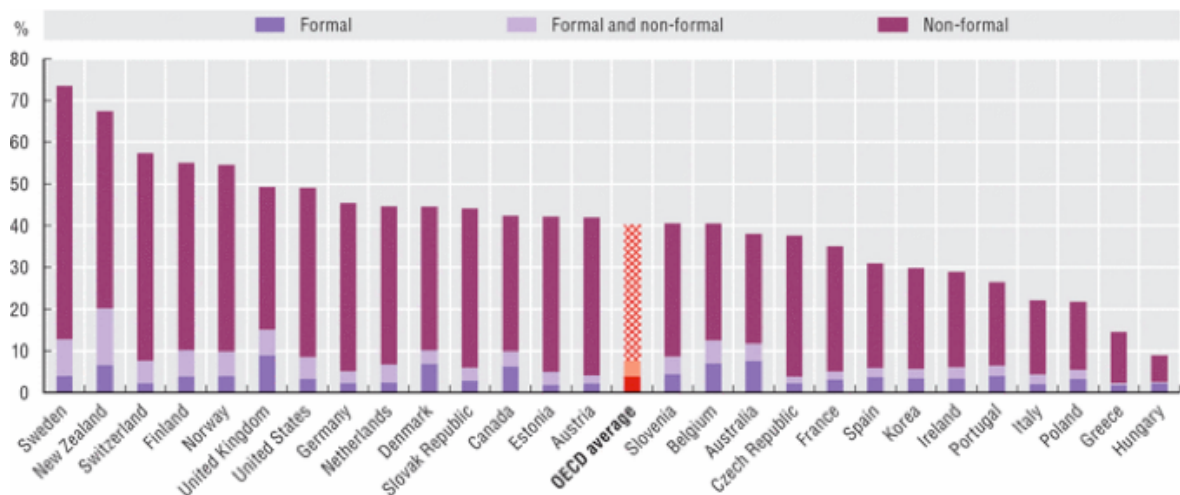
Expenditure as a percentage of GDP, 2008



Source: OECD (2011), Education at a Glance 2011, Table B2.1, available at <http://dx.doi.org/10.1787/888932463764>.

The percentage of Adult Australians taking part in adult education and training is less than the OECD average and significantly less than that of New Zealand, Canada and the Nordic countries.

1.16 Participation in formal and/or non-formal education, 2007



Source: OECD (2011), Education at a Glance 2011, Table 1.16, available at <http://dx.doi.org/10.1787/888932463764>.

Australia does not invest enough in education and it targets its investment too narrowly. For example, draft documents informing The Foundation Skills Framework, define Foundation Skills as ‘Language, literacy, numeracy and employability skills in the information age’ and suggest that the strategy will be targeted only at those adults aged 15 – 64 with the lowest skills.

While welcome, this is a minimal response for a country with aspirations to compete in the international knowledge economy. In scope, it compares unfavourably with the 20 year old Australian Language and Literacy policy, much less the comprehensive Lifelong Learning policies pursued by European Union countries. It will be insufficient to address the language, literacy and numeracy skills required to drive productivity throughout the employment market, nor to achieve social aims.

The 20th Century approach to addressing adult literacy and numeracy is to focus on the school system, in the belief that a strong school based foundation will set young people up for a lifetime of literacy and numeracy and that “second chance” or “catch up” education will be all that is necessary for the handful of adults who miss out on the basics in school.

The 21st Century approach to adult literacy assumes that technological, cultural and labour market change will be so rapid that today’s “literacies” simply won’t suffice.

The 21st Century approach to adult literacy recognises that today’s school students will move through multiple careers including into jobs that don’t currently exist, some of which might not have even been dreamt of.

The OECD, the European Union, and leading OECD countries with whom Australia competes, all have “lifelong learning” policies which recognise that literacy is an ongoing endeavour developed through many contexts over the lifetime. (Kearns, 2005, pg 5)

In contrast, Australia’s policy response too often reflects a 20th Century approach to a 21st Century challenge.

Literacy development is intergenerational, with the skills of one generation impacting on the next. Literacy and numeracy are essential steps on the pathway out of poverty. A concerted commitment is needed to build the literacy and numeracy levels of both adults and children in low SES (socio-economic status) communities

Dropping off the edge: The distribution of disadvantage in Australia by Professor Tony Vinson for Jesuit Social Services and Catholic Social Services Australia (2007) found that just 1.7 per cent of postcodes and communities across Australia account for more than seven times their share of top rank positions on the major factors that cause intergenerational poverty. The report highlights the particularly strong link between intergenerational poverty and low educational attainment and recommends a coordinated approach including:

- Aiming to raise educational attainment by improving early education programs, pre-school attendance, improving primary schools and provide financial incentives to attract experienced and successful teachers to the most disadvantaged schools.
- Guaranteeing three and four year old children living in areas that fall within the 10 per cent most disadvantaged localities in each state/territory 18 hours per week of free preschool to support a good start to formal education.
- Support for projects, which combine personal support, attention to educational deficits and skills development for disengaged young people.
- Building local community cohesion alongside tangible measures including training and work placement.

While the correlation between literacy and educational qualifications is not absolute, Burke (2010), in his analysis of the 2006 ALLS data, finds that the incomes of persons in employment are strongly related to literacy/numeracy. This relationship was found to be at least as strong as the relationship between educational qualifications and income. Addressing the literacy and numeracy levels of low SES families and communities is an important way to address intergenerational poverty and disadvantage.

UNESCO promotes family literacy as a holistic approach that contributes towards achieving Education for all Goals;

- 1, the expansion and improvement of comprehensive early childhood care and education
- 2, universal primary education; and
- 4, achieving a 50 per cent increase in adult literacy levels by 2015.

Furthermore, it contributes towards EFA (Education for all) Goal 5 (achieving gender equality in education by 2015) by targeting women, many of whom want to participate in literacy programmes in order to be able to help their children during the early stages of their school education.

Learning Towns and Learning Cities initiatives have been around since the 1970s. However, they came to prominence in 1996 when both the Organisation of Economic Cooperation and Development (OECD) and the United Nations Educational, Scientific and Cultural Organizations (UNESCO) released their major reports on lifelong learning. Learning Communities are varied, but their basic premise is the coordinated use of Lifelong Learning in a specific locality to build social cohesion and human capital (Faris, 2006). Learning Communities also act as brokers and advocates to ensure that national and state policies match local aspirations and provide value for money.

Programs designed in capital cities and narrowly targeted at particular cohorts won't necessarily work in diverse communities with complex needs. Coordinated whole of life and whole of community approaches, that have been tried successfully internationally, need to be part of the response to adult literacy and numeracy in low SES communities.

Career shifting between industries and short periods of underemployment and unemployment are inevitable in a rapidly changing, high technology, globalised economy. Australians have the right to access a general education, and generic skills that will prepare them for career shifting as well as the technical skills required by particular industries.

The Australian labour force is highly flexible and Australian workers are more likely to change jobs than workers in most other OECD countries (Sweet, 2011).

“Around 10% or more of Australians change their job each year, and of this number perhaps three in four change their industry, their occupation or both. Around twice this number experience significant change to the nature of their work but do not change jobs.” (Sweet, 2011, p. 10)

The benefits to industry of this level of mobility are obvious. The need for lifelong learning and broad general skills is equally obvious to fuel this mobility and to protect vulnerable workers during periods of transition.

While career shifting can be a positive experience for both industry and individuals, research based on the Australia at work study of 8,300 workers between 2006 and 2011 (Buchanan, Baldwin & White, 2011, p. 8) points out that the labour market is highly stratified and that the experience of career shifting in many industries accompanies periods of involuntary casualization, unemployment and underemployment. Further, they concluded that:

- people changing jobs were less likely to move to jobs with paid leave, and
- those who changed jobs were more likely to experience a drop in earnings and hours of work. (Buchanan, Baldwin & White, 2011, p. 9)

Despite the compelling nature of the need for general education and literacy and numeracy skills to cope with the rapid change inherent in the Australian employment market, the emphasis of much of Australia’s policy debate has been on short term “shortages” of technical skills in critical industries, rather than the underpinning literacy and numeracy needs of the broader workforce and population, which benefits all industries, including small and medium enterprises, not to mention individuals.

Buchanan points out, “While the mining industry still only employs fewer than 2% of employment — its demand for labour has triggered something of a ‘moral panic’ amongst policy-makers.” (Buchanan, Baldwin & White 2011, p. 8)

Lack of supposed “industry responsiveness” has become a mantra driving the marketization of the VET sector, the shift of resources and the development of short-term programs like the Productivity Places Programs in favour of long term and systematic resourcing of TAFE and Adult and Community Education (ACE).

As Australia's population ages, all Australians should have appropriate opportunities to develop the literacy skills that they need to remain in paid work for as long as they choose and the skills to engage in Australian civic and social life when they choose to retire.

The 2006 ALLS Survey found that the literacy and numeracy skills of the population tapered off for people aged more than 45 years, and were lowest for people aged 70–74 years. This could reflect the fact that older people had less education compared with younger persons, or that people experience deterioration in skills at those ages, or else that leaving the labour market could remove people from access to the types of literate and numerate activities that allow them to maintain their skills (Shomes, 2011). Research into the precise combinations of reasons is unclear.

Whatever the reasons are for the difference, the ALLS survey found that a substantial group of older Australians don't have the literacy and numeracy skills required by industry and are therefore vulnerable in the job market. Further, a substantial body of Australians will enter the "third age" without the skills required to access services, and remain socially connected.

Recent research by the Brotherhood of St Laurence highlights the damaging nature of involuntary non-participation and under-participation in work for older people and its relationship with poverty. Between 1996 and 2001 the proportion of older age-groups not in the labour force gradually declined; however well over a third (40%) of Australians aged 55–64 years and well over three-quarters aged 65–74 years were no longer participating in the labour force. This non-participation increases with age so that in the age group of 60 – 65, over 50% of Australians are not in paid work. (Gong & Macnamara, 2011, p. 11)

Of those 45+ without paid work, a significant minority consider this non-employment "involuntary". "Particularly striking is the proportion of men aged 45–54 years who fall into the 'involuntary' group (44%). A large proportion of women aged 45–54 years (just over one-quarter of all women in this age group not in paid work) also fall into the 'involuntary' group" (p. 10). A further significant proportion of the age cohort study reported wanting more hours of paid work than they were able to secure (Gong & Macnamara, 2011). Kimberley and Simons point out, in The Brotherhood's social barometer (2009, p. 10), that 'there is substantial risk of poverty' caused by involuntary non-employment and underemployment.

Australia's education and training system has not come to terms with lifelong learning in the context of an ageing population. The needs of learners at different life stages are different and the social costs of continuing to assume that one size fits all are enormous.

Those countries which have the highest levels of adult literacy recognise that high level professional skills and qualifications are required by teachers to deliver formal adult and vocational education qualifications. Australia must become one of these countries.

Although it is difficult to compare adult literacy and numeracy across diverse nations, the 1996 International Adult Literacy Survey of 23 advanced economies found that the Nordic countries including Sweden, Norway, Finland and Denmark along with Germany ranked highest on most measures.

The trend in these countries is towards greater professionalisation of Vocational Education and Training teachers (Wheelahan, 2010). In almost all EU countries, a higher education degree followed by teacher training regulated at the national level is a prerequisite to qualifying as a teacher of vocational training or adult education. These countries, particularly Germany also have sophisticated systems of teacher registration and continuing professional development to ensure that teachers retain the skills relevant to the context in which they are working.

In Finland, teachers in public and private adult and vocational education complete Masters level qualifications in Adult Education. Industry trainers do not complete this level of education but, equally, are not recognised as teachers. Even the UK is moving away from restricted professionalism. 'Lifelong learning teachers' are now required to complete Diploma level qualifications and engage in on-going professional learning as a basis for teacher registration (Seddon, 2010).

The trend in Australia is in the other direction. The Certificate 4 in Training and Education has become the de facto minimum qualification required for teaching adults in all VET contexts. Marketization has led to increased use of short term contracts and casual employment. Meanwhile the VET teaching workforce generally and the LLN teaching workforce in particular is ageing and the need to recruit new staff into the sectors is increasing.

Adult literacy is developed in a range of informal community and work environments as well as in formal learning institutions. There is a role for less qualified and differently qualified peer educators in community and work environments. However, just as the formal schooling system and higher education systems require highly skilled and qualified professional teachers, so too does the formal Vocational Education and Training System.

Literacy development is lifelong and occurs in the community, in educational institutions and in the workplace. A whole of government response is required to enhance and support the institutions and community settings in which adults learn as well as programs that encourage employers to invest in the literacy skills of their workforce.

Improving the literacy and numeracy skills of around half the adult population is a complex, long-term challenge that will require significant investment in the environments in which adults learn; primary amongst these are the public TAFE and Adult and Community Education (ACE) systems.

Since the early 1990s, TAFE Institutes, have been the primary providers of stand alone adult literacy and numeracy qualifications as well as providing 'tutorial support' for trades students (Wickert et al. 2007, p. 251).

Embedding literacy and numeracy in VET is strongly supported in other national approaches to VET in the UK, Ireland and New Zealand as it has the potential not only to help VET learners succeed in the academic requirements of the qualification they are pursuing, but also to contribute to their development as a member of their trade or vocational community and to their personal development as an adult in the wider community. (Black & Yasukawa, 2010).

In the period, since the 2006 ALLS Survey, rather than strengthening and investing in the public vocational education and training system, funding has declined in real terms and experiments in efficiency have lead to the Australian VET system becoming more heavily marketised than higher education, and much more marketised than vocational education in most other countries, where most entry level VET is provided by public colleges and overwhelmingly funded by governments, sometimes from employer levies (Moodie, 2011).

While embedding literacy and numeracy in vocational programs is recognised as having pedagogical value, LLN (Language Literacy and Numeracy) experts also recognise that learners with very low-level skills benefit from stand-alone, face-to-face delivery methods, without any vocational contextualisation. This is particularly the case for the large proportion of adults with low skills who are not working or actively job seeking. For adults who have given up on being part of the labour market, motivations for participating in literacy and numeracy programs may include wanting to support their children with learning, wanting to attain a drivers licence or simply wanting to remove the social stigma of illiteracy.

At this enabling level learners need to focus on very basic skill acquisition around learning to read and write before they can begin to use these skills in other more contextualised learning (Roberts and Wignall, 2011, p. 12)

Adult and Community Education (ACE) is about community-focused learning, pre-accredited learning and non-formal education, although increasingly ACE programs have a vocational flavour and some larger ACE providers in NSW and Victoria offer (usually entry level) accredited vocational qualifications. The ACE sector is the responsibility of States and Territories, all of which are signatories with the Commonwealth to a Ministerial Declaration on ACE.

ACE programs have a strong history of engaging disengaged adults with their local communities and providing a “soft entry” to the formal VET sector (Bardon 2006). ACE organisations have the additional value proposition of being locally based and easily accessible to learners, often combining childcare and other family services alongside adult education. Despite their success in building literacy, numeracy and social capital for the most disengaged, ACE programs and organisations are haphazardly funded, and almost non-existent in most parts of Australia beyond capital cities (Golding, 2011).

In addition to ACE specific organisations, there is a growing body of research indicating that other community-based organisations provide significant amounts of training both formal and non-formal, particularly for adults with low literacy skills. Further the research shows that this learning meets many of the pedagogical requirements for socially situated literacy development in that it is strength-based, practical and embedded within an immediately applicable and highly valued body of knowledge. Golding and others have identified emergency volunteer fire and emergency services (Hayes, Golding & Harvey 2004), men’s sheds, sporting, religious and special interest organizations (Golding et al., 2009, 2010), as primary sites of adult literacy development for men who are vulnerable in the labour market, at risk of social exclusion and under represented in adult education and VET.

Hayes et al. (2004, p. 23) suggest that given the success of volunteer emergency services in engaging men with low literacy skills in learning, that stronger links between these organisations and adult education providers to embed literacy support throughout the training would be a practical and low cost strategy.

Education policy makers often use the term “hard to reach learners” to describe those adults with low skills, who are not in education and training and are vulnerable in a modern labour market and society as a result. Given the available research into how and where adults learn and the current underinvestment in these institutions, “hard to reach” education, would be a more accurate focus.

References

- ABS (Australian Bureau of Statistics) 1996, Aspects of literacy: assessed skills levels, Australia 1996, ABS, Canberra.
- Bardon, Ben, 2006, Community Education and National Reform, Report prepared for DEST August 2006 by Ben Bardon, CWGA Research
- Burke, Gerald 2011, Literacy, qualifications, jobs, income and growth, NCVET Search Conference Papers 2011
- Black, Stephen and Yasukawa, Keiko Integrated Literacy and Numeracy Support in VET: Implications for skills, equity and research
- Buchanan, John, Baldwin, Susanna and Wright, Sally 2011, Understanding and improving labour mobility: a scoping paper, NCVET
- Burke, Gerald 2011, Literacy, qualifications, jobs, income and growth, NCVET Search Conference Papers 2011
- Castleton, Geraldine & McDonald, Marya, June 2002, A decade of literacy: policy, programs and perspectives An investigation by the Queensland Centre Adult Literacy and Numeracy Australian Research Consortium (ALNARC) Griffith University ALNARC National Research Program 2001-2002
- Department of Employment, Science and Training, 2008, Ministerial Declaration on ACE
- Faris, Ron, 1998, Learning Communities: Cities, Towns and Villages Preparing for a 21st Century Knowledge Based Economy, A Report submitted to the Resort Municipality of Whistler on behalf of the Centre for Curriculum, Transfer and Technology August 15, 1998
- Foster, S. 2005, National Centre for Vocational Education Research, 2005
- Golding, B, Brown, M Foley, A & Harvey, J 2009 Men's Learning and wellbeing through community organisations in Western Australia, Report to the Western Australia Department of Education and Training, University of Ballarat, October.
- Golding, B Foley, A Brown M & Harvey, J 2009 Senior men's learning and wellbeing through community participation in Australia, , Report to National Seniors Productive Ageing Centre, University of Ballarat, October
- Golding, B in J. Field, J. Gallagher & R. Ingram, Older men's lifelong learning: common threads/sheds', Researching transitions in lifelong learning, Milton Park, Routledge, pp.65-75, 2009.
- Golding, B. (2011) 'Social, local, and situated: Recent findings about the effectiveness of older men's informal learning in community contexts', Adult Education Quarterly 61:2, pp.102-120.
- Kearns, Peter, Achieving Australia as an Inclusive Learning Society, Adult Learning Australia, 2005

Lo Bianco, Joseph. 1987. National Policy on Languages. Commonwealth Department of Education. Canberra: Australian Government Publishing Service. ISBN-13 978-0644061186

Moodie, Gavin, Victorian TAFEs would suffer under new sanctions From The Australian October 19, 2011 12:00AM

OECD Canada, UNESCO Institute for Lifelong Education, 2011 Literacy in the Information Age (2000) Final report of the International Adult Literacy Survey

OECD (2011), Education at a Glance 2011, Table B2.1, available at <http://dx.doi.org/10.1787/888932463764>

Roberts, Anita and Wignall, Louise 2011, Briefing on Foundation Skills for the National VET Equity Advisory Council

Skills Australia, 2011, Skills for Prosperity

Sweet, Richard, 2011, The mobile worker: concepts, issues, implications, NCVET

Wickert, R, Searle, J, Marr, B & Johnston, B 2007, Opportunities, transitions, and risks: Perspectives on adult literacy and numeracy development in Australia,

Hayes, Christine, Golding, B, Harvey, Jack, 2004, Adult learning through fire and emergency service organisations in small and remote Australian towns, NCVET

Seddon, Terri, 2008, Expertise in teaching adults: A resource for Innovation, The Australian TAFE Teacher, Spring 2009, Pg 15

Vinson, Tony, Dropping off the Edge: the distribution of disadvantage in Australia, Jesuit Social Services and Catholic Social Services Australia

Wheelahan and Moodie, G, 2010, The quality of teaching in VET: final report and recommendations, Australian College of Educators