literacy link

Getting serious

by Pat Hazell

ACAL recently hosted a national forum in Sydney as a step towards developing a future directions strategy for adult literacy and numeracy. ACAL's intention was to bring leaders, practitioners and strategists from a variety of policy areas to work with literacy experts on a shared way forward. However, this is not what eventuated. Almost all the participants were adult literacy providers or stakeholders—something that demonstrated to the organisers the extent to which the cross-sectoral task remains ahead of us. Even so, the day was very productive.

The forum was opened by ACAL President, Jim Thompson, who described an ACAL position which supports an integrated, whole-of-government and active partnership approach to improving literacy skills, yet is still grappling with what this looks like in practical terms. Jim explained how ACAL intends to expand its advocacy role by working through community groups, government agencies and business enterprises whose own goals would be advanced if the literacy of their adult clients was further developed. This is something that sits well with the ANTA strategy, Shaping our Future *(see—*

www.anta.gov.au/publication.asp?qsID=488)
Education consultant, Jane Figgis, was engaged to investigate ways literacy and numeracy fit in with other social agendas (see Jane's article on page 3). The forum itself was preceded by a day-long think-tank designed to provide input to the forum. In addition, the preliminary report of an NCVER funded adult literacy project, *Building Literacy and Numeracy Capability in Communities: Learning from Exemplary Practice* provided useful background material.

Keynote speaker, Geoff Bateson, Partnership Manager of the Birmingham Core Skills Development Partnership, described that city's experience of a joined-up government approach to raising literacy standards. An article by Geoff will appear in a future issue of *Literacy Link*.

Go for the possibilities

Louise Wignall, a Senior Project Officer with ANTA (Australian National Training Authority) outlined their strategy, Shaping the Future, and suggested ways ACAL and the literacy field could take advantage of the possibilities it offered. Louise pointed out that there are explicit references to language, literacy and numeracy (LLN) in a number of places in the strategy, demonstrating that LLN is understood not only as an equity issue but as a whole system issue. Louise argued that the LLN field needs to be more strategic, more aware of where LLN money comes from, how expenditure is authorised and against what priorities and expectations.

Louise drew attention to some useful resources to stimulate thinking about future possibilities. These include a review by Rosa McKenna and Lynne Fitzpatrick soon to be published by the NCVER (National Centre for Vocational Education Research), *Building Sustainable Adult Literacy Provision: A review of international trends in adult literacy policy and*

Geoff Bateson (UK) "In just a couple of years the literacy skills of 2-3% of the Birmingham population have lifted by one level."

contents—

programs (see also *Literacy Link* Vol 24 no. 2). Also included were three useful discussion papers on the DEST (Department of Education, Science and Training) web site by Rosie Wickert, Francesca Beddie and Steve Balzary, that have been prepared as part of the preparation for the September NCVER/DEST forum on possible ways forward. *(www.dest.gov.au/litera-cynet/)*

Making it do-able

Geoff Bateson provided a fascinating account of how change has been implemented in Birmingham. Geoff described the challenges Birmingham confronted in the post-industrial era as it faced a skills shortage exacerbated by poor literacy and numeracy levels. A high level whole-of-city partnership was established with the aim of bringing about whole city change through improved literacy across all ages. All sectors had a part to play in this strategy, not just education.

"We have a language problem—our complex meanings of literacy could be part of the problem, not part of the solution."

During the progress of the Birmingham work, and following a change of government, an ambitious national strategy for improving adult literacy and numeracy skills, Skills for Life, was put in place in the UK. Because the Birmingham task was already under way they were well placed to feed constructively into this, and also to use it to strengthen the implementation of their own aspirational plan.

Just four strategic objectives were developed: get more people involved in improving core skills; make sure the supply of provision is there; make sure the provision is high enough quality, and make sure participants achieve their goals. Progress was rapid. Numbers in provision quickly doubled, so new teachers and

a new curriculum were needed. There is a requirement through the Skills for Life strategy to deliver outcomes and good outcomes have been achieved in Birmingham. In just a couple of years the literacy skills of 2-3% of the Birmingham population have lifted by one level.

Not on anyone's radar

Jan Figgis was the final speaker of the morning. She found that:
- Literacy is not a topic people think about or know much about.
- What is obvious to us is not obvious to others.
- Our complex meanings of literacy could be part of the problem, not part of the solution.
- We need to find the hooks in other strategies and priorities if we are to succeed in to engaging others in a new literacy strategy.
- There are points of leverage as joined-up government and capacity building gathers mass.
- Achieving our goals of greater engagement will require lots of pavement pounding.
- Make a start using whatever is available and let the policy catch up.

A number of barriers as well as possibilities were identified after lunch when participants worked in small groups. These clustered around an importance of being knowledgeable about the policies, priorities and strategies outside the VET sector, the importance of flexibility of approach and of a common language. Other barriers are related to finance and competition, previous negative experiences, existing preconceptions, conflicting and disparate goals, and ethical concerns.

In the final session, groups were required to select a key strategy or action which would take forward a more 'joined-up' approach to literacy capacity building in Australia, then present this as a promotional campaign. The program of song, dance, slogans and posters was nothing less than brilliant, and provided a fitting end to a day where ACAL had indeed 'got serious'.

Taking literacy learning to fresh fields

by Jane Figgis

The 'built-in not bolted-on' model of literacy learning has been an effective strategy for improving the basic skills of people at work. Extending the model seemed a logical avenue for ACAL to investigate as part of its forward planning. The first step was to identify fresh fields where improving people's literacy might deliver benefits both to the individuals concerned and the field itself. Jane Figgis, an education consultant and former broadcaster, was given the task of researching potential partners and discussing with them ways improved literacy might advance their agendas and ambitions.

The list of potential fields where literacy and numeracy might play a significant role was easy to devise. Health was an early entry—it seems obvious that being able to critique the flood of messages about dieting, for example, or simply to read accurately the directions on a prescription is critical.

There are also the agendas of welfare organisations, community development agencies, banks and other financial institutions, housing commissions, the electoral commission, justice departments—all areas where the literacy and numeracy of clients, if limited in some manner, could decrease the effectiveness of the agency or organisation working with them.

Jane Figgis, education consultant and former broadcaster

Even though these fields are very different, I discovered fairly quickly that they share two common characteristics which will determine whether there is potential for ACAL to build partnerships with them. The first charcteristic is that literacy and numeracy is not a topic people 'out there' think about, and secondly, literacy and numeracy is not a topic people 'out there' know much about. These factors are real hurdles to extending the built-in not bolted-on model. This article describes each in a little more detail in the hope that by understanding them, it will be easier to overcome them.

Literacy and numeracy are not seen as problematic by potential partners

One person I spoke to who is highly regarded in the field of community capacity building said my approaching him made him realise that he simply took literacy for granted. Or, more accurately, he doesn't think about it because he doesn't see poor literacy or numeracy.

The point is an important one. He may well be in contact with people with weak or even very weak skills but the problem is often masked. People with low levels of literacy can be extremely articulate and good communicators. And people compensate—they use the literacy and numeracy resources of other people.

The statistics say that 20 per cent of Australian adults perform at the very lowest literacy and numeracy levels and that a further 20 percent do not have the necessary literacy skills 'to effectively participate in daily life' making up 40 percent of the adult population. Frankly, that doesn't correspond to most people's experience of the world. It may be the case that there is a greater problem than is readily observed—that forty percent of the adult population of Australia is struggling to participate in daily life—but, with the exception of migrants who do not speak English, it just doesn't sound right. People 'out there' will need to be convinced of the deficits. Many of the people I interviewed said that one of the first things they would ask ACAL (or other literacy and numeracy specialists) to do would be to show them that there are real weaknesses in the literacy and numeracy skills of their clientele or in their particular community.

> *"...statistics say that 40 per cent of Australian adults do not have the necessary literacy skills 'to effectively participate in daily life'. Frankly, that doesn't correspond to most people's experience of the world."*

In domains like health where there is a concern about clients' literacy, the public health professionals' solution has been to simplify the message and to market that message. Instead of improving the skill of people with limited literacy, these officers get around the difficulty basically by sloganeering. I'm sure we all applaud the efforts to encourage people to exercise more, stop smoking, use condoms, etc. However, turning health messages into (maximum) two-syllable word slogans does not lead to fruitful partnerships around developing literacy.

There is (this will come as no surprise) confusion about what the word 'literacy' connotes.

Well, perhaps 'confusion' is the wrong word. There is great consistency and little doubt for most people 'out there': literacy is being able to read - to decode text. Primary school type stuff. More than once in my conversations, the interviewee would be describing quite nicely the literacy demands on his or her clients—in one case, their having to write letters and how confusing some of the letters they produce actually are. But then, quite suddenly, they'd turn round and ask: 'But is this communication or is it literacy?'

One of the informants, a person very knowledgeable about literacy who happens to do a lot of work in communities put the problem in stark (and startling) terms: 'The term literacy is part of the problem, not part of the solution'. Literacy has too much baggage and illiteracy too much stigma to be useful in conversation outside the profession.

It is interesting that although the word 'literacy' with respect to reading and writing is interpreted in the broad community in a rather pejorative way to mean 'basic literacy' or, actually, illiteracy—a deficit in decoding. Even so, the word itself is used positively and frequently in other fields. People talk happily, not disparagingly, about computer literacy, information literacy, health literacy, and financial literacy.

Some of the community development people I interviewed talked about 'institution' literacy as knowing how to set up and run local organisations. It is not clear to me whether this appropriation of the word literacy by these other fields—to mean a basic understanding—is doing the adult literacy field a service or a disservice. It gives prominence to the word, but it's not the literacy field's take on the word which is being promoted.

Building partnerships is 'pavement pounding' work
Literacy and numeracy educators may not always recognise just how special their knowledge and expertise is. It will require patient and detailed effort on the part of the profession before people in the 'fresh fields' clearly understand the roles they might play in improving the literacy and numeracy of their clients and customers.

The vast majority of my interviews ended with the person saying they would be really interested in having a conversation with someone associated with ACAL or other literacy or numeracy specialists. One person put it particularly clearly, but the sentiment was voiced by many: 'It is intriguing to think that we could actually improve clients' literacy. I like that idea!'

Those discussions are going to be time-consuming. Coming to an understanding of the ways literacy and numeracy are conceptualised and required in these arenas (including the language and meta-language used by these 'outsiders') is not a task that can be short-circuited. Remember, these other agencies and organisations have accommodated (or believe they have accommodated) the current level of their clients' literacy and numeracy skills. It will be a search for effective 'hooks', as someone put it, with that quite accurate image of pulling two sides closer together.

These discussions will need to proceed at two levels. One is on-the-ground with the agencies and organisations who deal directly with the clients whose literacy and numeracy are of interest. The other is at the policy level where advocacy for literacy and numeracy needs to be built into on-going thinking and planning.

In health, for example, the two levels are the practitioners and the decision-makers. Both need to understand the value of people being able to critically analyse all the information they are subject to. In finance, both local bank officers and peak body associations need to see the opportunities that are opened to them if client literacy and numeracy is improved. Similarly in the welfare sector: politicians concerned about poverty need to be engaged and so too do social workers (and volunteers) helping disadvantaged families. The potential for knitting other people's agendas to ours is significant but it has to operate at many levels.

Once an agreed understanding of the potential is in place, sector by sector, then detailed program development work is called for. How is this extended literacy and numeracy learning to be built in? Where? Who exactly is going to do the learning? Who is going to do the teaching? Who is going to pay for it? What exactly is involved?

In sum, moving forward together requires extended conversations. In the first instance, because the concerns of the adult literacy profession about continuing poor literacy levels are neither widely shared nor understood. Then conversations need to be held to develop programs and action plans that bring about mutual goals for improvements in literacy and numeracy. Literacy and numeracy will never be the core business of these potential partners but there is an opportunity to make many of them sincere and supportive allies.

ACAL submission to the senate inquiry into the future direction of life-long learning

by Rosie Wickert

The Australian Council for Adult Literacy welcomes the opportunity to comment and provide advice regarding the importance of adult literacy and numeracy in the effectiveness of any policies and strategies aimed at addressing the life-long learning needs of an ageing population. From ACAL's perspective, adult literacy and numeracy include computer and information literacies, which are increasingly referred to as the new basics. ACAL calls for a National Summit to develop and carry forward an informed, multi-faceted, coordinated whole-of-government strategy for adult literacy and numeracy.

Any effective strategy that aims to address the life-long learning needs of an ageing population must apply to the whole adult population. We are all ageing. Failure to recognise and act on literacy and numeracy needs of all Australians places not just Australia's literacy and numeracy levels at further risk, but will have dramatic detrimental effects on Australia's and Australian's economic, employment, social and health well-being and competitiveness.

A comprehensive approach to lifelong learning and adult literacy and numeracy requires:

- flexible options so that programs can support the different needs of different clients on different pathways
- coordinated policies and activities across all sectors to ensure there is a coherent national policy on literacy and learning from childhood to adulthood
- the commitment of key stakeholders related fields such as health, welfare, criminal justice and employment; and
- an evidence base informed by global trends in adult literacy and lifelong learning policy development
- a comprehensive whole-of-government national policy agenda to ensure a literate and numerate Australia with funding that aims to achieve sustainable progress

Key Messages

- As with other industrialised nations, Australia will be experiencing a serious skills shortage. Poor literacy, numeracy and IT skills present a barrier to many Australians who may need to retrain in order to remain in the labour market;
- In line with changing individual, community and industry literacy and numeracy demands (ANTA 2003), broader notions of literacy and numeracy than 'the lingering basics' (Lankshear in Lonsdale and McCurry 2004 - see '*Literacy Link* Vol 24 No 3) need to inform future planning and provision. New basic skills such as using technology, group problem solving and critical thinking are now determinants of success in the labour market (Murnane and Levy 2004);
- Poor literacy (including information literacy) and numeracy skills will hinder individuals' capacities to manage an increasingly 'patchwork' life/work trajectory created by rapidly changing patterns of employment (Speirings 2004);
- The 'new basics' were not part of the curriculum of large numbers of the workforce that will still be working in twenty years time (Adult Learning Australia 2004);
- Older Australians require appropriate learning opportunities available in flexible modes and relevant to their immediate needs. Older Australians do not need to do general education courses
- Literacy and numeracy skills can and need to be developed in many ways. Pathways start from unpredictable points. Literacy and numeracy improvement is a whole of community issue. Experience from overseas indicates that a wide range of service delivery organisations can play a part in improving society's basic skills capital stocks by developing their capabilities to enable learning in many life situations (Bateson 2003; Literacy and Social Inclusion 2004)
- People's lives pass through many transition points, not always linked to work and training. Often their literacy and numeracy needs are greatest at such times. Ensuring support is available at such times in one way of increasing the literacy and numeracy learning opportunities for Australian adults
- Thus there's a need to map the possibilities for greater organisational collaboration in a broad integrated national learning and literacy strategy across sectors - i.e. health, education, youth, ageing, housing, welfare, justice, crime prevention, community development and so on. A systematic approach is required, driven by a clear strategic framework, preferably supported by legislation and/or endorsed by COAG (McKenna and Fitzpatrick, forthcoming)
- The training of all 'front-line' workers needs to contain practical strategies as to how they can help develop the adult literacy, learning and numeracy skills of their clients. The current commitment to a community capacity building approach provides the opportunity for this but Australia is at risk of missing the learning possibilities that could be built into strategies that relate to families, ageing, health, crime prevention, consumer affairs and so on
- Literacy and numeracy practitioners must acquire the skills to deliver the 'new basics' to enable the effective implementation of a broad-based adult literacy and numeracy strategy
- Greater parity in pay and conditions needs to occur for adult literacy and numeracy workers in different sectors to assure greater quality and consistency across the field.

This paper in its entirety can be found on the ACAL web site—www.acal.edu.au

Riverina Institute of TAFE *'Families in Focus – Mobile Literacy Mentoring'* Based in Wagga Wagga, this project brings together 6 major agencies to set up a mobile literacy mentoring service. The service will assist those needing literacy assistance who have little contact with schools and other organisations. The project demonstrates strong cross-sectoral partnerships in meeting a literacy need in the community. Contact: Leonie Francis 02 6938 1380

Textile Clothing and Footwear Union of Australia (TCFUA) *'What do I do next? – An integrated literacy strategy for retrenched workers in the textile, clothing and footwear industry'* A strategic project which will provide literacy skills training to recently retrenched workers to help them find employment. The project features a strong collaborative partnership between the TCFUA, industry, and the training sector, to provide a strategic solution to the employment issue. While the project will focus on assisting recently retrenched workers from Yakka Pty Ltd, the final report will demonstrate a model that can be adopted in similar retrenchment situations where workers require literacy training to help them find new jobs. Contact: Helena Spyrou 03 9347 3377

Newcastle City Council *'Linking Literacy to Information Literacy – A pilot program for Aboriginal learners'* Using library IT facilities this project will provide literacy training and information literacy skills to Aboriginal people within a library setting. The project will teach Aboriginal participants basic literacy skills as well as instruct them on how to access information on subjects such as housing and health. The project will seek to establish the library as a secure place where Aboriginal people feel comfortable learning. Contact: Noelle Nelson 02 4974 5301

Department of Education, Tasmania *'Community Story-Boards: Enabling Literacy Through Community Engagement'* The project will fund five mini-projects in selected regional communities in Tasmania. Each project will create a 'community story-board', which will act as a vehicle for literacy learning for individuals selected to participate on each project. The storyboards will reflect the industries of each region including forestry, mining, and agriculture. Each mini-project will employ an action research methodology and involve a range of other community stakeholders. The project presents an innovative model for both improving literacy skills of participants and strengthening communities. Contact: Nick Evans 03 6233 2019

Bremer Institute of TAFE *'Literacy Resources for St Vincent's Life Skills Program'* This project will develop minor print resources to support adults who are participating in the St Vincent's Life Skills Program. The resources will help to improve the literacy and numeracy skills of participants around food preparation and cooking, and will include skills such as reading and interpreting instructions, and measuring ingredients. The resources support training and will help establish pathways for participants into other VET training. Contact: Jill Maiden 07 3817 3315

Stella Maris Institute *'Parents as Literacy Support'* This project t will improve the literacy skills of a group of young, disadvantaged mothers, including mothers from a CALD background, to allow them to become more involved in their children's learning. The project will seek to improve participants' literacy and numeracy skills using real texts, such as immunisation brochures, school reports, and newsletters. Contact: Diana Iles 02 9948 3272

North Coast Institute of TAFE *'Figuring it out – Literacy for Quality Education in Indigenous Governance'* This project will develop PD materials for trainers on literacy skills training and support for Indigenous people in Governance. The materials produced will include a literacy guide for trainers, trainer activities, and information for trainers on how to integrate literacy into Governance training. Altogether, the project will produce a suite of materials that will be used extensively throughout the NSW North Coast. Contact: Margaret Gardner 02 6592 6099

The Centre *'Volunteer Literacy Support Programme'* Targeting disadvantaged youth, this project aims to develop a volunteer service to provide literacy support for those who are learning at the Centre or planning to move from the Centre to other forms of learning. As part of the project, the Centre will collaborate with other agencies to create a service with community links, and to plan for sustainability of the service. Contact: Margaret Brickhill 03 5721 0219

Department of Correctional Services (SA) *'National Prisoner Literacy Assessment Tool'* This project will develop national standardised literacy diagnostic instruments suitable for use with prisoners in correctional centres across Australia. It brings together representatives from Corrective Service Departments and organisations from all States and Territories and TAFE, and will be of great value in unifying standards and in assisting prisoners with literacy needs. Contact: Bernard Meatheringham 08 8226 9061

REVIEW—*Blue Sky Bicycle and other Journeys*

by Leslie Stein

Students in my literacy class were recently discussing the news of an elderly woman who had won several million dollars in a lottery. Remembering a story I had read in *Blue Sky Bicycle and other Journeys* about an 'almost win', I suggested that the group might like to read adult basic education student Mark Collyer's story. The group were intrigued when they realised the stories in this professionally produced publication were written by students with skills similar to their own.

Mark's story of his educational journey revolved around his misreading the directions on a scratchie he had purchased at his local newsagency. This resulted in his missing out on a lottery win, but motivated him instead to get help with his reading skills. All the students were delighted that they were able to easily read Mark's story and many identified with his frustration. We then talked about what had prompted each of them to come to the college to work on their literacy skills. While none had a 'critical moment' quite as dramatic as Mark's, they were interested to tell and hear each other's stories. They agreed that they would like to write about their individual education journeys which I then produced as a booklet for

them. Since then I have used *Blue Sky Bicycle and other Journeys* on numerous occasions. Students were particularly interested to read the stories of migration and were keen to compare those stories to their own. Using the atlas to locate the places written about added interest to the texts.

Organised into journeys of migration, education, life experience and getting away, *Blue Sky Bicycle and other Journeys* is a popular resource for the classroom. It's not unusual to see students in our teaching room reading it during their tea breaks. One student commented that the stories were short enough to read in a sitting but long enough to really tell a story. It is a publication that will not date; the stories will be as relevant in the future as they are today.

Blue Sky Bicycle and other Journeys is published by the NSW Adult Literacy & Numeracy Council, Ph 02 9514 3973 www.nswalnc.uts.edu.au

Teaching qualifications survey

by Jan Hagston

The development of literacy, language and numeracy units to be included in the Training and Assessment Training Package has highlighted the need for discussion about the qualifications required by adult literacy and numeracy teachers.

To inform ACAL's position about teacher qualifications, ACAL asked its members and also members of State and Territory adult literacy councils a range of questions related to what qualifications they felt were required in their current job. 106 people responded to the questionnaire. The majority of respondents worked in TAFE Institutes (63%) with 22% working in ACE (Adult and Community Education) or other community organisations. Other respondents worked in private RTOs (registered training organisations), universities and government departments. A small percentage of respondents (8%) worked at more than one organisation.

Respondents were asked what qualifications were required for the position they currently hold, what they thought should be the minimum qualifications for the position and what qualifications would best equip them for the position.

Table 1

Qualifications required for current position	Respondents
No qualifications required	1%
Certificate IV in Workplace Assessment and Training	13.7%
Teaching qualifications	9.8%
Teaching qualifications in literacy, language and numeracy	7.8%
Teaching qualifications plus Certificate IV in Workplace Assessment and Training	10.8%
Teaching qualifications plus additional qualifications in literacy, language and/or numeracy or substantial professional development in these areas. The Adult Literacy Teaching and Adult Numeracy Teaching Courses were mentioned in number of responses as required or appropriate professional development.	31.4%
Teaching qualification plus additional qualification or substantial professional development in adult, literacy or numeracy plus Cert IV in Workplace Assessment and Training	15.7%
Other (mainly relating to non-literacy, language and numeracy teaching content, e.g. IT, agriculture)	9.8%

Responses to the question relating to qualifications required for the respondent's current position varied considerably, which is not surprising given the range of positions respondents held and the variety of contexts in which they work. *Table 1 (above)* summarises the responses.

The results indicated that most respondents required a teaching qualification for their current position plus additional qualifications in literacy, language and/or numeracy, substantial professional development, or Certificate IV in Workplace Assessment and Training.

Table 2

	What should be minimum qualifications required for current position	What would be best qualifications for current position
No qualifications required	0%	0%
Certificate IV in Workplace Assessment and Training	2%	0%
Certificate IV in Workplace Assessment and Training plus additional qualifications and/or professional development in adult LLN (literacy, language or numeracy) and/or relevant teaching experience	3.9%	3%
Teaching qualifications	14.7%	6%
Teaching qualifications in LLN	18.6%	19.2%
Teaching qualifications plus Certificate IV in Workplace Assessment and Training	2%	2%
Teaching qualifications plus professional development in adult LLN and/or relevant teaching experience	6.9%	7%
Teaching qualifications plus additional qual'ns in adult LLN	32.3% (over a quarter said relevant experience also required)	39.4% (Just under half said relevant experience and professional development also needed)
Teaching qualification plus additional qualification or substantial professional development in adult LLN plus Cert IV in Workplace Assessment and Training	6.9%	8.1%
Other (Responses included degree (unspecified), post graduate qualifications (unspecified), industry specific qualifications)	12.7%	15.2%

A number of respondents also commented on the requirement for experience in teaching in literacy, language or numeracy.

Responses to the questions related to minimum qualifications and the qualifications to best equip them for the position respondents currently hold, responses also varied considerably. *Table 2* (opposite) summarises the responses.

Responses indicated that few respondents felt that Certificate IV in Workplace Assessment and Training was an adequate qualification for the range of positions they held. A number of respondents commented that Certificate IV in Workplace Assessment and Training alone was not an adequate qualification. For example: 'Teachers with only Cert IV are really struggling' and 'Cert IV is fine for industry based supervisors who are doing on-job assessment of functional tasks but it is inadequate for classroom teaching, flexible delivery, on-line teaching and so forth.'

However, most respondents did not see a teaching qualification as adequate either. Responses related to what is believed to be the minimum qualifications and the qualifications that would best equip respondents for their current job show that the majority of respondents believed that a teaching qualification which covered literacy, language and/or numeracy or a teaching qualification plus additional qualifications or professional development in adult, literacy, language and/or numeracy would best equip them for their current position.

The importance of teaching experience and professional development, in conjunction with qualifications, was recognised by many respondents. Some respondents suggested that on-going professional development was required to ensure currency of skills. The importance of industry specific qualifications and experience was also recognised by many respondents.

Respondents were also asked what type of professional development or further study they had undertaken since obtaining their present position. Responses showed that only 8.5% had done no professional development since obtaining their current position. 32% had undertaken or were undertaken accredited courses related to their work. This includes courses at Certificate IV (mainly Certificate IV in Workplace Assessment and Training) to doctorate level. This does not include those who had undertaken the Adult Literacy Teaching or Adult Numeracy Training Courses, which prior to 2001 were accredited. The remainder of respondents had attended conferences, short courses, seminars, and so on.

How numeracy has shaped motherhood

by Margaret Carmody

Mathematics has played an enormously important role in Australia over the last fifty years in shaping not only how mothers have fed their children but how they actually mothered them too. In this article, Margaret Carmody (Australian Catholic University, Canberra) examines the role of mathematics in shaping social policy—how it has devalued women and their role, and eroded their knowledge and confidence.

Mathematics has influenced mothers in the care of their babies, in the feeding and in assessing their well being. The scientific and health communities have regarded mothers as not the most sensible of people. This is understandable when we consider the literacy of scientific thinking which is quite different from the common sense understanding of the world.

The scientific view of feeding babies is one bound by mathematics—it is one where all the elements are measured and pronounced satisfactory or otherwise. Volumes of milk, frequency and length of feeds, weight of the baby-all these become indicators of successful infant feeding and by implication, indicators of successful mothering. Unfortunately this has largely become the discourse of motherhood, so that now we as a community have forgotten the things that cannot be measured.

Mothering became an exact science in Australia in the 1940's—today's grandmothers were brought up under this influence. The scientific approach to feeding babies was a genuine attempt to tackle some serious problems but, in the process, caused others. Mothering was reduced to an exact science, with precise values and predictable outcomes. Ironically, outcomes today such as widespread obesity and other health problems were not predicted.

The scientific view was also used as a form of authoritarian transmission, or non-negotiable learning. It was a matter of telling, instructing, reinforcing. The health professionals were the experts and these unreliable mothers had to obey their dictates. The effect was to greatly reduce the number of breast fed babies, to disempower and confuse women so that they relied upon a few set, explicit mathematics formulas. But, what could possibly be better than ensuring the future health of the community?

Even today, if you take a careful look at the advertisements and information about formulas to feed babies, you will find scientific appeal, selective use of statistics, quasi-scientific terms such as flora instead of germs and appeals to general fear. Will your kids be sporty and intelligent? Drink this and make sure. They all have a token endorsement of breast milk; reminiscent of the anti smoking messages on cigarette packets. As more and more women return to work when their babies are very young, there is a tendency to once again rely on scientific discourse about feeding. Today's supermums are under similar pressures to regulate their babies and their mothering, despite attempts to encourage them to breastfeed.

The idea of scheduling feeds for babies gained popularity in the 1920s in Australia, because of the influence of Dr Truby King. In a system of timed feeds, every four hours, most mothers could not succeed at breastfeeding, so formulas were the answer. Many mothers felt formulas, being scientific, were actually superior to breast milk and never even attempted breastfeeding, especially in view of the social isolation of the breastfeeding mother. It was a world of scheduled feeds, formula feeds and weighing the baby. Most of the formulas were very complicated and some in well-known baby books did not even add up. These formulas required considerable literacy skills on the part of the mother. She needed to be able to read the labels, to understand the terms and be able to translate between American and Australian measures.

Try this one: Evaporated milk 13 oz + water to make one quart + corn syrup 2 Tblspns. This will make 6 bottles of 5 1/4 oz, 5 bottles of 6 1/2 oz, or 4 bottles of 8 oz.

Dr Benjamin Spock, 'Baby and Childcare' New York 1972,

There were assumptions about the mother's language background and skills; assumptions about her domestic skills and circumstances—that she had a measuring jug, that she knew about temperatures, cleanliness and sterilising. There was the assumption that she had the numeracy skills to be able to count, add up and divide and multiply and measure accurately. And lastly, there was the biggest assumption of all, which we now know to be entirely untrue, that cow's milk, diluted and sweetened is equivalent to breast milk.

Not only did mothers have to contend with making up formulas, they also had to understand schedules for feeding-more numeracy skills were required. They needed to be able to tell the time, to be aware of the time, and they needed to then be able to work out the volume per feed as a fraction of the daily intake. The relationship between the weight of the baby and its need for milk was reduced to a mathematical formula: baby's weight in lb x 10/2 = total oz per day. This was a non-negotiable learning situation, allowing for no collaboration and no reflection. Mothers were not the

changed radically over the last forty years due in no small measure to the vision of one woman, Mary Paton, who in 1964 founded the Nursing Mothers Association of Australia (now the Australian Breastfeeding Association). Mary Paton's approach has been to allow mothers to construct their own knowledge, to provide them with information and let them make their own decisions.

We are still a society where babies and their mothers are controlled by a discourse that involves the explicit mathematics of mothering. As teachers, this is a matter of great concern and there are specific implications for adult numeracy teachers.

It is pertinent to understand what went wrong with mothering, how mothering has been reshaped and the part mathematics has played in this. Breastfeeding is no longer considered part of normal life. When did you last see a baby breastfeeding on TV? Or feeding in any way? One could be forgiven for thinking that babies don't eat at all. Perhaps they are like Snugglepot and Cuddlepie and don't need to eat? There is a complex confusion of messages in the media, and this is a fertile area for discussion and analysis, as statistics suggest that mothers are more influenced by the media than by health professionals. When did you last see a movie star or a personality breastfeeding their baby? Breast is best, yet we know that half of Australian babies are not exclusively breast fed for the first six months.

baby health card from the fifties

experts. Texts implied impartiality and detached authority, but in reality they were anything but.

The advice given to mothers in Australia has

Classroom activities

- Look at ways mathematics is incorporated into motherhood, and into feeding babies. Students can list their own experiences and compare them with the group.
- Students can assess the mathematics used in advertising, information and labelling of products, regarding feeding babies.
- When discussing what we count in our society, don't forget the numeracy of baby feeding.
- In a women's maths class, consider the numeracy of feeding babies as something they are already good at. Many women won't think of measuring out formula and reading weight charts as numeracy. Compare different cultural traditions.
- Discuss the effect of the maths on their mothering. Did it make them feel secure? Did it worry them? Did they adopt practices that made them feel bad, because it was required, eg scheduled feeds, early weaning.
- Make a list of all the indicators of a healthy baby that can't be counted or measured.
- Interview your own mother or aunts and find out how maths shaped their mothering.

From this discussion, it would be possible to examine all sorts of issues regarding the role of science and mathematics in particular in our society, how the traditional roles of housewife, cook and mother have been taken over by science, and now barely exist. This has devalued women and their role, their knowledge and their confidence. How have women dealt with this? What are the benefits of a scientific approach? What are the benefits of finding out the facts, talking to other mothers and then making up your own mind? How has mathematics shaped mothers?

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Adult learning through fire and emergency service organisations in small and remote towns

Christine Hayes, Barry Golding and Jack Harvey

▶ PUBLIC SAFETY ORGANISATIONS play a vital role in preventing and reacting to fire and emergencies throughout Australia. They put considerable effort into training volunteers. This report investigates how literacy levels affect volunteers' ability to meet increasing community expectations, and considers means for them to learn valued literacy and communication skills.

Rural fire services and state emergency services usually maintain headquarters and regional offices to coordinate training. Drivers for change in their training practices include the training needs of diverse regions, the diversity of employees and volunteers, new emergency response technologies, and changing community and legal pressures.

A study was conducted of 20 fire brigades and state emergency service (SES) units in small and remote communities across five states. Surveys were distributed to registered members in each brigade or unit, yielding 329 responses (73%). Over 80% of respondents were male, and over 90% were unpaid fire or state emergency service volunteers.

The brigades and units themselves were found to be important adult learning providers, the majority (60%) of all respondents attending training at least monthly. Common forms of training were technical (85% of respondents), emergency response (83%), team and leadership (66%) and other communication skills (60%).

Where locations also had local technical and further education (TAFE) or adult and community education (ACE) organisations, these tended to show limited knowledge of, and few training links with, the corresponding public safety organisations. This is partly because the learning organisations tend to have female employees, whereas most emergency volunteers are male.

In the area of communications, 30% or more of respondents ranked their skills as 'low' for using computers, leading meetings or briefings, and public speaking. Often, the number of people rating particular communication skills as 'highly important' to the brigade or unit exceeded the number rating their own skills as 'high'.

While nearly 80% of respondents would like to improve their communication skills, only 15% agreed literacy was an issue for them, although other evidence suggests this is an understatement. A large majority expressed positive feelings about being a volunteer and their unit's place in the community.

Volunteers are enthusiastic about learning, but older members resist formal training, believing it may be too difficult or will not recognise acquired skills. Most members believe that because these are team organisations, it is important that the 'team' have the full range of skills, rather than each individual.

Volunteers believe their organisations play important social and community roles. Registered members use acquired skills across the community, while spouses and partners gain skills through their support role. This all contributes to the development of 'social capital', or the skills and networks that result from collective, civic activities.

The report suggests the bonding that occurs between members is invaluable when they are responding to emergencies, and enables them to do so quickly and efficiently.

RESEARCH OVERVIEW

Strategies for further literacy and communications development should note the volunteers' strong preference for practical onsite training delivered by their own organisations. However, local partnerships with adult learning organisations can be strengthened.

▶ Messages for policy and practice

Rural fire and emergency organisations are important community locations for adult learning, particularly for men or for those with limited formal education. Volunteers are keen to learn directly relevant skills.

While some volunteers are attracted to the idea of skills and qualifications, others (particularly older men) may be deterred by the perceived imposition of higher training requirements. Given that the organisations struggle to attract, train and retain skilled volunteers, barriers should be minimised.

At least 15% of volunteers can be expected to have difficulties with training because of limited communication or literacy skills, and this may grow with increasing training and assessment demands. In re-developing training and materials, 'hands on' training best suits most volunteers.

Literacy development in itself is not core business for the organisations, and to some extent a fire or emergency team can make up for individual skill gaps. However, the study reinforces the importance of accurate communication skills in emergency work, and the interest that volunteers have in developing these skills.

The learning that occurs through widely dispersed fire and emergency organisations contributes broadly to rural and remote communities. In essence, they are a kind of local adult learning organisation, although not widely recognised as such by volunteers or the community.

These organisations are willing to further the communication skills of their volunteers. However, they prefer that any such training be funded, directly relevant to the organisation's role, delivered primarily through existing structures, and undertaken locally.

Adult learning though fire and emergency service organisations in small and remote towns, by Christine Hayes, Barry Golding and Jack Harvey, will be available soon. To be alerted when it it is available, subscribe to NCVER News at <http://www.ncver.edu.au/ncverevents/news.html>

ACAL is pleased to publish selected NCVER Research Overviews in this and the following two issues of *Literacy Link.* We invite readers to contribute their responses to them.

RESEARCH OVERVIEW

What is all this learning for? Indigenous adult English literacy practices, training, community capacity and health

Inge Kral and Ian Falk

► CULTURALLY APPROPRIATE vocational education and training (VET) opportunities in remote Indigenous communities can give people the skills to be an active community participant. A key component of this is how adult literacy practices meet the needs of these communities.

This report studies the evolution of a Northern Territory community-controlled health service in the Sandover region among Alyawarr and Anmatyerr peoples. This involved an ethnographic investigation of adult literacy practices both in English and the local languages. It conducted interviews with community members and observers, everyday observations of community literacy practices, and an analysis of literary artefacts.

Western education and training has a short history in the region, because homeland school coverage was only achieved in 2003 and there are few texts in local languages. Local people have few job opportunities, although artwork is a major source of income. The community, having regained its lands, maintains coherent systems of law and culture.

The main interface with mainstream vocational education and training is the health service, particularly for those who undertake the Certificate III in Aboriginal Health Work. This training has, however, been affected by inconsistent planning.

The health service is developing a culturally appropriate training model which allows the community to identify the 'right person' culturally for the role. Younger trainees are mentored in the workplace culture, training is transparent, informal and flexible, and traditional community authority structures are reflected in the workplace.

Little teaching and learning of English literacy at home was observed. About 80% (39 out of 49) of interviewees had attended school and said they had English literacy. However, when assessed using the National Reporting System (NRS) as an indication of reading and writing competence, 50% of males and 40% of females were not yet competent at NRS Level 1.

About 50% of interviewees had participated in some form of adult literacy or training course, but few had further training aspirations.

The community is striving to maintain its Indigenous cultural heritage, and the health service is recognised as a site to extend its aspirations for education, training and employment.

The community is also dedicated to the process of developing a literate environment and the roles of 'literacy brokerage' and 'textual interpretation' have emerged. Not everybody has to be literate when key people act as brokers or mediators in identified sites for the less literate group.

Those who have moved in from other communities or engaged in lifelong learning tend to encourage literacy in others and practise it themselves. Such individuals are more likely to create, find or store written texts, and a general community transition to literacy would be aided by spreading these practices.

Literacy is more likely to be adopted if it is linked to cultural and religious activities, and community responsibilities that build 'social capital' of the communal whole. Social capital is the communal skills and networks that bind people together and makes them strong.

The health service represents a move towards 'cultural control' of employment and training, and similar trends exist in homeland schooling. The community is seeking a communitarian model of vocational education and training, which integrates both cultural values and competencies, and skills learnt from the mainstream schooling system.

These findings may not translate to all Indigenous contexts. However, they do suggest that vocational education and training in remote Indigenous communities must make allowances for the limited literacies of adults, who may speak English as a second, third or even fourth language.

▶ **Messages for policy and practice**

More attention should be given to community literacy activities in remote Indigenous communities. This could involve supporting 'family literacy' activities, professional development for 'literacy brokers', more homework centres, and developing strategies for Indigenous learning centres.

Everyday literacy practices should be encouraged in remote Indigenous communities, by making literacy materials available through the establishment of community libraries, and by increasing storage spaces for literacy materials.

There should be a thorough survey of Northern Territory Indigenous literacy, as well as research on the transferability of these findings and on the cross-cultural implications of social capital theory in Indigenous contexts.

Mainstream vocational education and training invests in preparing and developing individuals for employment. As the report title implies, literacy and training are only relevant for this community if they affirm socio-cultural roles and responsibilities.

Governments and training bodies should be encouraged to recognise and incorporate traditional law and authority structures in Indigenous communities.

Training and employment goals, as well as the Community Development Employment Program, should be incorporated into Indigenous community planning processes.

Local Indigenous cultural competencies and outcomes should be incorporated in education and training.

▶ **Messages for trainers**

Indigenous community members should be trained for meaningful activity that maintains the well-being of family and community. This could involve adult education courses in English language, literacy and numeracy, and in 'civic skills', both which can contribute to community life, lifelong learning, and employment.

There should be relevant on-site training, with trainers always ensuring that material is consistent with Indigenous community development plans.

Meaningful training pathways for required roles should be negotiated locally with Indigenous communities, not imposed from outside.

Trainers should customise training packages and assessment procedures so they are in line with the reality of the English language and literacy context in remote communities.

Community-based adult educators, and informal training and mentoring for non-accredited training, should be supported in Indigenous communities.

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RESEARCH OVERVIEW

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Doing literacy online

by Ilana Snyder & Catherine Beavis

When computers began to come into widespread use in the late 1970s, all sorts of claims were made about the ways in which they would dramatically change education and schools. Great hopes were held for how this new technology would improve things. The talk was of 'hyperlearning'—a technological revolution that would enable anyone to learn anything, anywhere, anytime, making schools and teachers redundant.

In the 1970s, when desktop computers first entered schools, they were hailed as a new technology that would radically alter education —and alter it for the better. In the 1980s, computers were promoted as tutors and drill masters. In the 1990s, with the advent of the Web, it was claimed they would make schools a thing of the past, with students able to stay at home and be taught by 'master' teachers from around the world.

Twenty five years later, it's clear that education has not been transformed to this degree, and that predictions like these, based on uncritical enthusiasm for the new technologies, overlooked what we know about the connections between society, commerce and computers, as well as what we know about how we learn. They ignored the complex links between information and communications technologies (ICT) and the local and global structures of commerce, industry and education. They assumed that computers were neutral, even benign, instruments of information and communication, and that education was simply about the transmission of facts.

The technological revolution has led to significant changes in many aspects of our lives, including how we work, play, form relationships and communicate, and how we teach and 'do' education. The implications of the use of computers for education are real, but more subtle than those reflected in early hopes and fears.

Moreover, it is unlikely that the development of the Internet will solve the problems of education systems worldwide. Teachers, rather than being replaced, are more important than ever.

The ways in which we think about the promises and threats of ICT for education are tied to what we understand education to be. If education is seen as primarily about collecting and exchanging information, with students free to talk to each other or be left alone, then the Internet seems the perfect medium to achieve these objectives. However, if education is perceived as a deeply social practice that requires time and at least some face-to-face interaction between teachers and students, then the Internet is more likely to be seen as an increasingly significant communication medium for teaching and learning, but not the only one.

"Are we are in the midst of a revolution, a period of radical social transformation, mediated by new technologies?"

None of the contributors to *Doing Literacy Online* advocate either learning at-a-distance or face-to-face learning as the only approach to education for the future. The overwhelming view is that striking an effective balance between the two is essential. In relation to literacy, the contributors share the view that literacy is not just a neutral set of print-based skills. All the writers acknowledge that communication has changed and continues to do so. In the contemporary world, communication involves a dynamic mix of signs, symbols, pictures, words, sounds and gestures that includes but goes beyond print literacy.

Are we are in the midst of a revolution, a period of radical social transformation, mediated by new technologies? The bottom line is that ICT are being used both within formal education systems, and in society more broadly, to a greater or lesser extent, depending on the global location, and educators need to recognise this reality. Whether we feel sceptical or, at the very least, uneasy with the massive changes of the current era that are linked to the use of ICT, we cannot afford to ignore them.

All of us need to pay attention to the social and cultural changes associated with the use of ICT. The challenge is to find ways to use what new technologies have to offer in productive ways but, at the same time, to help our students become critical and capable users.

When we examine the complex connections between technology and literacy in Australian culture and education, we need to make intelligent use of the range of tools of inquiry we have at our disposal. We hope that this book makes a contribution to this important objective.

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Teacher qualification survey

Some had undertaken the Adult Literacy Teaching or Adult Numeracy Training Courses.

Respondents were also asked what professional development would most assist them in their current job. The following are the ten most commonly mentioned topics or areas requiring professional development and support:
- networking and sharing ideas and challenges with practitioners working in same area
- using ICT (Information and Communication Technology) to support literacy and numeracy education (delivery, course development, basic computer skills, relevant applications, etc)
- current research, issues and trends
- numeracy—practice and theory
- working with young learners
- working in industry contexts
- working with special needs students
- resources
- assessment For eaxamle, assessing in competency based system, holistic tasks

- National Reporting System.

A number of respondents also commented that they would like the opportunity to undertake higher education programs or participate in research. Others commented on the cost of undertaking professional development and the lack of financial support to do this.

Overall the questionnaire revealed a highly qualified workforce, with most respondents having higher qualifications than were required for the positions the held. Most had undertaken additional professional development (formal and non-formal) and were keen to undertake further professional development to ensure their skills remained current.