In 2001-2002, the Adult Literacy and Numeracy Australian Research Consortium conducted 26 national investigations with findings in the following areas: (1) population competence; (2) linking literacy and numeracy into training; (3) professional support for educators and trainers; and (4) policy and systemic issues. All the projects were intended to integrate new research with an analysis of past provision and practice and thereby provide a body of evidence for future policy development in the adult literacy and numeracy field. The following were among the conclusions that emerged from the projects: (1) addressing the challenges facing Australia's adult literacy and numeracy sector requires a whole-of-government approach that is consistent with parallel innovations in other areas of social policy; (2) the vocational education and training sector provides a number of models of integrated policy responses to complex relationships that can guide formation of a policy regarding literacy and numeracy; (3) adopting a lifelong learning approach must take seriously the political and social exigencies of lives across their span while also giving consideration to the concerns of employers and business; and (4) efforts to develop policy regarding literacy and numeracy must be informed by the knowledge and cultures of diverse groups. (An 8-item reference list and 28-item bibliography are included.)
Learning for Life:
The role of adult literacy and numeracy in lifelong learning and socio-economic well-being

Executive Summary of the ALNARC National Research Program 2001-2002

Adult Literacy and Numeracy
Australian Research Consortium
National Research Program
June 2001- May 2002

Prepared for the Department of Education, Science and Training
June 2002
The ALNARC 2001-2002 national research program

This executive summary provides an overview of the ALNARC June 2001 – May 2002 national research program which comprised 26 individual investigations within an overarching structure of four major projects. The aim of the four major projects was to integrate new research (empirical research, reviews of literature, and discussion documents) with an analysis of past provision and practice in order to provide a body of evidence for future policy development in the adult literacy and numeracy field. The following diagram illustrates the relationship among the four major projects:

Overarching questions included the following:

What Australian initiatives have been undertaken in recent years in adult literacy and numeracy policy and research to improve vocational and lifelong learning? Can Australia be informed by international developments?

How are adult literacy and numeracy used in work and community contexts where notions of skills and knowledge are in a process of rapid transformation? What are the implications of these social practices for future adult literacy and numeracy policy, practice and research in Australia?

Is there evidence to support the claim that cross-sectoral policy integration will provide greater leverage for workplace learning and effective citizenship programs? What are the implications for improved policy, provision and research for the next decade?

What form might future adult literacy and numeracy policies take to respond to future scenarios about lifelong learning and socio-economic well-being?

Findings from the ALNARC research program are presented under the following headings:

1. population competence;
2. linking literacy and numeracy provision into training;
3. professional support for educators and trainers; and
4. policy and systemic issues.
1. **Population Competence**

**Findings**

Australia’s involvement in the *International Adult Literacy Survey* (OECD 2000; ABS 1997), provided evidence that current Australian profiles do not meet the necessary literacy and numeracy levels to respond to training, workplace and citizenship demands placed on people in contemporary times. Widespread commentary on the issue indicates the ‘problem’ is not simply one of improving the quality or length of compulsory schooling, as literacy and numeracy capacity on leaving school is only one indicator of continued competence throughout the lifespan. While some researchers question the transfer of school literacies to the workplace others argue that contemporary work and citizenship demands create new forms of literacy and numeracy practice. Therefore ongoing literacy and numeracy competence is best conceptualised under a model of ‘lifelong learning’, with the requirement for support in terms of policies that address whole of life education, rather than schools based policy initiatives alone (Castleton and McDonald 2002).

Empirical studies in Australia indicate that literacy and numeracy are considered variously as communication practices, generic skills, innovation or enterprise skills, entry level skills and context specific skills. Whilst each umbrella term addresses skills critical for living and working in the twenty-first century, each umbrella term refers to a different, but equally important, aspect of ‘core’ skills, how they are taught, when they are integrated with training and lifelong learning and what aspects of their profiles are ‘core’ across the terms. Hence, whilst different research points to different skills for different contexts and purposes, there is no single framework for explaining the ways these different research outcomes fit together coherently. However, uniformly agreed as important are the critical skills of literacy and numeracy that underpin all aspects of life and work.

Survey data suggest that Australia occupies a ‘middle ground’ in literacy rankings when compared to countries of similar industrial and developed profiles. While knowledge of Australian numeracy levels is ambiguous at best, there is increasing evidence that poor numeracy performance has a significant impact on labour market participation (Bynner, 2002). Further, that more information about the aggregation of performance around gender would be helpful in understanding future needs regarding numeracy provision generally, and workplace training in particular.

Data drawn from population surveys must also be analysed in the context of the limited rural and Indigenous raw data provided. Given this population profile it is unlikely that findings drawn from the surveys are an adequate representation of specific population needs (see also Every with Young 2001).

**Implications**

The evidence provided by international and national surveys and empirical studies confirms the complexity of literate and numerate practices, and reminds us there are no quick fix, or universal solutions to such complex challenges. If literacy and numeracy are central in organizing more effective responses to lifelong learning, workplace productivity and socio-economic well-being then solutions must recognize the value of using complementary perspectives to achieve goals.

A number of issues are identified as ways to move forward and meet the challenges.

1. The OECD (1982) framework of social indicators for socio-economic well-being provide a useful entry point for understanding, planning and evaluating policy/strategy for all aspects of life, not simply ‘paid work’. Literacy and numeracy are neither the cause nor the single solution to unemployment.

2. More detailed study of the literacy and numeracy profiles of specific groups within society, especially Indigenous peoples, youth who are disenfranchised, those living in rural and remote areas, those who are institutionalised or incarcerated and those who are homeless, is required in order to understand how literacy and numeracy as social practices contribute to the capacity of people to access and also influence public life.

3. A more comprehensive national picture of numeracy *in its own right* is required in order to avoid it being tokenised, and therefore ignored, or misunderstood as an attachment to the term ‘literacy’.

4. Seeking a whole of government approach to these challenges will involve showing how different ways of defining and using literacy and numeracy do, in fact, constitute a comprehensible and nationally important ‘whole’. Infrastructure support to promote debate about the similarities and differences between these approaches to ‘generic’ skills will be a necessary requirement of a vibrant and innovative sector.
2. **Linking literacy and numeracy provision into training**

**Findings**

Across public and policy contexts literacy and numeracy are constituted as entry-level skills necessary for many employment profiles. However, many trainers are working with tacit assumptions about workers' literacy and numeracy skills. While often not named as such, literacy and numeracy also underpin many higher order employment and citizenship activities.

Data from previous ALNARC research into issues related to the implementation of training packages, indicates that access to training is often limited to full-time workers; that literacy and numeracy use is usually context specific and dependent on the task at hand; accessing systematic literacy and numeracy support is difficult for some trainees despite the fact that they have already been accepted into training programs; and, training provision at lower levels of the Australian Qualification Framework is not well established as an entry pathway for people with low levels of literacy and numeracy.

Literacy and numeracy skills are increasingly needed for employment. Indeed in the case of many 'at risk' young people, literacy and numeracy capacity are embedded in the selection of programs offered them. That said, there appears to be limited legislated commitment to the education and training of young people (Ovens 2002; Spierings 2002). Further, while many workers have access to WELL programs, itinerant workers, outworkers and labour hire company employees are representative of groups that may not be informed about, or easily able to access, these forms of provision.

Whilst there is evidence to suggest that literacy and numeracy demands of training and workplaces are increasing (see for example the increasing documentation required of workers to comply with quality assurance procedures) there is some concern that the causal link between literacy/numeracy and employment has not been more critically evaluated (Black 2002; Falk and Guenther 2002). Such an evaluation would have different nuances across rural and remote communities, and for people from non-English speaking backgrounds, for example.

On the matter of general preparation for work and lifelong learning there is increasing evidence to suggest that competencies are not simply 'transferred', rather, they are re-contextualised through new forms of learning that are situated in the relevant context (Falk and Millar, 2002). Similarly, research on non-standard work practices in contemporary workplaces suggests speaking and 'personal presentation' skills are the leading communicative practices (Falk and Millar 2002).

**Implications**

The research findings set out above suggest that enormous and unrealistic expectations are circulating in policy and educational circles regarding the desired outcomes of literacy and numeracy provision. A number of issues are identified as ways to move forward and meet the challenges.

1. Literacy and numeracy demands are increasing in workplaces in part as a result of increasing demands for documentation resulting as businesses implement continuous improvement systems, quality training and quality assurance mechanisms designed for auditing or reporting purposes. Workplaces recognize the additional expectations arising from this form of documentation and the changes produced in entry level and higher order workplace practices. Significant cross-sectoral research and collaboration across education, health, youth, training and corrections for example, would be of assistance in charting the impact of these practices on workplace training needs.

2. Further mapping of provision and access to training is needed with regard to vocational training offered at lower levels of the Australian Qualifications Framework and the corresponding literacy and numeracy support required and available at these lower levels. Evidence suggests that certificates in general education are available but not always accessible to workers in vocational training. On the other hand vocational training programs are not always able to meet the literacy and numeracy requirements of participating trainees. Further research could usefully explore a matrix of provision that includes 'built in' literacy and numeracy, as is currently the case in many training settings, as well as preparatory programs where trainees are simply unable to meet the requirements of training due to literacy and numeracy difficulties.

3. Further research on the connections between literacy and numeracy, and notions of generic skills, innovation skills and communication will enable stakeholders to develop a better understanding of the language available to describe these skills, the actual competence involved and the training required to address issues associated with building Australia's capacity to provide for the continuing education needs of its citizens with respect to lifelong learning and work.
4. There is a continued need to ensure a comprehensive matrix of learning opportunities available to all citizens. Linear training pathways are one way of accessing literacy and numeracy provision. Equally important are parallel opportunities for literacy and numeracy learning that are connected to the broader development of social capital and critical skills of citizenship.

3. **Professional support for educators and trainers**

Findings

Literacy and numeracy competence is perceived by governments to be critical to lifelong learning and VET productivity. As such, knowledge of literacy and numeracy practices and associated issues of provision are concerns for all stakeholders.

Literacy and numeracy provision involves issues associated with general training and the detail and specificity of literacy and numeracy involved in each context. The challenge for developers of materials is to conceptualise without becoming too specific, and at the same time indicate to trainers that delivering training will involve a much more detailed response to local context (see for example Trenerry 2002). The challenge for educators and trainers is to develop a specific body of knowledge around literacy and numeracy and acquire skills associated with more generic adult and vocational education delivery (Shore and Zannettino 2002). The current Review of The Training Package For Assessment & Workplace Training (NAWT November 2001) provides an important interface with the preparation of educators and trainers responsible for the full range of literacy and numeracy provision. Thompson and Chan Lee (2001) suggest that the current Certificate IV in workplace training and assessment provides insufficient training in integrating literacy and numeracy.

As in the wider VET sector there are increasing concerns about the casualisation of teachers’ work and the impact this has on quality teaching. Literacy and numeracy educators are experiencing increasing deregulation and casualisation of their work, in combination with an increasing tendency to privatised provision and promote ‘user pays’ responsibility for their initial training and ongoing professional development. This presents opportunities for new and innovative practice, but it also undermines networking connections, collaborative possibilities previously developed under more integrated systems and shared provision arrangements (Hazell 2002; Shore 2002; Castleton and McDonald 2002). Various projects raised issues about the funding available in tender documents for professional development (Hazell 2002; Shore 2002; Johnston 2002; Castleton and McDonald 2002), especially professional development that moves beyond compliance with systemic accountability measures to ‘curiosity driven’ (DETYA 2001) investigations about teaching and learning.

Implications

The lack of a clear policy position on the extent of formal preparation required to be a literacy/numeracy educator or trainer and the range of functions performed across the continuum of roles practitioners address, presents challenging issues for the VET and community sectors. A number of issues are identified as ways to move forward and meet the challenges.

1. The relationship between certificate/diploma training for literacy and numeracy educators in the VET sector, and the parallel infrastructure and support for undergraduate and graduate teacher education is a matter for ongoing debate. Adult literacy and numeracy educators require sustained time to improve practice and this is made all the more difficult by the ambiguity of ‘pre-service’ guidelines available for employment, other than those levels of competence pegged to staff development modules and certificates such as Adult Literacy Teaching, Adult Numeracy Teaching and Assessment and Workplace Training.

2. There is a need to revisit the support and infrastructure expectations associated with provider tenders and examine the accountability procedures in place to ensure professional development is integrated and delivered as part of these tenders.

3. Arrangements for policy research and provision of literacy and numeracy need to recognise the important differences and commonalities within and across domains such as workplace and community settings, the ESL and ABE interface and between literacy and numeracy. This is becoming more important as educators and trainers work in and across these settings as part of casual and mobile work environments

4. There is a need to continue to document empirical studies of practitioner research, thus providing exemplars of adult literacy and numeracy provision in situ, at the same time as educators are provided with ongoing professional development.

5. A matrix of responsibility for preparation and ongoing professional development of educators would assist stakeholders to clarify and take up responsibilities across these domains.
4. **Policy and systemic issues**

**Findings**

Analyses of international policy documents show that many governments are working to integrate literacy and numeracy within wider cross-sectoral portfolios (Castleton and McDonald 2002). There is no evidence for this in Australia with regard to literacy and numeracy however there is increasing interest in ‘whole-of-government’ approaches to social policy. A mapping of provision over the past 10-15 years suggests a demise in formal procedures for organizing and coordinating literacy and numeracy provision nationally. However, there is substantial evidence emerging from over a decade of activity within vocational education and training regarding the integration of literacy and numeracy in the wider VET and lifelong learning domains. Despite this extension of portfolio responsibility within VET, responsibility for ‘whole-of-government’ responses to adult literacy and numeracy rests largely within one department, DEST.

A number of tendencies appeared in the data across projects. First, there is a tendency to amalgamate diverse areas of provision resulting in generic areas of program management and responsibility. This tendency is a consequence of the assumption that literacy, numeracy, adult basic education, community learning and vocational learning are similar enough pedagogically and contextually to be amalgamated under generic forms of governance. Integration of programs can prompt managers and educators to identify important similarities between areas of provision however integration can also conceal significant differences between the portfolio areas. One of the challenges of the research program has been to identify similarities and differences between portfolios areas and further to explore the differences that count in terms of responding to issues of competence, purpose for learning with regard to learners commonly grouped within each portfolio, and necessary learning outcomes.

A second tendency is associated with short term funding cycles, although this is not a phenomenon unique to the adult literacy and numeracy field, nor is it something easily resolved given the budget process associated with education and training provision. A number of projects (Hazell 2002; Shore 2002; Castleton and McDonald 2002) noted that significant gains such as student/worker learning outcomes, quality staffing initiatives and longer term policy innovation may be undermined by repeated and often unnecessary change to management and funding arrangements. Participants recognised the importance of short term funding to respond to innovation, and to counter ineffective recycling of programs which may not be responsive to community/industry need. Nevertheless these projects also identified the need to build some funding continuity and infrastructure into programs especially in contexts where ‘management’ or administration was deemed as critical in the production of learning outcomes and hence to providing the much-needed continuity from one program cycle to another.

An allied issue which emerges is the relative increase in time spent on documenting compliance with funding process compared with actual provision of education and training. In systems far wider than VET there is acceptance of these increased auditing and reporting measures. However this needs to be balanced with a recognition of the changing nature of the teacher/provider’s work.

**Implications**

Australia is experiencing a ‘policy void’ in the adult literacy and numeracy domain. A number of issues are identified as ways to move forward and meet the challenges.

1. There is no official overarching policy to guide the scope of strategies for resource flows. Therefore, while some ad hoc strategies are in place (for example job-related literacy and numeracy resourcing) there are neither sufficient re sources, nor resources of the right kinds, to ensure a strategic and sustained responses to the literacy and numeracy needs of the adult population.

2. The withdrawal of commitment to the *National Collaborative Adult English Language and Literacy Strategy* (NCAELLS) (ALIO 1991) means it is increasingly difficult to access, track, compare and analyse consistent data or accountability mechanisms put in place by the Commonwealth and the States.

3. The Australian adult literacy and numeracy sector has offered international benchmarks for systemic leadership, to counter over reliance on individual commitment of bureaucrats, practitioners and advocates. It may be time to revisit the need for a mechanism that draws the states and territories together on a systemic issue, adult literacy and numeracy provision, that goes beyond sectoral boundaries and requires significant amounts of political goodwill amongst a range of stakeholders.

4. Educational accountability is a critical aspect of adult literacy and numeracy provision. Current forms of accountability address systemic performance by tracking learner attendance in programs and individual learning outcomes. One challenge to be addressed is the identification of resources to undertake documentation of accountability, given the range of resource rich and resource poor...
organisations involved in adult literacy and numeracy provision. Another challenge is to elaborate on the contexts and purposes for being involved in adult literacy and numeracy provision and develop a matrix of accountability measures that reflects this diversity.

The way forward

Adult literacy and numeracy competence in Australia is not a new issue. Since the early 1970s Commonwealth funds have been deployed to the states to address the citizenship and employment challenges created by changing literacy and numeracy demands on the population. Prior to this, extensive efforts were directed to literacy provision in the armed forces. During the 1980s in particular the Adult Migrant Education Program faced particular challenges as Australian migration and refugee policies shaped the incoming participants in AMEP and WELL programs. In the 1990s increasing emphasis on vocational education and training programs, competency based assessment and movement to user -pays systems of training, again shifted the focus of adult literacy and numeracy from being the cornerstone of economic reform to essential underpinning skills for a knowledge nation. However, in the twenty-first century, the international focus has shifted towards literacy and numeracy for lifelong learning and citizenship.

In any democratic society, the government accepts responsibility for basic education for all citizens. There is a particular challenge here in that whilst the ‘problem’ of adult literacy and numeracy education is not one residing in a poor schooling system, the solution must of necessity begin with systemic change and innovation. This challenge has been taken up in previous decades through sustained Commonwealth funding. It was this funding innovation through ALAC, ALLP and NCAELLS that provided the scaffold for value -added activities to be adopted across states and territories. More recently, the VET sector has provided innovative models of intra-sectoral collaboration, while a policy designed to integrate basic and wide community education in a framework, the draft third National ACE policy, is explicit about government responsibility of providing pathways to lifelong learning and work.

Any response to the body of evidence produced from the ALNARC 2001-2002 National Research Program requires recognition of the complex layers of governance involved in such provision. A number of challenges are evident in addressing these exigencies:

1. Complex systems require responsive forms of policy development. In the case of adult literacy and numeracy no single response will deal with the complexity of learning and training issues revealed by the existing research. The research does, however, imply a whole-of-government approach to adult literacy and numeracy, which is consistent with parallel innovations in other areas of social policy (see for example health, indigenous affairs, youth and the current review of adult community education policy in Australia). Simply reinstalling policies from the early 1990s would be inappropriate, as would a call to a policy that addressed literacy and numeracy in isolation.

2. The VET sector provides a number of models of integrated policy responses to such complex relationships. Literacy and numeracy delivery has achieved some degree of success with the ‘built in not bolted on’ model of articulation. DEST has, therefore, a degree of experience in meeting the challenge of intra-sectoral integration across the domains of training, workplace learning, adult literacy and numeracy, and English language services, and may be able to provide some leadership in extending models of cross-sectoral response.

3. Adopting a lifelong learning approach must take seriously the political and economic exigencies of lives across their span. It is equally important to listen to the concerns of employers and business, however there is danger in thinking these views will be easily prioritised or reconciled.

4. The challenges for a system of literacy and numeracy provision informed by the knowledges and cultures of diverse groups is enormous. Such diverse experiences and knowledges have much to offer in terms of their positive contributions to national socio-economic well-being, to say nothing of the moral position incumbent upon education and training institutions to provide leadership and systemic support for all Australians.

One of the major challenges emerging from this body of research is to understand the range of complex functions required to be achieved by literacy and numeracy provision, and continue to develop forms of governance that respond to this range of functions. Approaching the ‘solution,’ in this way foregrounds the iterative relationship between the range of policy initiatives available and the variety of purposes they are required to serve.
References

(see attachment for references linked to the ALNARC 2001-2002 national research program)


Bibliography of ALNARC National Research Program 2001-2002


Hazell, Pat (2002). And then there was one. The Case of Resources Support in Victoria. Research project completed by ALNARC (New South Wales) for the ALNARC National Research Program 2001-2002.


Kelly, Sheilagh Betty Johnston and Keiko Yasukawa (forthcoming) Readings in Australian Adult Numeracy. (provisional title) Language Australia and Centre for Language and Literacy, UTS.


NOTICE

Reproduction Basis

This document is covered by a signed "Reproduction Release (Blanket)" form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.

This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").