

Integrated approaches to teaching adult literacy in Australia: A snapshot of practice in community services

Rosa McKenna Lynne Fitzpatrick Communication in Education and Training Pty Ltd



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Rosa McKenna Lynne Fitzpatrick

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The views and opinions expressed in this document are those of the author/project team and do not necessarily reflect the views of the Australian Government, state and territory governments or NCVER



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The project was conducted between November 2003 and August 2004. The team included Lynne Fitzpatrick, Rosa McKenna and John Hillel.

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Key messages

The aim of this project was to examine and document the 'integrated approach' to delivering language, literacy and numeracy skills using the community services industry as a case study. This industry recognises these skills as crucial.

- ♦ The extent to which language, literacy and numeracy is delivered successfully in an integrated approach is dependent on the ability of facilitators and assessors to interpret vocational training packages and to develop appropriate teaching and learning strategies.
- ❖ Practitioners experienced some challenges with understanding training packages and used different language, literacy and numeracy frameworks and support materials. However, they were able to demonstrate great flexibility in response to contextualising training to the community services industry and applied a remarkable consistency of instructional strategies to enhance the language, literacy and numeracy skills of students.
- ♦ Restrictive funding models leave registered training organisations to make commercial decisions about levels of support required by learners, affecting the time and resources available for practitioners to explicitly address the language, literacy and numeracy needs of students.

Executive summary

Practice in English language and literacy instruction has broadened and deepened over recent decades, as has the conceptual base underpinning emerging practice. In Australia this change has resulted in the growth of 'integrated training', in which the acquisition of literacy skills are 'built in' to the broader skills development, and where literacy learning is placed in authentic and real-life settings. Integrated approaches continue to develop in response to the reforms of the National Training Framework, in which language, literacy and numeracy has become more explicitly described in training packages, and delivery options have become more flexible.

The aim of this project was to examine and document the integrated approach to delivering language, literacy and numeracy skills in the community services industry. This study combines an overview of the Australian literature tracking the influences leading to the 'building in' of language, literacy and numeracy to vocational training, with some observations of practices in three training sites in this industry in Victoria, through interviews with trainers/facilitators at the case study sites and analysis of teaching processes using the 'video stimulus recall' methodology, a methodology previously used in educational contexts where participants are replayed the videotape after the lesson to assist discussion about the events recorded.

The research project addressed the following key questions:

- ♦ How is literacy conceptualised in practice by registered training organisations and personnel in the VET system?
- ♦ What literacy practices are developed in an integrated approach?
- ♦ What teaching and learning strategies are employed?
- ♦ What are the key factors that might describe the 'integrated model' of adult literacy delivery?

Observations at three training sites in Victoria suggest that a generalist vocational facilitator is equipped to deliver an integrated approach, provided they have a framework for conceptualising linguistic practices in the workplace context and within the training package, and can facilitate strategies and activities to develop critical workplace communication. The specialist language, literacy and numeracy teacher needs to have a sound knowledge of the requirements of the specific industry and workplaces, as well as of the relevant industry competencies to understand the reading, writing, oral communication and numeracy skills required by learners in their programs.

Despite some challenges with understanding training packages, practitioners on the whole were able to demonstrate great flexibility in response to training packages and a remarkable consistency of instructional strategies to enhance the language, literacy and numeracy skills of students.

These strategies were situated in workplace practices and were activity-oriented. Facilitators recognised the central role of communication across the whole qualification and clustered areas of knowledge and skills to develop their curriculum. However, restrictive funding models that do not provide for specialist professional development leave registered training organisations to make commercial decisions about levels of support required by learners.

The literature review and the case studies demonstrated that the following features are central to successful integrated approaches to language, literacy and numeracy teaching within vocational programs:

- ♦ using a constructivist approach, which acknowledges that learning is affected by the context in which it is taught, as well as by students' beliefs and attitudes
- \Leftrightarrow developing an explicit model of language appropriate to the context of the industry
- ♦ providing a framework for describing language, literacy and numeracy
- ♦ conducting an analysis of the specific training package and workplace context
- ♦ ensuring there is capacity to identify critical points of intervention
- ♦ considering the needs of learners.

The project brief

Little research into teaching and learning practices in adult literacy has been undertaken in Australia. Research funding in this country does not support studies of the effectiveness of a range of program types. Consequently, the full range of practices is not known. However, studies have been conducted in the United States which identify and compare different approaches to adult literacy delivery, and a typography of programs has been developed (Garner 1998).

This study attempts to understand and describe one of the most prominent and distinctively Australian approaches, the integrated approach, operationalised in a limited number of sites in community service training settings.

Methodology

This investigation tested a number of hypotheses relevant to an integrated approach to adult literacy delivery in the vocational education and training (VET) sector in Australia. These are:

- ❖ Trainers and assessors require a framework for understanding literacy and numeracy practices in a workplace.
- ❖ Trainers and assessors can apply this framework to develop and customise training to meet the training package units of competency.
- ❖ Trainers and assessors can use direct instructional strategies to develop literacy and numeracy skills while developing vocational skills.

The investigation considered the following research questions:

- ♦ How is literacy conceptualised in practice by registered training organisations and enterprise personnel in the VET system?
- ♦ What literacy practices are developed in an integrated approach?
- ♦ What teaching and learning strategies are employed?
- ♦ What are the key factors that might describe the 'integrated model' of adult literacy delivery?

Literature review

The practice of 'building in' language, literacy and numeracy into VET provision has gradually evolved in Australia over the last two decades. While it may have been a haphazard development, the relevant framework is, in our view, grounded in sound pedagogical and applied linguistic theory. In order to understand the development of the processes of integration, a literature review—of largely Australian items—has been conducted using the following categories:

- ♦ historical overview of adult language, literacy and numeracy education in Australia
- introduction to and exploration of competency-based curriculum and assessment in postcompulsory education in Australia, including provision for adult language, literacy and numeracy education

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Adult literacy in this report refers to the teaching of reading, writing, listening and speaking and numeracy to adults.

- ♦ informing pedagogic and linguistic theories for the development of an integrated approach
- ♦ evaluation, research and resource developments supporting an integrated approach.

Limitations of the literature review

Access to historically important models of workplace language, literacy and numeracy proved difficult and was also constrained by the timing of the research. Many sources documenting early experimentation have been lost or were unavailable from the Adult Basic Education Research and Information Service (ARIS) through which the literature review was conducted at the time of the project.

Qualitative research

A qualitative research approach was used. The research required that facilitators and others involved in delivery of language, literacy and numeracy in vocational education and training reflect on their teaching practice, and through that reflection reveal their understandings of language, literacy and numeracy in relation to training and the workplace.

Negotiations with registered training organisations took place between February and August 2004. These negotiations were complex, as timing of the site visits was tied up with the training organisations' planned teaching cycles and enterprise timelines. It was also important that ethical processes to protect confidentiality of all parties, particularly when the research was being conducted in an enterprise, were in place prior to the site visits.

The interviewing and videoing of teaching was conducted between May and June 2004 after the learners and facilitators had been together for a learning period of several months. Having this length of time was seen as important to the research since it enabled facilitators to reflect on the language, literacy and numeracy demands of the workplace role, the training program, and the skills of the learner(s).

Analysis of the data was conducted in July and August 2004.

Video recall stimulus

The methodology selected for gathering the qualitative data is a process called 'video stimulus recall'. Video stimulus recall has been utilised in general education research on teacher knowledge and the impact of research on practice (McMeniman et al. 2000). Our methodology was informed by its previous applications in these areas.

Ethical considerations

Documentation of the ethical process for this research is attached in appendix 3.

Selection of research sites

An array of delivery modes exists, as does a range of service providers offering vocational education and training in Australia. To provide consistency across research sites, it was decided to select from training providers delivering the Community Services and Health Training Package.

Research sites

The research proposal covered an investigation of four sites representative of common delivery modes in vocational education and training. The table below outlines the specifications we sought to investigate.

Modes of delivery

Off the job

Training and assessment delivered predominantly off the job by vocational generalist

Off the job with literacy, language and numeracy support

Training delivered predominantly off the job; language, literacy and numeracy support provided by a language, literacy and numeracy specialist

On the job

Training and assessment delivered on the job by a vocational generalist

On the job with literacy, language and numeracy support (Workplace English Language and Literacy [WELL] Programme-funded)

Training and assessment delivered on the job; language, literacy and numeracy support by a language, literacy and numeracy specialist

As we negotiated with registered training organisations we found that these categories of delivery were not distinct or readily identifiable. Most trainers provided a blend of on-the-job and off-the-job training. The training packages require work placement and many of the learners were either experienced community services sector workers, doing voluntary work in the sector, or undertaking training as part of a traineeship.

Despite the view that a great deal of Workplace English Language and Literacy (WELL) training occurs in aged care and childcare workplaces, few sites were available during the period of the research. Of those who were approached, the logistical and ethical issues of the research methodology were cited as barriers to the participation of some organisations. The search for a suitable site in this category was abandoned in August 2004.

The qualitative research was reduced to three training sites representing common modes of recognised training delivery in the Community Services and Health Training Package.

The researchers did not specify which units of the training package they were concerned to observe being taught. Taking the view that language, literacy and numeracy had been integrated into all units, the expectation was that, irrespective of which unit(s) were being delivered, teaching of language, literacy and numeracy skills would be covered. The particular units observed, and the National Reporting System (NRS) analysis of those units is given in appendix 1.

Limitations of the sample size

The intention of the project was to gain insight into processes of teaching and practice through observation of the participants and reflection by participants of the teaching strategies utilised. It was hypothesised that the research process would enable detailed documentation of teacher behaviours and selection of specific strategies, which would then form the basis of a description of features of an integrated approach in action. The choice of methodology, 'video stimulus recall', was a resource-intensive and sensitive methodology. The project did not have the resources to work in this way with a large sample.

In the view of the necessarily small sample therefore, a deliberate decision was made to confine the study to a sample working with the same training package to ensure at least some common features and points of comparison. The sample was further limited by the difficulties in identifying a fourth site in which language, literacy and numeracy specialisation was explicit. As noted above, no training site in which the WELL Programme was being conducted was available during the course of the data collection, despite following up most programs currently being funded at that time.

The limitations of the sample size and the lack of a WELL site mean that the research should not be generalised to the entire vocational education and training sector. However, the research provides a worthwhile and informative snapshot of delivery of language, literacy and numeracy integrated into a VET program.

Data collection

The key stakeholders were identified at the research sites and interviews were conducted to determine how they conceptualise literacy, what literacy practices were identified as important to workers training at certificate III and certificate IV levels, and what they expect their employees to learn in the training provided. Stakeholders varied, depending on the nature and location of the delivery. They included: teacher/facilitator; registered training organisation manager; and facility manager or work supervisor.

Facilitators at the sites were selected either randomly, based on who was available on the particular day filming was to go ahead (one registered training organisation), or on the basis of recommendations from others in the organisation (two registered training organisations). Facilitators were randomly selected and therefore we make no claims as to how 'typical' they are. There is no current profile of the 'typical VET teacher/trainer/assessor' with which to compare our facilitators.

Informants

Facilitators participated in:

- ♦ a preliminary interview establishing how they prepare and plan teaching, and what teaching strategies they employ in relation to language, literacy and numeracy. These interviews were audio-recorded then transcribed for analysis
- ♦ observation and filming of sequences of teaching. A video was made of teaching activity (approximately two hours or a teaching session). The filming consisted of one fixed camera with appropriate microphone support
- ♦ a follow-up interview (audio-taped) as soon as possible after the filming of the teaching activity. The video was replayed by the facilitator and used as a prompt for recalling teaching events. The facilitator was encouraged to stop the tape at any point they wanted to highlight. This gave the opportunity to explain particular actions/activities. The audiotape of the video stimulus recall session was transcribed for analysis. No further use was made of the video.

At each site, the registered training organisation or departmental manager was interviewed about the way training is structured. Since a facilitator may be implementing a teaching and learning strategy designed by someone else, it was important to understand the planning and preparation process. Where observations were being made at an enterprise, the enterprise manager was interviewed. Interview schedules are attached in appendix 2.

Terminology

To avoid confusion the following terms have been used:

- ♦ A teacher, workplace trainer or assessor is generally referred to as a facilitator.
- ♦ A vocational generalist in this study refers to a facilitator of vocational training in a particular industry area who holds qualifications in that vocational area as well as general training qualifications.
- ♦ A language, literacy and numeracy specialist is a facilitator of vocational training who has qualifications in general education, and teaching qualifications in vocational education and training and in English as a second language or adult literacy and/or numeracy.

Analysis

The researchers undertook an independent analysis of the language, literacy and numeracy skills within the units of competency covered by each of the sites using the National Reporting System to map likely levels of reading, writing, oral communication, numeracy and learning strategies. In Australia, unlike other countries such as the United Kingdom, there is no accepted framework for identifying the levels of communication skills. The National Reporting System was developed as a national framework to report on adult language, literacy and numeracy outcomes in the late 1990s, and has been used to inform the development of training packages such as the Health and

Community Services Training Package. It is used as the reporting standard for the Workplace English Language and Literacy Programme. This analysis is attached in appendix 1.

Transcripts of the video recall stimulus sessions with facilitators were analysed to determine the extent to which facilitator actions are influenced by knowledge of language, literacy and numeracy pedagogy. The analysis of the language, literacy and numeracy skills required by the training package and the workplace context provided the framework for the analysis of interviews and delivery practices.

Findings

The findings from the qualitative research are discussed using the research questions posed in the project proposal.

- ♦ How is literacy conceptualised in practice by registered training organisations and personnel in the VET system?
 - evidence of conceptualisation of literacy, for example, as basic skills, as a continuum, or as integrated
 - evidence of working within a framework/hierarchy of literacy skills.
- ♦ What literacy practices are developed in an integrated approach?
 - evidence of analysis of training package/work role activity for literacy requirements
 - evidence of planning which explicitly builds in teaching literacy requirements.
- ♦ What teaching and learning strategies are employed?
 - evidence of training activity explicitly directed towards developing required literacy skills
 - evidence of assessment activity directed towards literacy requirements
 - evidence of assessment activity customised to take into account learners' language, literacy and numeracy skills.
- ♦ What are the key factors that might describe the 'integrated model' of adult literacy delivery?

The findings from this research project have implications for adult literacy policy and practice, as well as for the professional development of VET personnel.

Background

History of adult language, literacy and numeracy provision

English as a second language

English as a second language training has been provided in Australia since 1948 (Adult Migrant English Programme website). Initially, free English lessons were provided to help migrants 'assimilate' into the host community and to help them get work. English classes were provided on ships bringing migrants to Australia and in migrant hostels. The government-commissioned Review of Post-arrival Services and Programs (Galbally 1978), led to the creation of a separate and extensive on-arrival program targeting new arrivals in a wide range of migrant hostel and suburban locations—schools, community health centres, ethnic associations, hospitals and prisons—and a restructured ongoing program. The Adult Migrant Education Programme is administered from the federal department responsible for immigration and multiculturalism.

As early as 1952, there were courses specifically focused on employment. A three-month preemployment course was conducted for migrant workers in the Victorian Government Railways, and in 1959, classes for employees had begun at the Gas and Fuel Corporation, Containers Ltd, Bradford Cotton Mills and Robert Bosch Pty Ltd. These courses were the forerunners of the English in the Workplace Programme, which commenced in 1973. From 1973 to 1985, English in the workplace courses focused on occupational health and safety, basic work-related communication and offered some guidance on rights and entitlements. After 1985 courses focused on the specific needs of industry. English tuition in the workplace was established as an industrial right in an Industrial Relations Commission decision in 1987 (Eyles Miltenyi Davis Pty Ltd 1989, p.5).

Adult literacy and numeracy

Adult literacy provision emerged in Australia in the 1970s and its development has been attributed to the climate created by the Kangan Report (Watson, Nicholson & Sharplin 2001; McKenna & Fitzpatrick 2004). In the early 1970s, the federal government established a committee of enquiry to examine Australia's vocational education system. The report, *TAFE in Australia: Report on needs in technical and further education* (Kangan 1974), recommended an expansion of the system, assisted for the first time, by substantial federal funding.

Over the next decade, the new system (known as technical and further education [TAFE]) more than trebled in size and the courses of training expanded greatly. One of the new areas of growth was in pre-vocational preparation for those who had left school without completing compulsory education, and for the unemployed. Adult English language, literacy and numeracy made up a substantial part of these pre-vocational preparation courses. Most TAFE colleges established access departments offering classroom-based programs and compensatory education programs delivering concurrent assistance to students enrolled in technical courses within the institution. Community education sites also emerged in this period and provided alternative and less formal provision and pathways to further education and training. Federal funding was provided for these initiatives, commencing with the Voluntary Adult Learning Grants (VALG) and increasing over time to support specific initiatives through TAFE Resource Agreements between the Commonwealth Government and state and territory governments (Commonwealth of Australia 1991b, p.46). These were increasingly focused on assisting the unemployed to access training for employment.

The case had already been made in the Industrial Relations Commission for English language training for workers whose first language was not English (Eyles, Miltenyi, Davis Pty Ltd 1989). The case was now being made for all workers (Long 1989). Long's study on employer and union perceptions showed that 'employers and unions have an understanding of literacy as it affects the workplace':

... literacy is an important skill for both English and non-English speaking workers. In fact literacy is seen as a more important skill than most other technical job-related skills, in that it is a first order skill necessary for acquiring higher order skills ... In addition both employers and unions believe that literacy skill will be increasingly required in the future to meet increasingly sophisticated technological demands. (Long 1989)

The Workplace Language, Literacy and Numeracy Programme

As a joint initiative between the Departments of Industrial Relations, Immigration and Multicultural Affairs and Employment, Education and Training, the Workplace English Language and Literacy Programme commenced in 1989. The WELL Programme effectively expanded the English in the Workplace Programme to include all workers and adopted the structure recommended by Miltenyi (Eyles, Miltenyi Davis Pty Ltd 1989). In 1994 the Department of Employment, Education and Training became solely responsible for the program.

By the late 1980s it was evident that organisational and technological changes occurring in the workplace were highlighting language and literacy as central to industry restructuring and education reform (Australian Council for Adult Literacy 1990, pp.15, 23–4; Francis 1992; Kalantzis 1992). As Kalantzis emphasises:

If there is one thing that we can agree upon in the relationships of restructuring and education and immigration, it is the importance of literacy. (Kalantzis 1992, p.27)

National language policies provided further momentum in considering Australia's language resources for economic and social development (Lo Bianco 1987; Commonwealth of Australia 1991a, 1991b). The need for services not only for non-English speaking adults but also for all Australians was emphasised during International Literacy Year initiatives culminating in the Australian Language and Literacy Policy (Long 1989; Commonwealth of Australia 1991a).

The Australian Language and Literacy Policy essentially retained the Adult Migrant Education Programme as a settlement strategy for immigrants. It identified English literacy as a barrier to employment and training and injected funding linked to unemployment entitlements through labour market programs. Efforts in TAFE to meet adult English as a second language and literacy and numeracy were maintained through agreement to Australian Language and Literacy Policy goals by the states and territories.

This [ALLP] was a landmark document for a number of reasons, but significantly for adult literacy, it placed adult English language and literacy concerns on the national education agenda while linking the language and literacy competence of adult Australians to national economic imperatives shaped by technological advances and globalisation.

(Castleton 2001, p.3)

The WELL initiative has been maintained. Funding in real terms has remained fairly constant (Gyngell 2001). The program's objectives and underpinning principles are virtually unchanged from those early years: the aim is still to provide workers with language and literacy skills to help them to meet the demands of their current and future employment needs. The principles are:

- ♦ training being conducted at the workplace during normal working hours by accredited facilitators
- ♦ training being based on a thorough assessment of workers' needs
- ♦ employers contributing to the cost of the training and providing suitable accommodation etc.
- ♦ worker participation to reflect the gender and ethnic balance of the group concerned.

Initially English as a second language and literacy training had separate budgets but these were combined in the early 1990s (Gyngell 2001).

One of the perceived weaknesses of the English in the Workplace Programme was the lack of accreditation and direct articulation between the English in the workplace courses into occupational qualifications (Mawer 1992). This was addressed in the WELL Programme by requiring language, literacy and numeracy to be directly linked to accredited courses and, since the introduction of training packages, to units of competency.

Training must provide English language, literacy and numeracy skills that meet workers' employment and training needs and should (in order of preference):

- a) be integrated with workplace training to support the underpinning language, literacy and numeracy skills within units of competency from an industry specific endorsed Training Package where available ...
- b) be integrated with workplace training to support the underpinning language, literacy and numeracy skills within generic units of competency contextualised for a particular industry ...
- c) be integrated with workplace training required to obtain licences (i.e. dogger, forklift, work cover i.e. OH&S), certificates or other mandatory qualifications.

(Department of Education, Science and Training 2004b, p.6)

Language, literacy and numeracy outcomes are reported using the National Reporting System (Gyngell 2001).

Finally, the importance of information communication technology skills linked to the development of literacy has been acknowledged in program guidelines issued in 2004 (Department of Education, Science and Training 2004b).

Informing theories

Strands of theoretical work, including theories of learning and applied linguistics, have contributed to the developing ideas of an integrated approach to language, literacy and numeracy in vocational education in Australia.

Theories of learning

Adult learning

Adult literacy facilitators in all sectors of provision claim to adhere to principles of adult learning. Malcolm Knowles elaborated a theory of andragogy (a theory which sets adult learning apart from children's learning). He identified five distinguishing features of adult learners (Smith 2002):

- ♦ *Self-concept*: as a person matures, his/her self-concept moves from one of being a dependent personality toward one of being a self-directed human being.
- ♦ Experience: as a person matures, he/she accumulates a growing reservoir of experience which becomes an increasing resource for learning.
- ♦ Readiness to learn: as a person matures, his/her readiness to learn becomes oriented increasingly to the developmental tasks of his/her social roles.
- ♦ Orientation to learning: as a person matures, his/her time perspective changes from one of postponed application of knowledge to immediacy of application, and accordingly, his/her orientation toward learning shifts from one of subject-centredness to one of problem centredness.
- ♦ *Motivation to learn*: as a person matures, the motivation to learn is internal.

The work of Mikulecky and others served to further differentiate literacy education for adults and children. The literacies of work were identified as being different from the literacies of school.

Students graduating from school could not necessarily successfully transfer the academic literacies they had been taught to the workplace (Mikulecky 1988). Not only do adults learn differently, but also the types of relevant literacies are different.

These have become powerful arguments for the need for continuing adult education and for the site of such adult education to be located in the workplace.

Competency-based training

Competency-based training was introduced in Australia in the late 1980s as a strategy to improve the skill levels of the Australian workforce, enable Australian industry to be more competitive in global markets, and to establish new career structures for the Australian workforce (Carmichael 1989; NCVER 1999, p.1; Hawke 2002). The most generally accepted definition for competency-based training is that put forward by the Vocational Education, Employment and Training Advisory Committee in 1992:

CBT is training geared to the attainment and demonstration of skills to meet industry-specified standards rather than to an individual's achievement relative to that of others in a group.

(cited in NCVER 1999, p.2)

The characteristics of competency-based training and assessment have been summarised as:

- ♦ based on competency standards
- ♦ focused on outcomes not inputs
- ★ taking account of recognition of prior learning (RPL)
- ♦ modularised
- ♦ self-paced
- ♦ based on demonstration of skills rather than knowledge

Moreover, the competencies gained through this training are widely recognised.

The features listed above can and do exist outside a competency-based training system. The National Training Board adopted a broad definition of competency which included underpinning knowledge, values and attitudes (Mawer 1992, pp.52–74; NCVER 1999, p.2). Competency-based training has remained a key element of VET policy adopted by successive governments at federal and state and territory levels.

The key influence of competency-based training and assessment can be found in the evolution of the outcomes statements or standards developed for the Australian post-compulsory system. The standards developed by the National Training Board and those now forming part of training packages are significantly different from earlier versions, particularly in the heightened awareness of and prominence given to generic skills such as language, literacy and numeracy.

Constructivism

Constructivist theories of learning and knowledge, although not new, are emerging as a useful approach in vocational education and training, as system reforms force a move away from trainer-centred approaches to a focus on learners and learning (Chappell 2004; Schofield & McDonald 2004; International Labour Organization 2002).

Constructivist theories of learning infer that learners construct knowledge for themselves and that learning and language are intertwined (Bruner 1960; Billet 2001). Chappell (2004) notes the importance of context in constructivist theories of learning:

There is general agreement that learning involves the active construction of meaning by learners, which is context dependent, socially mediated and situated in the real world of the learner.

(Chappell 2004, p.4)

The emerging view is that the knowledge required for the new economy is less foundational or discipline-based and is acquired through collaborations and networks which exist within specific sites and particular contexts. A more constructivist approach readily facilitates skill acquisition in the new economy.

It is not surprising that the emphasis of learning at work is focused on work performance, including not merely the acquisition of technical skills, but also the general development of cognition and attitudes, and the capacity to engage in lifelong learning.

Workplace learning

The most authentic and situated site for vocational learning is the workplace itself. The constructivist approach argues that the workplace offers a site for learning that is both different from, but complementary to, institution-based education (Billet 2001; Hager 1997). Billet argues that the kinds of activities learners engage in and the quality of the support and guidance they receive are significant determinants of learning results.

In Billet's model (Billet 2001, p.106) learners move from peripheral participation undertaking activities of low accountability to full participation and activities of high accountability. Activities are embedded in the workplace setting and tools, and learning occurs through observation and listening. Direct guidance is available from more experienced co-workers using modelling, coaching, scaffolding (a term used to indicate structured support for the learner taken from the work of Vygotsky), questioning, diagrams and analogies. Learning and working are seen as interdependent. The essential elements for learning to take place are:

- ♦ the situation (shaped by the tools, artifacts and processes of the workplace)
- ♦ the provision of direct guidance (opportunities for authentic practice)
- ♦ the provision of indirect guidance (opportunity to observe, discuss).

The role of teacher is thus changed from one of instructor to one of facilitator or guide. Learning strategies such as project and problem-based learning, mentoring and peer tutoring are promoted.

Linguistic theories

Applied linguistic theories—theories about how language works and is taught—have played an influential role in the teaching approaches used by adult language and literacy teachers and to shaping the integrated approach. These ideas became formalised in teaching and assessment frameworks guiding teacher practices.

Psycholinguistics

Adult literacy provision commenced in Australia in the late 1970s in response to what Hodgens and others have termed the 'literacy crisis', in which the public press became almost hysterical about declining standards (Hodgens 1994). The perception of the illiterate in the 1970s is characterised as the 'deficit/disadvantaged subject'. Despite the expansion of education to meet hitherto disadvantaged groups in the community, the literacy crisis was almost always framed in terms of individual deficit and social disadvantage. In response, educators looked towards psychological diagnostic approaches to 're-mediating' the student (Green, Hodgens & Luke 1997, p.20).

The small army of volunteers who were recruited to provide tuition for adults were trained in psycholinguistic strategies popular in the schools of the time which draw on the work of Goodman, Watson and Burke (1987), Graves (1983) and Smith (1978, 1982). This 'whole language' or process approach emerging from progressive educators in schools was mingled with participatory models influenced by the work of Friere, and the literacy campaigns in the United Kingdom (McKenna & Fitzpatrick 2004). Teachers assumed that, if adults were exposed to texts that were meaningful to them, then they would learn to read and write similar sorts of texts.

The whole language approach has its roots in the meaning-emphasis, whole-word model of teaching reading. One of the popular strategies used in adult literacy teaching was 'language experience'. The language experience approach emphasised the knowledge the student brings to the reading situation—highlighting the link between oral language and written language, between reading and writing. The teacher uses the prior experiences or creates shared experiences to enable the student to dictate a story which the teacher records. The teacher and student read and re-read this story until the student can do so alone. In adult literacy many of these texts were built around employment-related experiences. This self-generated text was considered meaningful and provided the opportunity for immersion in the text, the development of sight words and for spelling.

These approaches using the adult's experience and using the texts and contexts of the workplace were taken into the early models of workplace training (Waterhouse & Sefton 1997, p.8), and for others formed the basis of a functional literacy approach.

Functional approaches

The most articulated of the functional literacy approaches, 'functional context education', developed in the 1970s, is an approach to education based upon a theory of cognitive development, learning, and instruction. The approach is based on the premise that 'literacy is developed while it is being applied' (Sticht 1997; Levine cited in Lankshear 1992).

Functional literacy has been portrayed both negatively and positively.

Negative portrayals see functional literacy as an example of the extension of ideology which links human capital into education, and literacy specifically: 'functional literacy = skills necessary to function in today's job market = market economy = the market = the economy' (Gee 1996), resulting in the reduction of the teaching of literacy skills to the narrowest forms necessary for the worker to be of use to the employer. Some view functional literacy as reflecting the interests of the ruling ideology and dominant classes (Friere & Mecedo cited in Lankshear 1992) and exposing people to greater forms of manipulation (Levine & Postman cited in Lankshear 1992).

The functional literacy approach has also been portrayed positively in much research literature. Integrating language, literacy and numeracy skills into workplace delivery is described as providing opportunities for contextualised learning. When learners continue to use what they have learned in real-world situations, literacy skills are reinforced. The real issue for the 'functionally' literate is whether they can decode the messages of media culture, counter official interpretations of social, economic and political reality, and whether they feel capable of critically evaluating events or indeed of intervening in them (Lankshear 1992).

A broader interpretation of functional literacy could see a literate person as being able to critically evaluate and intervene in the social and economic texts of everyday life.

Sociolinguistics

Sociolinguistics is a branch of applied linguistics focusing on the connections between language and society, and the way we use language in different social situations. It has been a dominant influence in Australian approaches to language and literacy education and particularly workplace provision. Workplaces are recognised as crucial sites where participants, workers and facilitators, through their language and literacy practices, regularly claim identities, signal memberships, manage relationships, address and solve problems, all essentially through communication (Candlin cited in Mawer 1999).

The influence of sociolinguistics is demonstrated in a number of studies of language-in-context in workplace settings, and the application of observations to teaching in the workplace. A sociolinguistic approach is particularly attractive because it engages with the dynamic of social change and the agency of that change. Such an approach deflects blame from the deficient individual implied in the psycholinguistic model to a more complex set of social factors outside the individual's control.

Language, literacy and numeracy education has been strongly influenced by the 'systemic functional' model of language developed by Halliday and applied by Martin and Rothery in the development of their notion of genre (cited in Mawer 1999). Genre theory deals with teaching literacy by modelling features of different text types.

The systemic functionalist model attempts to show the systematic relationship between meaning, the wording, and its particular concept through grammar. The grammar and the tools developed by the genre school have been particularly useful in giving workplace facilitators the means of analysing language in use and undertaking detailed needs analysis (Mawer 1999). As education has become more universally available, the tools offered by the systemic functional approach have been used to directly introduce those from culturally and linguistically diverse backgrounds to the dominant cultural and linguistic resources needed in modern Australia. This approach has been critical of progressivist and natural learning approaches to literacy education and has promoted a direct instruction or interventionist approach. They argue that more than exposure to text is necessary. Systemic functional approaches teach learners about the background information of a text and how and when it is used, and give a way of discussing how the text is constructed using its own grammar. This grammar is different from the system of grammar which most of us learn. This approach is therefore an interventionist, rather than a progressive one.

Critics of the systemic functional approach, however, argue that it is not enough to give workers power or control over specific genres or text types. They call for a critical language approach, whereby language is seen as a social practice in which language is viewed as discourse. Discourse shapes, and is shaped by society in a two-way, dialectic relationship (Candlin & McNamara 1989 cited in Mawer 1999; Faircough 1992 cited in Mawer 1999). The connection between language, power and ideology highlights that there are some social interactions or sites of activity that are more important than others and that, because literacy and social practices vary, standardised language teaching and testing is not productive. However, identifying and locating critical sites and practices in workplaces can contribute to workplace learning. Mawer identifies a critical role for a language, literacy and numeracy specialist as part of a multi-disciplinary team in workplace education (Mawer 1999, p.59–61).

The contribution of the New London Group (Cope & Kalantzis 1995) has been to develop the concept of multi-literacies, whereby social interaction occurs using the full range of electronic and other media. Sociolinguistic approaches reject the idea that language is acquired through immersion or naturalistic means, arguing that, for some individuals to engage in specific social practices, for example, at work, linguistic structures need to be directly taught. This aspect of sociolinguistic approaches is important to teachers of adult language, literacy and numeracy in a vocational context.

Language, literacy and numeracy frameworks

The theoretical works outlined above have strongly influenced the development of national frameworks guiding provision of communication skills and language, literacy and numeracy in post-compulsory education.

National Communication Skills Modules

In an effort to support development of communication skills, the National Communication Skills modules, a separate set of 18 modules, were developed (Australian Committee for Training Curriculum Products Limited 1995, 1998). These modules were taught separately from technical modules and were taught by generalist not vocational facilitators. They provided guidance for

training in conjunction with the National Training Board standards for vocational training. The modules dealt with the interpersonal skills needed by workers, and introduced forms of written and oral communication generically used in work. They assumed basic literacy in English.

The National Framework of Adult English Language, Literacy and Numeracy Competence

The National Framework of Adult English Language, Literacy and Numeracy Competence (1994) established a common reference point for describing English language, literacy and numeracy competence. The framework grew out of development for a national curriculum funded by the Australian Committee for Training Curriculum in 1989 and complemented the Mayer key competencies (Mayer Committee 1993), the national competency standards auspiced by the National Training Board and the Australian Vocational Certificate Training System. The framework recognised the need to better coordinate adult literacy and English as a second language provision and to assist industry to incorporate language and literacy competencies in training (Coates 1994, p.1).

The framework identified six aspects of communication—procedural, technical, personal, cooperative, systems and public. Adults were seen as performing in three stages, assisted, independent and collaborative.

One of the framework application papers explored the potential of the framework for integrating English language, literacy and numeracy into industry standards (Mawer 1994). The paper concluded that the national framework could be used to develop industry competency standards that would, for example:

- ♦ reflect a broad notion of competence
- ♦ identify the communicative aspects of work requirements
- ♦ reflect some of the new work design principles
- ♦ recognise the diversity of skills and resources in the workforce
- ♦ develop focused, realistic range statements and evidence guides.

(Mawer 1994, p.24)

While the framework was extremely useful for curriculum planning and for conceptualising the complexity of language and literacy as social practice, it was found to be unwieldy for use in assessment. The next development, the National Reporting System, was designed to address this shortcoming.

The National Reporting System (NRS)

The National Reporting System for Adult English Language, Literacy and Numeracy (developed by Coates et al. 1996), commonly referred to as the NRS, was developed to report on outcomes of labour market programs. The development of the system was informed by an eclectic set of linguistic, education and assessment theories and practices, including the work of Kirsch and Mosenthall (responsible for the International Adult Literacy Survey methodology), and theories of learning and language outlined above. The development team was advised by an equally diverse group of academics, practitioners and policy-makers. It built on the linguistic foundations of the national framework (Coates 1994) which was a part of the continuing work of academics involved in the developing theories of multi-literacies (Cope & Kalantzis 2000). It explicitly deals with social inclusion and technology, and promotes a critical—cultural approach to literacy, one which attempts to cover the range of social purposes for which people use literacy. However, it also covers understanding the mechanics of language, including the basic skills and whole language approaches (McKenna & Fitzpatrick 2004).

The National Reporting System (Coates et al. 1996) built on the earlier national framework. While maintaining the agreement of breadth and purposes of communication (Aspects), and stages of

development (Conditions of Performance), the National Reporting System proposed five levels of competence across each of the areas of reading, writing, oral communication, numeracy and learning to learn. These levels were described in terms of their linguistic/numerical features and meaning-making strategies typically employed at the level.

The application of the National Reporting System for different purposes was described in a companion volume, *Applying the NRS: A guide to using the National Reporting System* (Fitzpatrick & Coates 1996). One of the uses signalled for the National Reporting System was as a resource to assist industries and enterprises to incorporate information about English language, literacy and numeracy into appropriate places in the industry competency standard's format.

Industry restructuring and training reform

Australia, like other members of the Organisation for Economic Co-operation and Development (OECD & Statistics Canada 2000) embarked on industry restructuring to position Australia competitively in the global economy.

Globalisation and the emergence of the knowledge-based society are the two main features of the economic paradigm at the start of the 21st Century.

(OECD & Statistics Canada 2000, p.1)

The first round of restructuring in Australia included the gradual removal of tariff protection, increased productivity measures, reclassification of awards, enterprise bargaining, multi-skilling and the linking of awards with training outcomes (Australian Council of Trade Unions 1987; Business Council of Australia 1989). Industry restructuring required writers with appropriate levels of English language and literacy skills.

Multi-skilling associated with the award restructuring process requires a significant amount of training, which in turn assumes that workers are capable of coping with increased demands on their English language and literacy skills. It is imperative that each employee has the necessary basic skills and language to accept the training necessary, and the ability to learn new skills and absorb new technology. (Commonwealth of Australia 1991b, p.22)

These structural reforms had profound effects on existing workers, particularly in the manufacturing sectors, and on the skill needs of the general workforce, raising issues about training, access to training and the capacity to use new technologies at a time of rising unemployment (Commonwealth of Australia 1991b, pp.20–3; Sefton, Waterhouse & Deakin 1994, p.13). Early initiatives of the Workplace English Language and Literacy Programme were directed at automotive, food processing, textiles and timber industries (Bean et al. 1996; Adult Literacy Basic Skills Action Coalition [ALBSAC] 1995). These were the industries in which the impact of restructuring was most keenly felt, particularly by unskilled workers who were often immigrants who had difficulty accessing training and dealing with new technology and working in self-managing teams.

Standards for occupational health and safety were being developed and could only be effective if workers could understand information and participate in workplace committees, raising implications for many existing workers in the system with no English language or literacy skills (Bean 1994; Castleton & Wyatt Smith 1995). Adult illiteracy was beginning to be seen as having an impact on economic performance and to be the subject of serious study by the OECD (Benton & Noyelle 1992).

As the structural reforms were occurring in industry, the policy discourse was moving from the complacency of the 'lucky country', in which Australia continued to prosper with little effort (Horne 1964), to the 'clever country' in which Hawke (1988) set out the arguments to increase funding for research and development and provoked serious debate about Australia's education and training policies and structures (Dawkins 1988, 1989). This provided further momentum to the adult literacy movement (Australian Council for Adult Literacy 1990, p.9; Kalantzis 1992, pp.20–40).

The most recent discussions about the training reform process have been concerned with the need for our education and training systems to produce workers for a knowledge economy (International Labour Organization 2002; OECD & Statistics Canada 2000; ANTA 2003; Schofield & McDonald 2004, p.9). This latest shift reflects the impact of the take-up of new information technologies on increasing the flow and quantity of information, and developing both new industries in the service sector and new jobs. For a community to produce knowledge workers, individuals need the opportunity to engage in lifelong learning to maintain their position in a volatile labour market, and workplaces need to acknowledge their role and responsibility as sites for learning. Consequently, in the design of further training standards, generic skills like literacy are seen as both 'front and centre' of further reforms to the system (Schofield & McDonald 2004, p.19).

Developing integrated approaches to language, literacy and numeracy

Many researchers (Sefton, Waterhouse & Deakin 1994; Garner 1998; Falk & Miller 2002) have concluded that generic literacy training, that is, literacy education dealing with general language functions decontextualised from its social purpose, has had a low level of transferability.

Other research points to the poor participation in general adult literacy programs in countries similar to Australia (McKenna & Fitzpatrick 2004). Integrated approaches are certainly those which attempt to align learning more closely to adult contexts and purposes.

The search of the Australian literature reveals that integrated approaches have emerged from two discrete areas of action:

- ♦ structural reforms to training by which language, literacy and numeracy were made explicit in standards development
- practitioners incorporating language, literacy and numeracy into teaching and learning activities and materials.

Integration through standards development

National Training Board competency standards

The earliest national standards were standards to guide teaching and learning and constituted a national curriculum approach (Schofield & McDonald 2004, p.11). They were developed by educators for educators and were considered as curriculum documents (Mawer 1992, p.55).

In 1991, the Minister of Employment, Education and Training asked the National Board of Employment, Education and Training to evaluate approaches to incorporating English language, literacy and numeracy into industry standards under the Australian Standards Framework. The ensuing report challenged the National Training Board's position in which language, literacy and numeracy were excluded from industry standards. There was, however, no agreement on what constituted a 'good example' of an industry standard which included language, literacy and numeracy components. At that time debate focused on whether implicit or explicit incorporation into standards would lead to better outcomes for learners.

The Australian Language and Literacy Council of the National Board of Employment, Education and Training (1993) concluded that no specific model could be identified, and requested further work be commissioned to investigate suitable models, including the possible use of the National Framework of Adult English Language, Literacy and Numeracy Competence (Coates et al. 1994) currently being developed. It was hoped that the application of a national framework would lead to a more coherent and systematic interpretation of language, literacy and numeracy required in the workplace. The debate centred on problems with language, literacy and numeracy being included implicitly in the standards, and issues arising where they were explicitly identified.

Implicit model of standards development

An implicit model was defined as one with no express reference to English language, literacy and numeracy, competence where this competence is assumed or implied by the standards (Australian Language and Literacy Council 1996).

The difficulty with the implicit model was the possibility that language, literacy and numeracy would be overlooked unless these skills were explicitly and unambiguously included within competency standards, since interpretation of the standards would be subjective and discretionary.

Explicit model of standards development

An explicit model would make express and visible reference to English language, literacy and numeracy competencies (Australian Language and Literacy Council 1996).

Problems articulated in relation to an explicit model included its potential for screening out those without identified relevant skills. Issues with standardised testing were identified, as was the potential for inclusion of narrow non-contextualised language, literacy and numeracy tasks.

In May 1995 the Commonwealth, state and territory ministers for vocational education and training agreed that English language, literacy and numeracy competencies must be incorporated into competency standards.

The recommendations of the Australian Language and Literacy Council model, *Literacy at work*, were consistent with the position on English language, literacy and numeracy being developed by the Australian National Training Authority (ANTA) in response to the Ministerial Council ruling. In 1996 ANTA piloted the Australian Language and Literacy Council model for including language, literacy and numeracy as part of the competency standards development process with four industry groups. The pilot projects drew on the National Reporting System and the key principles and strategies for the integration of language, literacy and numeracy into vocational education and training outlined by Courtenay and Mawer (1995).

The report on the sub-project to investigate their incorporation into the Cotton Competency Standards made a number of relevant recommendations:

- → Language, literacy and numeracy skills are already implicitly embedded in the performance criteria even if they are not explicit. The performance criteria, however, need to be more detailed to include the language, literacy and numeracy aspects specifically.
- ♦ Integration of language, literacy and numeracy would be best done at the time the standards were being researched and developed and as part and parcel of the research, as was the case in this project (Rural Training Consultants of Australia 1996, p 4).

In 1996 ANTA also funded a project to examine usability issues relating to the National Reporting System, including its use in vocational education and training contexts (Cumming et al. 1997). One of the recommendations from this report was to:

♦ Use the resources available in the NRS to develop and review industry standards in light of the MINCO agreement for inclusion of language, literacy and numeracy and the development of national training packages (Cumming et al. 1997, p.41).

Explicit referencing of standards in training packages

The development of national training packages presented an opportunity for integrating language, literacy and numeracy explicitly into industry standards. Australian National Training Authority guidelines stipulated that national training packages must demonstrate the incorporation of language, literacy and numeracy, as well as identify key competencies, in order to be endorsed.

The standards forming the basis of training packages are developed by industry to describe work performance, and are endorsed by the National Quality Training Framework (Chappell et al. 2003, p.16).

The standards in training packages outline the outcomes but not the strategies, processes or experiences that can be used to develop competence. The model requires facilitators to interpret the standards within a workplace context and to develop and deliver a training program relevant to the needs of the learners, the mode of delivery and the industry context (Chappell et al. 2003, p.7; Schofield & McDonald 2004).

It was argued that, once language, literacy and numeracy were explicit in industry standards, there would be an automatic flow-on to teaching and learning processes, resource development, professional development of facilitators and assessors, and assessment processes. Explicit inclusion of language, literacy and numeracy in the standards would provide *unambiguous guidance* to the users of the standards on the language, literacy and numeracy requirements embedded in work activities (Coates 1996).

Four alternatives for the identification of language, literacy and numeracy into the standards format were outlined. These were:

- ♦ adding performance criteria
- ♦ adding to the range of variables and evidence guide.

The centrality of the language, literacy and numeracy activities to the workplace task would determine the selection of an appropriate alternative. In many cases the alternatives would be used in combination.

This model provided for stand-alone or 'separate development' language, literacy and numeracy units, and most training packages now include identifiable units such as 'communicate in the workplace', 'complete workplace documentation', or similar. These units are allocated student contact hour funding under most state and territory purchasing arrangements.

Analysis of specific training packages has shown that generic skills and language, literacy and numeracy have been included either implicitly or explicitly (Millar & Falk 2000, p.14; Sanguinetti 2000, p.2; Trennery 2000; Haines & Bickmore-Brand 2000; Kelly & Searle 2000) with the later iterations of training packages becoming more explicit about underpinning knowledge and generic skills (Wyse & McKenna 2001), but with some variation and inconsistency in treatment (Chappell et al. 2003, p.9).

The Workplace Communication Project

To assist industry training advisory boards and the developers of training packages, the Department of Education, Training and Youth Affairs funded the Workplace Communication Project (1997–99). The aims of the project were to ensure that industry training advisory boards and the staff responsible for the development of standards in training packages were aware of language, literacy and numeracy requirements, and that the relevant language, literacy and numeracy resources would be made available for inclusion into standards and training. The project identified a consultant from whom advice could be sought and provided funding for industry-specific projects to assist in the process.

The National Reporting System (Coates et al. 1996) was used as the basis of the consultant's advice, since it provided a nationally recognised set of generic reading, writing, oral communication, learning strategies and numeracy competency statements which could be appropriated for analysing and describing the English language, literacy and numeracy requirements of work tasks. It provided a means of identifying and describing language, literacy and numeracy competencies in the

workplace. The 'Aspects of Communication' described in the National Reporting System were used to identify the range of language, literacy and numeracy tasks required in the workplace.

Alignment of level of English language, literacy and numeracy with the Australian Qualifications Framework

Under the Workplace Communication Project, levels of the National Reporting System were aligned to the certificate levels of the Australian Qualifications Framework and attempts were made to implement the alignment (Fitzpatrick & Roberts 1997). It was hypothesised that all work roles at a particular certificate level (say for example, all certificate III courses) required the same level of English language, literacy and numeracy skills, thus providing a relatively simple process for integrating English language, literacy and numeracy into standards at the particular certificate level. However, results from piloting the National Reporting System with industry revealed that there was, in fact, a wide divergence in skills required by work roles at the same certificate level in training packages.

With no direct alignment between NRS levels of English language, literacy and numeracy and levels of the Australian Qualifications Framework, the language, literacy and numeracy practices in each unit of competence in every training package need to be analysed to ensure that an integrated approach to language, literacy and numeracy does, in fact, occur.

The advice to industry training advisory boards was then refined as *Workplace communication: Incorporation of language, literacy and numeracy into training packages* (ANTA 1999a), downloadable as a PDF file from ANTA. It suggested a four-step approach, which included analysis of communication processes using all of the Aspects of Communication described within the National Reporting System. The advice responded to the industry view that English language, literacy and numeracy skills were important at all levels of the Australian Qualifications Framework, and reinforced the concept that language, literacy and numeracy needed to be built into units across the range of certificate levels.

This advice was incorporated into ANTA training package development documents such as those providing guidance to training package developers (ANTA 1999a, 1999b, 2000a, 2000b). Each industry training advisory board or industry skills councils is required to incorporate language, literacy and numeracy skills into all stages of development of a training package.

While explicit standards have been mandated, this is not to suggest that the way in which language, literacy and numeracy had been included was, in all cases, at an appropriate level of specificity (Kelly 1998; Wyse & McKenna 2001; Watson, Nicholson & Sharplin 2001; Falk & Miller 2001).

A report (TAFE NSW Access Division 2001) commissioned by ANTA concluded that there was a need for greater consistency across training packages so that those implementing them had clear guidance about the language, literacy and numeracy skills required. This was particularly the case for those training packages with nested units of communication skills crossing a number of certificate levels.

Although the intent of some Training Package developers is that the same language literacy and numeracy unit, when clustered with vocational units will be interpreted within the context of these vocational units and the AQF level of the package of units, this is premised on the skill of the trainer in delivery and the assessor in assessing in a holistic manner.

(TAFE NSW Access Division 2001, p.12)

Integration through teaching and learning activities

Integration was initially used to describe language, literacy and numeracy built into teaching and learning processes. In terms of practice this meant that, rather than teaching language, literacy and numeracy separately from technical training, language, literacy and numeracy is included in the technical training. For example, teaching occupational health and safety in an integrated way would require teaching the language, literacy and numeracy skills involved in reading signs/tags,

giving/following instructions etc. Separate teaching of generic grammatical structures or spelling would not be undertaken.

In this model of integration, English language, literacy and numeracy skills were included in the learning processes for vocational training, rather than delivered separately, a practice which reflected a functional or sociolinguistic approach to language development and a constructivist approach to vocational training. It involved research at individual worksites to tease out the language, literacy and numeracy skills embedded in work tasks, and expanding the learning from a narrow technical view of the competency to more a more holistic view.

The integrated model is also premised on contemporary notions of literacy being socially and culturally determined. Such an understanding suggests there is not one English literacy, fixed and finite, for everyone to learn to a pre-determined standard; but rather a multiplicity of literacies which operate in particular contexts and situations.

(Sefton, Waterhouse & Deakin 1994, p.37)

The national automotive language and literacy coordination unit

One of the first to research, develop and articulate the integrated model was the National Automotive Language and Literacy Coordination Unit. In 1994 the unit developed a model of integrated training within the context of the Vehicle Industry Certificate as a WELL project with the National Automotive Industry Training Board.

The integrated model was developed as a practical and pragmatic response to complex industrial and educational challenges. (Sefton, Waterhouse & Deakin 1994, p.32)

The automotive industry, like other sectors of manufacturing, was in the process of structural reform and was being rationalised, reducing from four to three major manufacturers; tariff protection was also being phased out. New manufacturing techniques such as 'lean production' were being introduced, whereby a level of responsibility for the quality of the product was devolved to the shop floor, gaining efficiencies, but adding to the complexity of job functions.

The report *Breathing life into training* (Sefton, Waterhouse & Deakin 1994) proposed a model for integrating key elements of accredited industry training. The National Automotive Language and Literacy Coordination Unit argued that a model of training which integrated key elements of the training would provide a more effective strategy for addressing contextually appropriate literacy and language, as well as issues of workplace reform. Key elements included:

- ♦ organisational and technical systems of the workplace
- ♦ key competencies
- ♦ the technical language and 'lingua franca' of the workplace
- ♦ social, political and industrial parameters and constraints affecting the workplace, including change initiatives
- ♦ existing skills and potential of employees.

However, the automotive industry did not support the incorporation of language, literacy and numeracy into standards at this time, because of concerns that this might:

- create barriers to participation in industry training by placing an inappropriate emphasis on particular language, literacy and numeracy competencies
- ♦ result in teaching these skills in ways unrelated to the context of work in the industry
- ♦ devalue thinking and conceptual skills.

The approach adopted by National Automotive Language and Literacy Coordination Unit was to build language, literacy and numeracy into the teaching and learning processes implicit to the Vehicle Builder's Certificate. In this approach, language, literacy and numeracy were conceptualised as components of the broad interactive communication processes used in the organisation. Learning was achieved by immersion in this culture and exposure to it. Nevertheless, while teachers working in this environment brought with them experience of teaching adult language, literacy and numeracy, there is little information about how direct instruction to develop the language resources of workers was provided.

The problem of this approach was that, like all approaches, it was dependent on the skills and knowledge of the education practitioners involved. However, in this implicit approach, there is no incentive for trainers to tackle the language and literacy issues. This was not a systemic solution to the language, literacy and numeracy issue.

Foundation Studies Training Division

The Access Division of TAFE NSW recognised that, while vocational standards implicitly recognised language, literacy and numeracy, the quality of their teaching staff in influencing teaching and learning processes would be the most effective strategy in furthering an integrated approach (TAFE NSW Access Division 1996, 1998).

A raft of materials to support both vocational teachers and English language, literacy and numeracy teachers working in integrated programs was developed by Foundation Studies Training Division/Access Educational Services Division, NSW TAFE. These publications, such as *Strategies for success* (TAFE NSW Foundation Studies Training Division 1996), *Working together* (TAFE NSW Access Division 1996), *Customising working together* (TAFE NSW Access Division 1998) supported both work-based and vocational programs.

The emphasis was on developing ways of working collaboratively to achieve workplace and learner goals by defining the role of the language, literacy and numeracy teacher in the collaboration. Successful teaching in an integrated way was premised on an English language, literacy and numeracy teacher carrying out ethnographic studies of particular workplaces. Teaching and learning strategies and materials could then be customised to meet learner needs at the particular workplace. This approach is also represented in a number of industry-supported studies (Lukin 1998). The strong influence of the sociolinguistic approach, particularly of genre theory is evident in the New South Wales approach. By undertaking a thorough discourse analysis of workplace texts, teachers could directly teach these linguistic structures as part of vocational training.

Interpreting training packages

The extent to which language, literacy and numeracy is integrated in vocational training and training delivered in workplaces is still dependent on the capacity of the facilitators and assessors to interpret training packages and to develop teaching and learning strategies appropriate to the situation. Recent research on the implementation of training packages indicates that among VET practitioners there is a poor understanding about how training packages work. The integration of language, literacy and numeracy in training is but one element affected.

There is an unacceptably high level of confusion amongst educators in particular about the relationship between Training Packages and teaching, learning and assessment. Many do not seem to know how Training Packages work. (Schofield & McDonald 2004, p.27)

From the outset there have been recognised tensions between the value of competency-based approaches for the development of technical skills and the development of generic skills. Many people have viewed a competency-based approach as simply being incompatible with the development of basic skills (Gribble 1990), and counterproductive to the development of modern workplace practices which require teamwork, flexibility and innovation (Gee, Darrah & O'Connor

cited in Virgona & Waterhouse 2003, p.7). Various attempts have been made to identify and include generic skills (Carmichael 1992; Mayer Committee 1993; Coates 1994).

Despite this significant work, a number of studies have continued to identify problems with competency-based training, including the ongoing balancing of job specificity and generic skills, transferability of skills (NCVER 1999, p.7; Billett 2001; Falk & Miller 2002), potential fragmentation and disaggregation of knowledge (Stevenson & Kavanagh cited in Sefton, Waterhouse & Deakin 1994, p.31) and atomisation and over-assessment, particularly using written tasks (Fegent cited in Sefton, Waterhouse & Deakin 1994, p.31). Mawer identified the potential tension between the educationally sound principles of a negotiated, client-centred curriculum and the move towards the centralised, predetermined, competency-based curricula (Mawer 1992).

Integrated language, literacy and numeracy in practice

The WELL Programme

The WELL Programme has facilitated and contributed to the development of integrated approaches. Evaluations of training conducted with WELL funding between 1992 and 1995 indicate that language, literacy and numeracy training used a deficit model and that training was mostly directed towards those with poor skills. WELL training provided *complementary* support to vocational training (Bean et al. 1996; Gyngell 2001) rather than *integrated* training. The main feature of early WELL training was of courses negotiated by the workplace language, literacy and numeracy specialist, often incorporating workplace communication tasks or texts, but mainly focusing on developing the learner's general language and literacy skills. The central concerns of the workplace remained peripheral to those of the educators (Mawer 1999, p.61).

Growing acceptance of workplaces as sites for learning, the emerging sociocritical and constructivist pedagogies and the nature of the WELL funding enabled the program to foster innovation. The WELL guidelines recognised the employer as well as the learner as a client. The funding arrangements, whereby the business contributed proportionately more as the program went through its three-year cycle, encouraged buy-in and some ownership of the outcomes. Evaluations endeavoured to show a bottom-line outcome, that is, benefits to the business as well as personal gains (Bean et al. 1996).

WELL activities have also expanded. In 2004 funding is available for workplace training, resource development and strategic projects supporting the delivery of integrated workplace communication programs.

Training funding has allowed for the appointment of specialist language, literacy and numeracy facilitators to be located in workplaces and to work alongside workplace trainers and assessors. The 'enterprise-based teacher' has become part of the multi-disciplinary team in the workplace (Mawer 1999) able to implement four broad strategies (Falk, Smith & Guenther 2002):

- ♦ setting up and promoting the project
- ♦ researching and establishing communication needs and priorities
- ♦ developing a range of training and support initiatives in line with the organisation's business goals
- ♦ evaluating the project.

The range of teaching and support initiatives has thus expanded from the two-hour, off-the-job class to gap training, just-in-time instruction, team teaching, modification of workplace communication practices and documents (Falk, Smith & Guenther 2002; National Reporting System website). Guidelines to the WELL Programme link training outcomes to vocational outcomes. Consequently, the distinction between WELL delivery and the 'built in' vocational approach is merging to produce an integrated approach.

'Built in' vocational training

As a consequence of language, literacy and numeracy being explicitly built into standards, integrated approaches are now being used by facilitators as they deliver recognised training through training packages. To ensure its effectiveness, this process has been aided by strategic work with industry training advisory bodies, national professional development initiatives and resource development.

Strategic plans

Strategic plans to implement language, literacy and numeracy through training packages have been developed by a number of industry training advisory boards. These include Utilities (Catelotti 1999) Forest and Forest Products (McKenna 1998), Transport Distribution Training (Del Grosso & McKenna 2000), Public Safety (McKenna 2001), and local government (Local Government Industry Training Advisory Board 2004).

The development of strategic plans involves extensive consultations with members of the relevant industry group. Priorities are established to support the inclusion of language, literacy and numeracy/workplace communication as an integrated and essential element of training and skills development as part of the implementation of training packages in the specific industry. Endorsed at the industry training advisory board level, the strategies recommended became part of the implementation strategy for the industry training advisory board.

Del Grosso writes of the impact of transport drivers' strategic plan:

Systemic change does take time and it is only now that we are beginning to really see the results that the strategy is having upon enterprises that are putting training programs into place. Employers are becoming selective about who they select to deliver the training and this includes language, literacy and numeracy training. They are evaluating and developing Plain English Policies with regard to enterprise paperwork, they are accessing funding to develop support resources appropriate to the needs of their workforce, they are paying fee for service for literacy support and they contact the ITAB with a variety of questions regarding how best to support their workforce with appropriate language, literacy and numeracy training.

(Del Grosso 2001)

Fogolyan et al. (2003) outlined the impact of the Public Safety WELL National Resource Project on training in the public safety agencies, particularly the volunteer sector. The industry training advisory board research, conducted through consultation with all the public safety agencies, applied the International Adult Literacy Survey data to the demographic information of the industry and undertook an analysis of the literacy and numeracy demands of the training package. This report to the industry training advisory board led to the adoption of the National Workplace Communication Action Plan in this industry. The objectives of this plan were to:

- promote the inclusion of the language, literacy and numeracy in the implementation of the training package
- develop partnerships among peak organisations and registered training organisations to address the workplace communication in the industry, such as a set of pilot projects with volunteer firefighting and emergency service agencies in Queensland and Victoria to trial a community network model of delivery of language, literacy and numeracy support to volunteer workers
- → implement an information strategy through the public safety website
- ♦ evaluate the action plan.

The impact of strategies such as these developed by industry training advisory boards has been to promote the strategic use of funding, such as the WELL Programme (to provide training and resource development), and Framing and Reframing the Future projects to support staff development, particularly among workplace facilitators. Projects funded through the Reframing the Future initiative enable teachers/trainers to develop an understanding of language, literacy and numeracy in vocational training, along with the practices required to integrate these successfully.

Professional development

ANTA workplace communication professional development project

A major national professional development strategy, the development of products and a series of national workshops were funded by ANTA to support integrated approaches. Three publications, *Built in not bolted on* (Wignall 1998), *A new assessment tool* (Goulborn 1998) and *Tenfold return* (McKenna & Wignall 1998) were produced, along with videos targeted at VET practitioners, workplace trainers and assessors, and human resource managers. *Built in not bolted on* was updated in 2000 by a team of practitioners at Central West Community College (Perisce 2002).

South Australian action learning project

As part of an action learning-based professional development project, a number of key VET practitioners in South Australia developed a model for integrating English language, literacy and numeracy training into mainstream workplace training programs (Purcell & Cielens 1998).

The project compared outcomes from different delivery models:

- ♦ language, literacy and numeracy integrated into mainstream training through team teaching
- ♦ block, front-end courses in which language, literacy and numeracy were delivered separately.

The authors concluded that the integrated program had more benefits for learners and facilitators. The project also developed guidelines for language, literacy and numeracy teachers for use in the delivery of integrated language, literacy and numeracy in a training package, beginning with an analysis of the competency, learning outcomes and performance criteria.

Training and resource products

Since the early 1990s a plethora of teaching and learning, and professional development resources have been developed for specific industries and even workplaces, which outline the processes needed for integrating language, literacy and numeracy in the training, and for responding to the needs of industry, workplaces and training packages. Models of integrated training in practice are exemplified in a number of reports.

For example, Babalis describes the processes used to analyse units in the Process Manufacturing Training Package to identify language, literacy and numeracy skill requirements, and the development of training resources contextualised to the workplace and the learners (Babalis 1998). Hummel describes how a resource developed to support occupational health and safety for contractors with low levels of literacy in the oil refining industry customised the core units of the Chemical Hydrocarbons and Oil Refining Training Package (Hummel 1998).

Research data and analysis

This section provides the analysis of the interviews and sessions conducted using the video stimulus recall methodology to explore the key research questions:

- How is literacy conceptualised in practice by registered training organisations and enterprise personnel in the VET system?
- ♦ What literacy practices are developed in an integrated approach?
- ♦ What teaching and learning strategies are employed?
- ♦ What are the factors that might describe the 'integrated model' of adult literacy provision?

The development of the integrated approach to the provision of language, literacy and numeracy skills outlined in the previous chapter has suggested a number of key themes which could be expected to appear in current VET training and assessment in this area (and manifested in the selected case studies). What, for example, has been the impact of having language, literacy and numeracy explicitly identified in industry standards in the teaching and assessment practices of teachers? Has it led to an integration of language, literacy and numeracy—a built-in approach—in VET? To what extent have the experiences and resources developed in built-in teaching and learning processes been influential? Have concepts of literacy and numeracy among trainers and assessors been influenced by the developments in applied linguistics and the move to more constructivist pedagogies? Although there is great diversity in practice, are there some common features or principles which describe integrated approaches?

The research provides just a snapshot into the practices of facilitators in one industry, and while the analysis offers informative insights into current practice, it is not generalisable to all VET practice.

Background to the research

Community Services and Health Training Package

This training package reflects the industry view of the importance of equity, key competencies, communication skills, holistic approaches and cultural awareness in community service work. The training package defines the knowledge and skills needed to work in the areas of aged care, childcare, disability support and community development, all industry areas in which effective communication is crucial to service delivery. These skills are well represented in this training package, with language, literacy and numeracy integrated at all levels of its standards, in addition to a number of stand-alone units with a communication skills focus.

The Community Services and Health Training Package assessment guidelines clearly state that the registered training organisation must ensure that, in developing, adapting or delivering training and assessment products and services, language, literacy and numeracy requirements are consistent with the essential requirements for workplace performance specified in the relevant units of competency, and that they develop the learning capacity of the individual.

There have been a number of language, literacy and numeracy professional development activities for community services and health practitioners conducted by state industry training boards undertaken with Reframing the Future funding. Training package delivery is supported by a

number of WELL-funded language, literacy and numeracy resources available on the literacynet website, http://www.dest.gov.au/literacynet/>.

The research sites

Site 1

Goulbourn Ovens Institute of TAFE is a multi-campus public provider located in north-east Victoria. The Certificate III in Aged Care is delivered at the Wangaratta campus in a classroom format with specialist facilitators delivering specific units of competence.

There are approximately 25 students in the class, covering a broad range of ages and educational backgrounds. All use English as their first language. Many are currently working in the industry in casual positions or as volunteers.

The session covered Unit CHCGROUP2C: Support group activities; and Unit CHCAC6C: Support the older person to meet their emotional and psychosocial needs, from the Community Services and Health Training Package. The mapping of these units to the National Reporting System by the research team shows that students will need to reach NRS 4 for writing and NRS 5 for oral communication. The ability to read is implicit in the units. Some critical issues for developing language and literacy skills in this context are register flexibility² for oral communication and consideration of the workplace and social contexts at NRS 5. (See appendix 1 for details of mapping.)

The facilitator observed at this site held a degree in social work, a Diploma of Education and Certificate IV in Assessment and Workplace Training. This facilitator had considerable industry experience as well as secondary teaching and TAFE teaching experience. The training load was shared among a number of facilitators, all of whom held VET qualifications. A team of facilitators undertook the training, rather than its being conducted via a team-teaching model.

Site 2

Adult Multicultural Education Services (AMES) is Australia's largest provider of specialist, multicultural language and employment services. The Footscray Adult Multicultural Education Services centre is located in the western suburbs of Melbourne, a culturally and linguistically diverse community. The centre provides English for new arrivals through the Adult Migrant Education Programme, language support for the unemployed, and some vocational programs as well as employment services.

The Certificate III in Aged Care offers two days a week off-the-job, classroom-based training at the centre and two days a week on-the-job training in nursing homes and hostels. Two facilitators deliver the course—a vocational generalist trainer with nursing qualifications and a language, literacy and numeracy specialist. The course is delivered in 20 weeks.

The research was conducted during a classroom session at the centre covering Unit CHCCS405A: Work effectively with culturally diverse clients and co-workers. The session also included aspects of CHCINF8B: Comply with information requirements of the aged care and community care sectors, and CHCGROUP2G: Support group activities. The session was planned to cover report writing, verbal reporting, group communication, respecting individual differences, communication and interaction, and group encouragement. The unit CHCCS405A: Work effectively with culturally diverse clients and co-workers, being knowledge and attitude-based, was difficult to map to the National Reporting System. Oral communications for the other units observed were mapped at NRS 5.

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Register flexibility means the kind of language selected for particular situational contexts. A language user may select features of language, such as tone and degree of formality in syntax and pronunciation, in relation to audience and purpose. Different styles of speech are related to register variables, which may include power relations, social distance, and shared knowledge between participants, and the purpose, setting, and mode of discourse (National Reporting System website p.42).

Twenty-five students attended the session. The group covered a range of ages and education backgrounds. Thirteen languages groups were represented.

The facilitator of the sessions observed is a language, literacy and numeracy specialist. She has recently completed a Masters in Teaching English to Speakers of Other Languages (TESOL) and she holds a Certificate IV in Assessment and Workplace Training. She is an experienced teacher of English as a second language to adults. The course is delivered using a shared approach with another facilitator who has community services and health qualifications and industry experience.

Site 3

CMC Training at Work is a private provider registered in Victoria. The company delivers recognised training in the community sector, predominantly childcare, out-of-school-hours care and aged care throughout Victoria. The Certificate IV in Community Services (Children's Services) is delivered on the job at the student's workplace. Students collect evidence and complete learning tasks (provided in a student manual) for assessment of units clustered around learning topics. Prior to assessment, students can have on-the-job training sessions (support visits) with their workplace assessor and trainer. In addition, workplace supervisors are provided with a logbook outlining the competencies students are working through. Supervisors provide support and guidance on a daily basis. Students use learning guides, selected readings and attend workshops and classes (held off the job) to extend and complement their learning.

The research was conducted with a trainer and trainee at the Phoenix St Childcare Centre in North Sunshine. The session dealt with the topic of how to program activities for children and covered the following units of competency: CHCPR4A: *Provide opportunities and experiences to enhance children's development*, CHCPR5A: *Enhance children's play*, and CHCPR9A: *Use observations and records*. The analysis of these units using the National Reporting System indicates that the student will need to reach NRS 3 for writing and NRS 5 for oral communication to fulfil competency requirements. Reading skills are implicit in the units. Some of the critical language demands in this workplace were register flexibility for oral communication; documenting objective observations; and careful choice of language required in descriptions and profiles of children. The workplace and social contexts at NRS 5 were relevant at this site. Workers in the centre are required to encourage and model language for children.

The facilitator has an Advanced Diploma in Childcare, a Certificate IV in Assessment and Workplace Training and has recently worked in the industry. The registered training organisation has recently completed a Reframing the Future project in which issues and strategies for addressing language, literacy and numeracy and the use of the National Reporting System were addressed.

Table 1: Key to research sites

Research sites	Site no. in research	Modes of delivery	Units being taught when observed
Goulbourn Ovens TAFE Institute	1	Off-the-job training	CHCAC6C: Support the older person to meet their emotional and psychosocial needs
Certificate III in Aged Care		Classroom-based supported by workplace placement	
Adult Multicultural Education Service,	2	On-the-job and off-the-job training	CHCCS405A: Work effectively with culturally diverse clients and co-workers
Victoria Certificate III in Aged Care		Direct facilitation of language, literacy and numeracy skills	CHCINF8B: Comply with information requirements of the aged care and community care sectors
			CHCGROUP2C: Support group activities
CMC Training at	3	On-the-job training	CHCPR4A: Provide opportunities and experiences to enhance children's development
Work		Training and assessment provided on the job	
Certificate IV in			CHCPR5A: Enhance children's play and leisure
Child Care			CHCPR9A: Use observations and records

Conceptualisations of literacy

Evidence of conceptualisations of literacy

The project investigated whether the facilitators were working with particular conceptualisations of literacy, summed up as:

- ♦ literacy as basic skills
- ♦ literacy as a continuum of skills
- ♦ literacy as skills integrated into all training activities.

The research demonstrated that facilitators worked with all three conceptualisations of literacy.

Firstly, all facilitators worked with a basic skills concept. In two sites, trainees with skills below a certain level were not accepted into training, or into training at a particular certificate level. This was seen as necessary because the funding of the course (nominal hours) was not elastic; the course ran over a fixed period and thus there was no time to support those requiring substantial amounts of language, literacy and numeracy skills development. The registered training organisation providing off-the-job training was more flexible in this regard, working with students over longer periods of time and tailoring the level of support available to trainees. Programs generally had more applications than places, and exclusion on the grounds of inadequate language, literacy and numeracy skills was seen as legitimate. It was also seen as not being in a learner's best interest to accept them into a course where their chance of success was small.

Facilitators also worked with the concept of a continuum of language, literacy and numeracy skills: it was acknowledged that courses at higher certificate levels required higher levels of language, literacy and numeracy skills and they saw it as part of their responsibility to provide opportunities for students to develop these skills.

Facilitators worked with integrated approaches. They identified the language, literacy and numeracy skills required for competence in the workplaces and as part of the training requirements, and included the teaching of these skills in their programs.

Conceptualisation of language, literacy and numeracy as basic skills

All facilitators in the study had a clear understanding of the language, literacy and numeracy skills required to succeed in their courses, and to be competent in the workplace. All conducted pretraining assessments to assess suitability for the industry, and included language, literacy and numeracy pre-training assessments as one of their selection processes to screen out those who did not have skills at the perceived level required to even begin training.

What language, literacy and numeracy levels would you expect students to have when coming into this course? Do you have an expectation of the level they will have reached at the end of the course?

In assessing the clients before she [the facilitator] accepts them, she requires a certain level of literacy, ISLPR³ Reading & Writing1+/2. It is important to work out how much assistance they will need to complete the course. She takes in some who do need assistance but needs to be aware how much of that time is going to impinge on the course content delivery. Many students will gain the necessary skills as they work through the course. (Site 2)

Two facilitators had deliberately devised assessment items related to the language, literacy and numeracy underpinning skills of the training package and linked to the National Reporting System.

I look at selecting students who fulfil a basic requirement, like a prerequisite, before they can get into the course. They have to have certain skills, and I try to assess whether people can apply these skills in their basic work situation. So with numeracy, it's no good saying: How

³ ISLPR = International Second Language Proficiency Rating

much does this cheese cost you? That has nothing to do with Aged Care Cert III. So the assessment item will be something like: This patient is on a 40 g protein diet per day, and this is a list of items with grams of protein, make them a menu for a day. Or, this patient needs to walk 2 km a day and these are the distances to the corner, around the block. Write them an exercise package. This way I can see if they have the basic numeracy skills they need to be able to fulfil the requirements. (Site 1)

Another facilitator had developed a more generic test which required applicants to answer questions like 'why do you want to do the course', 'where did you hear about this course', 'what do you want to do in the future?' She had found this inadequate and would be moving to more contextualised assessment items for the next intake.

I'm always careful with the literacy because that's the thing that can let them down, once they get into the course. In their country [of birth] they are used to looking after older people and they think it will be the same here and they don't realise there's all the theory and literacy that's involved.

So I'm careful selecting because I don't want to set them up for failure. When I first started teaching the course, the criteria [sic] was that they could put a sentence together, with a fairly good word order, so I would only have to teach the style, the genre of the different reports. But they are used to writing about themselves, so when my test was writing about yourself, it was a bit easy. So next year my test will change. (Site 2)

All registered training organisations referred those who were not accepted into the course to general adult literacy courses, either within their institution or to community classes.

There were other people who didn't have the literacy or numeracy skills. I didn't just send them a letter and say you were not successful. I asked them to come in, and said this is the reason you weren't successful, but if you are still interested this is what you need to do to before you can get in: do a return to study, get some reading and writing skills through this course that TAFE runs. You need to undertake this before you come into this course ...

(Site 1)

What happened to students who had been accepted into training if it was subsequently discovered that they were struggling with the language, literacy and numeracy skills which underpinned competence in training or in performing these tasks at the workplace? Once the course began, facilitators used additional resources available through the registered training organisation or in the community to try to build the skills of enrolled students not meeting the standards. But there were difficulties with this.

In the assessment, I'm looking for the skills that will get them through, because they have to write, they have a lot of documentation to do. Last year I was really disappointed. I had this lovely young man. He really wanted to do Aged Care. I had taught him in evening classes and he got through the basic literacy. He was really good in the workplace. His practical skills were great, but his writing was as if he were dyslexic. He just couldn't do it. I couldn't pass him in the course. I offered to help him, I don't like to lose them. I offered him extra study on the literacy but the poor thing was so busy with night shift, and working as a cleaner, he didn't have time. The nursing home was really sorry too because they knew how great he was with residents, but they said, look we can't understand his writing. (Site 2)

Facilitators with industry specialist backgrounds were also aware of more general community literacy issues. While one of the facilitators was not herself trained in English as a second language, she had lived for several years in a country where English was not the official language, working in her professional area, and had learned the language of that country as a second language. She was very conscious of language issues as a result of these experiences. She had also formed a clear picture of the levels of literacy overall in the community in Australia in which she now lives.

I've been amazed by the level of functional illiteracy in this community. Things like completing Centrelink forms, grant applications, I've written so many CVs for other people,

I'm shocked that people live in the community but with their level of literacy they can't function fully as members of the community. (Site 1)

Conceptualisation of language, literacy and numeracy as a continuum

Facilitators also saw language, literacy and numeracy skills as a continuum. Students required certain skills at the level they were currently studying, and it was acknowledged they would need higher language, literacy and numeracy skills if they wanted to study at a higher level. This was particularly important when the course students were presently undertaking was a pathway to a higher-level course. Facilitators saw it as their responsibility to improve language, literacy and numeracy skills in order that students possess the skills required to be accepted into a course at a higher level.

Most people are doing it [Certificate III in Aged Care] as a way to get into Div Two nursing ... and some want to go further ... At Cert III, you could probably do the course orally, but you have to write case notes or brief reports, you need them to be able to write short objective case notes. Now sometimes people with literacy problems are actually good at this, they cut to the point, so at Cert III it isn't likely to cut people out too much, but once you get to Cert IV you have to write more detailed notes.

At Cert IV they need to be able to write notes sufficiently well that the care plan could be changed on the basis of their notes. Some of the things I do with writing are to try to lift them up to that next level of fluency. To me if they write about something they care about or something they've researched, I'm hopeful they can go on. My way of teaching can seem a bit hard for people with literacy problems, I'm asking for that reflection, but once they get going, they up the ante.

(Site I)

One facilitator with an industry specialist background saw that one of the benefits of the aged care course she was teaching was the development of participants' literacy skills.

[The course] works to assist students to develop literacy skills ... [As part of the unit: Support older person with needs] we saw *Company of strangers* and did some reflective writing. You could see them bringing their old writing skills together, thinking how am I going to describe [this character], what adjectives can I use, how can I describe what was happening ... it is a very broad unit, it's about growth for them too. This can happen from them using language ... (Site 1)

Using a framework/hierarchy to describe a hierarchy of literacy skills

All participants worked within a framework of language, literacy and numeracy skills from accredited courses, or the National Reporting System, or schooling levels (as they perceived them), and referred to these in the course of the interview.

When they come in I like them to be ideally finished Cert III CSWE, but that doesn't always happen, and I've got a couple of men who are finished Cert II but they need to be a Cert II in at least 3 of the macro skills. Ideally a Cert II in at least 3 macro skills, and a 1+ in the other skill. It would be better to be at Cert II in all areas, but it is really hard to get that. (Site 2)

What language, literacy and numeracy levels would you expect students to have when coming into this course? Do you have an expectation of the level they will have reached at the end of the course?

Practically, I think they're at a Grade 8 level, and I want to get them to a Grade 10 level.

(Site 1)

Although the facilitators did not use a shared language to explain the linguistic interventions needed, they all concurred with the research team on the contextually critical skills needed in this industry. These were the register flexibility, high levels of listening and speaking skills and skills in writing for recording behaviours in an objective and non-judgemental way. The oral communication skills in the units covered were mapped at NRS level 5 and the writing skills were at level 3, covering the procedural, cooperative and public aspects of communication.

Reading skills were not strongly evident in the units selected, but were implicit in the learning activities set up by facilitators. Students were required, for example, to read power point presentations, overhead transparencies and blackboard notes, hand-outs and learners' guides. Reading skills at level 3 of the National Reporting System were observed. Learners were scaffolded into the structure of the texts used commonly in training and in the industry.

Conceptualisation of language, literacy and numeracy as skills integrated into all training activities

The industry specialist facilitators tended not to distinguish in importance between technical skills and those relating to language, literacy and numeracy. Because they recognised the importance of the language, literacy and numeracy skills in the work roles, they integrated those into their delivery.

I don't see that the world is divided up into communication skills over here and childcare skills over there. It's all part of the whole thing. They need to be able see it like a circle, start at one point and connect it all together, and then go round and round. It's not just the theory side of it; it's also the work practice side of it. (Site 3)

They saw it as their responsibility to have the students competent in the language, literacy and numeracy required in the workplace by the end of the course.

In terms of their written work, and approaching that from the professional angle, they need to be able to write, regardless of whether they are writing for a committee, or parents, or older children

We do work on writing for different purposes, and that is why we provide the assignments, because that gives them the challenge of writing that form of documentation whether it is research [or] writing policy. They need to be able to do those things to pass at a certain level. And if they are struggling with that, we support them through that, give them guidance, resources, give them a task to do.

(Site 3)

I want to make sure they have the skills to start off with, or that those skills can be developed, so I've got pretty stringent criteria for letting them into the course. Once they're in, it's my duty to get them through and make sure they are competent ... If someone doesn't have the written skills to be able to give a complete answer on an assignment, then I'll give them a verbal, but I need to be assured at the end of the course, that they can fill in the relevant forms and documents so they can work as patient care assistants. (Site 1)

Literacy practices developed in an integrated approach

Evidence of analysis of training package and work role activity for literacy requirements

All of the registered training organisations had analysed the language, literacy and numeracy requirements for specific work roles and were able to give clear and detailed accounts of what would be required 'on the job'. All had a clear perception of the language, literacy and numeracy skills required by a qualified worker in their work role. There was consensus between registered training organisations delivering aged care about the language, literacy and numeracy required. In summary, these were:

Reading:

- organisational information: standard operating procedures, occupational health and safety information
- ♦ charts: blood pressure, bowel movements etc.
- ♦ noticeboard information.

Writing:

- Reports to supervisor, colleagues and/or health professionals reflect changes in the client's needs, abilities and circumstances.
- ♦ Reports reflect observations not opinions.
- ♦ Reports reflect legal and organisational requirements.
- ♦ Health terminology and common abbreviations are used appropriately.
- ❖ Routine information is entered on charts, for example, blood pressure, bowel movements.
- ♦ Notes are taken and used as basis of reports.
- ♦ Client's preferences are identified and incorporated when developing the service delivery plan.

Oral communication:

- ♦ listening and responding constructively, initiating and responding to topics of interest to the aged person
- ♦ providing clear, concise information to aged person, supervisor, colleagues, family members
- ♦ using health terminology and common abbreviations appropriately

Numeracy

- ♦ reading and interpreting numbers, for example, thermometers
- ♦ writing numbers onto charts.

Reading and writing skills (Certificate III in Aged Care)

What workplace tasks do you want them to be able to do by the end of the course? In terms of their reading and writing?

Write a nursing care plan, fill out a resident's assessment form to the standard required by their employer and mandated by the accreditation authority, so it's in line with government policy. It's mainly forms that they need to fill out. They also need to have the skills to be able to update their knowledge, and to take up new educational offerings, for example, undertake a certificate, use a new piece of equipment or understand legislation that they have to incorporate into their practice. OHS [occupational health and safety] policies. They have to complete First Aid Level 2 every couple of years. (Site 1)

[The writing is] largely structured forms. Mostly [like the bowel charts], they require ticks. They shouldn't touch the care plan, that's the general thing that happens with that resident. But if something happens which is different to what's on the care plan, then they write it down on the progress notes. Our students have very little to do with the documentation, because the nursing homes have their own staff who have been trained, but if they were writing anything it would be on the progress notes rather than the care plan. They could also write down blood pressure, personal preferences of a resident, for example, that they like to comb their own hair.

Oral communication

In terms of their speaking and listening?

They need to be taught to actively listen. A lot of them don't have that, they actually switch off, so they need to be taught to listen and ask pertinent questions. They need to learn to take notes so they can remember, field notes so they can take them back and document, anecdotal notes they can keep for their annual appraisal or their 90-day appraisal if they are starting a new job, so they have an actual balanced appraisal. They need to be able to understand the organisational policies. They might have an OHS issue, if they've fallen over or a resident's fallen, they need to be able to fill in an incident form. They might note a deficiency that's important in the information on a form, something that has been left off. They need to be able to bring that to the attention of somebody. (Site 1)

I would like them to be excellent listeners and able to reflect back to older people what their issues are. I would want them to be able to convey issues related to social and emotional needs of patients to their supervisors if they noticed a change. They need to have enough language to do that. I tell them if you know what is happening you can inform the Div One nurse more appropriately. They can support the patients' families if they know what is happening. They also need to know when to ask for help.

(Site 1)

You would want them to be able to go to work, they all work with a buddy or a supervisor, and to have the communication skills to be able to ask their buddy what they were going to do that day, to understand the instruction, to ask questions to clarify, and then to be able to relate to the residents at the right level, respecting their rights.

(Site 2)

At diploma level the expectation is to be able to communicate well enough to work together in a team, to be able to communicate with parents, to interact with children. Presenting information to parents is really important. She needs to present programs, documents to parents. Spelling and punctuation should be accurate, and presentation is important. (Site 3)

Those who had worked in the community services and health industry themselves were familiar with the requirements resulting from accreditation, legislation, client care and working as a member of a team. They had a clear picture of the professional standards required in the industry. They were also able to use their professional knowledge to be explicit about the purpose of many of the tasks required of learners, and the standards that applied.

[Diploma in Child Care] teacher to learner: It's really important that your [planning] program is clear. You need to know that, if you are away for one day or on annual leave, your room is going to run as smoothly as if you were there. So if a clear picture is painted to the relievers that this is where I want experiences set up, this is how many children I want there, there is consistency because the children know where things are. So it's really important that you document everything on your program and on your floor plan. (Site 3)

Facilitators kept their professional experience and knowledge up to date by site visits and liaising with employers, team teaching/auspicing arrangements with those employed in workplaces, and belonging to training networks.

In many respects, knowledge of these requirements, and working within networks to maintain currency was easier for those with direct experience of working in the field. The facilitator who did not have that direct experience in the industry/workplace setting, that is, the language, literacy and numeracy specialist, used a variety of means to develop familiarity with what was required in the aged care workplace. This included liaison with employers of students, site visits and team teaching with those with vocational qualifications. The facilitator sought to improve her familiarity by working as a volunteer in an aged care setting during a leave period from her registered training organisation. This underlines the importance she attached to exposure to the workplace to develop understanding of the actual language, literacy and numeracy requirements of the workplace.

Evidence of planning which explicitly builds in teaching literacy requirements

Delivery strategies for community services and health, in general, vary from teaching units on a stand-alone basis, teaching units in clusters based on workplace role, or clusters based on underpinning knowledge/skills, or a mix of these. All of the registered training organisations studied had carried out an analysis of the training package they were working with in terms of language,

literacy and numeracy requirements, although there were variations in how this was done. Analysis of the language, literacy and numeracy in the training package may have been at a cluster/certificate level, or at the level of individual units.

One registered training organisation analysed the language, literacy and numeracy skills when developing clusters of units based on workplace roles, and included sets of generic skills whose development is tracked through the training. Facilitators consciously look for opportunities to directly teach and provide opportunities to practise these within workplace tasks and activities (Site 3).

Another registered training organisation (teaching the Aged Care Training Package) had also analysed the training package for language, literacy and numeracy in this systematic way. The facilitators also had a broad knowledge of what was required in the qualification. While facilitators at both registered training organisations operated within a team teaching situation and had responsibility for teaching particular units from the certificate, they had sufficient depth of understanding of the underpinning skills required across the certificate level to be able to recognise when something from another unit had not been covered, or needed to be covered.

Video: Now I want you to turn to the person sitting next to you. You've done active listening haven't you? ... when you nod and reflect back, summarise what they've said. Or, you just let someone talk and if they look stuck you say, 'can you tell me more about that'. Or say the last few words that they have said? Have you done that in the communications class?

So this is where you are trying to work out what they have done in another session?

Yes, I didn't know whether they have covered this. So I was just trying to suss out whether they had done active listening, I just didn't know. I decided that it's also in this unit, so I decided to do it. It would reinforce it if they had done it previously. I realised I needed to do more, it is really key ...

I didn't know I was going to do that lesson on active listening really but I knew I had to check it out. So it was a diversion from what I had planned, I had to do it then. Only one person indicated recognition of what I was saying.

(Site 1)

Both of the registered training organisations delivering aged care were delivering Unit CHCCS405A: Work effectively with culturally diverse clients and co-workers, which was a recent addition to this training package. Performance criteria for this unit largely involve knowledge (legislation, cultural practices, resources) and inclusive attitudes and processes. It is difficult to estimate the level of language, literacy and numeracy underpinning skill required by reading the unit itself. Holistic assessment with other units at the same level is recommended, which suggests a clustering of units. (See appendix 1 for NRS mapping.) One facilitator delivered the unit as part of a cluster with CHCINF8B: Comply with information requirements of the aged care and community care sectors, and CHCGROUP2C: Support group activities. The other units in the cluster provided the framework for the language, literacy and numeracy skills.

Facilitators also use the nationally accredited support materials developed for use with the training package rather than rely on their own analysis of the training package unit.

And in terms of their writing, one thing I am curious about, having looked at the units themselves that you are doing on Monday, it is really difficult to know what level of writing is required, may be simple. May be complex. (Researcher reads from unit Underpinning skills)

So in terms of how you prepare and write up your lesson notes, do you go through the unit of competence and take it apart?

It depends; we have a resource which tells you what the student needs to know in order to achieve this unit. It doesn't tell you how to teach it, but it tells you those things. (Site 2)

Teaching and learning strategies employed

Evidence of training activity directed towards developing required literacy skills

The strategies used by the classroom-based registered training organisations were remarkably similar, despite the different backgrounds of the facilitators. Both classroom facilitators had structured class time in a similar way, with short presentations using overhead transparencies, small group exercises and reporting back to the whole group. Small group work required note-taking skills.

Teaching reading skills

Reading legislation and long academic articles posed problems for both aged care groups.

Both facilitators were careful to introduce new terminology and concepts before beginning reading exercises.

What I was doing there was to have all that on an OHT so that they could listen and see as I was reading it; that's good for literacy isn't it? It helps them focus, or when I am introducing new language. That helps them with the language of Aged Care. They did a worksheet last time and they had to give examples of older people and freedom from fear, impact of ageing. They all did this and we shared the responses, so that's language too. That page is out of the underpinning knowledge page of the unit, and I get them to tease that out, so they are connected to the idea before they go on and do it in more detail. We did it in class, in twos, so they are using the language talking to one another.

I gave them a lot of reading the week before, and I just felt the need to tease out the key bits, and I was afraid they might have been overpowered by it. We read it in class together first, I know they're following and the slow readers love that reinforcement. I do more of that because of the client groups we have.

(Site 1)

Both facilitators re-wrote more complex materials to a level they felt matched the independent reading level of their students.

I wanted people to read a really good article, from ERIC [international database on educational materials and research], *Empowerment for later life*. I went through and edited it, and it could have had some more editing. I wanted to keep the words they needed, and kept the same technical terms. If I had said read this at home, they would have looked at it and said I won't. By doing it together, I thought they are listening, reading, and discussing bits.

Did you have in mind the layout as well when you were re-writing?

Yes, tried to avoid long paragraphs as well. Write so that the idea doesn't become too buried.

So here you are editing down to a point where you think it's readable by your group?

I could have edited more but I didn't want people to look at it and say here's an ERIC digest that has been edited down to the point of stupidity. Basically the substance is still there.

I've kept the words; 'empowerment' is a big word, and relating it to older people [appropriate vocabulary for this industry] ... (Site 1)

Really they work in together. I've just given them a list of documentation, legislation they need to read up on. That's a real effort for them and I have to try to get that language into as plain a language as I can. In the workplace they are looking at legislation, complex language, in the classroom I get it down to as plain and simple a language as I can but still introducing new vocab and new styles all the time. (Site 2)

Both facilitators adopted a similar strategy in the classroom when teaching material such as legislation or academic articles, breaking them into sections, so that each person/group read only one section. Through each group reporting back to the whole group, each student gained a sense of

the whole document. This also offered the opportunity for students to practise paraphrasing, an important skill in the workplace where oral reporting is commonplace.

We do paraphrasing a lot. The reason I do it is that the formal language of the text is often too much for them. I get them to paraphrase so I can see that they have an understanding of it. And as you can see, I got them to paraphrase and then I got them to report back to the rest of the group, and that helps the rest of the class. This was a pretty lengthy text and I broke it into paragraphs, I gave them all a different paragraph to paraphrase so when they reported back, everyone got the information without me standing there lecturing them.

So you're giving them practice now at a recount or paraphrasing?

Yes, because they have to develop confidence to support what they have said, and reporting back. In the workplace they have to report back so often and a lot of them are really hesitant to do it. So if they are doing something with a topic that they are familiar with and comfortable with, then I'm hoping that will [help]. They also get practice at asking questions, I encourage questions. It is so important in the job they are going to, to be able to ask questions, clarify instructions, it's one of the main things, and it's an area that I get feedback on from nursing homes, that they need to ask more questions, clarify. (Site 2)

Using a World Health Organisation (WHO) document—'Social determinants of heath'—as a reading task provided one of the facilitators with an opportunity to raise questions with students about how they go about reading.

Video: people getting into groups based on World Health Organisation social determinants groups, small group work.

The students had to choose which topic they wanted to discuss, and then move into groups based on social determinants. A bit of negotiating going on, but that's all communication, isn't it?

I gave them this document from WHO, divided it up (depending on the topic), I just gave them the page of the social determinant they were interested in, not the whole thing.

So they have a bit of reading to do, and then they answered the questions?

I didn't want them to get too up-tight about the reading, but I wanted them to know if they wanted to have a go, it was there.

This is a really good reading exercise: it's got a graph, it's immediately relevant to what is being discussed and it is being used for problem solving? You're giving them some directions as to which bits to do first, where to read?

Yes, they had to answer these three questions today, and report back. I pretended it was the WHO committees reporting back on what they were looking into; so one person from each group came out the front, and read out what the group had decided. All I've given them to go on is that [page from the World Health Organisation document], the rest is going to be up to them to find out.

You've included process questions like: How are we going to find out, so you've got a 'learning to learn' process happening?

Yes, and the reason I've said it was the WHO committee is that it helps them to see structures too, that way they are growing too. It's giving them time to get frustrated too. They are anxious learners, there will be times when they ask how are we going to do that, but mostly they got onto it quite well.

(Site 1)

The childcare course (Site 3) also required reading of quite complex material, including legislation, policy documents and theorists, for example, on child development. Accreditation requirements were also adding to the materials, which needed to be read and comprehended by students.

Students are given a book of readings and have access to readings and online learning materials on the registered training organisations website.

Teaching writing

All facilitators were aware that many students need assistance to reach the level of writing required for the qualifications being undertaken.

When I started the course I was aware that only 3 students had done Years 11 & 12, and most people had been out of school for some years, and hadn't done any other courses. I started them off on very simple exercises. Communication skills was one of the first modules we did because I felt that was a base-building block. We started off with the first assignment to describe a non-verbal communication incident that they had witnessed. It was very brief, half a page or three or four sentences. As the course progressed, my expectations have progressed. (Site 1)

Another facilitator supported students with their writing by first teaching them the concepts and terminology she wanted used in a particular piece of writing.

We watched *Company of strangers*, and I asked them to do a written review. One of my methods of teaching writing is to tell them the words I want them to use in their writing. So, for example, with this review the examples were: mindfulness, rather than mindlessness or learned helplessness, stages in the life of a group, communities of interest, and any other issues explored in class which the film raises. I'd already covered those terms with them. I introduce words from the industry. (Site 1)

Teaching of report writing in the classroom drew on simulated activities:

I get them to write accounts of what we have been doing in a formatted style, a report style, For example, after next Monday's class I am going to get them to write a report of one section of the class, to get them into the structure of writing only the facts. The content has to be familiar, you can't just give them something which means nothing. It's got to be relevant.

(Site 2)

The language, literacy and numeracy specialist used a piece of dictation as a teaching activity.

This dictation is quite lengthy. The reason I do it is to give them the formal vocabulary and to give them the formal style, so they're listening, they've got comprehension, pronunciation, and I give them the punctuation. So they've got that formal writing as opposed to just writing different pieces. And it's another form of lecturing.

And is the piece an example of the sort of reports they might be required to produce in the workplace?

It's actual course material, it's material from the resource, so it's another way of giving them a lecture. Within this I give them punctuation, point form, it's another way of giving them instructions. They have to follow instructions: it's vital. I don't correct this or collect it. It's just for their individual writing. If there are words that I think are different or unusual words I will spell them for them. If I see someone hesitating, I will spell it for them. But when I'm collecting work I am very strict with spelling. They are doing a report for homework this weekend and I've told them I expect absolutely no spelling mistakes because they are not very good at using dictionaries and I want them to look up every single word. I don't want any spelling mistakes. It's not a big issue at the beginning: a lot of people can't spell. I try to get best practice ...

Sometimes I'll give them a couple of words, depending on the words, and if it is a sentence I'll put them in the phrases, just like English teaching. (Site 2)

In the workplace learning model, teaching of written communication was largely done by modelling, supported by classroom and other learning activities when necessary. While much of Certificate III in Child Care could be achieved orally and by demonstration, there are a number of

writing tasks which are required in the workplace. One task is the maintenance of a record which lists children and their medication.

I do have a student doing Cert III at the moment whose background is ESL. She can read English but not write it. The plan is that she is sitting with some people in her centre, they're going to ask her the questions because she can't write English. So she tells her co-workers the answers and they write down the answers. There are a lot of Turkish people there, so they translate, and that is how the assessments are conducted. The support visits are based on myself teaching her, I ask her questions, and she answers those. What we need to work on now is her writing, e.g., she needs to be able to complete medication charts. She is going to have to do some form of writing. What we are doing is the co-worker is teaching her how to do that, so she is copying the other staff member filling in charts. (Site 3)

At Diploma of Child Care level, writing requirements are more extensive, and more complex.

Child observations have to be written in a non-judgemental way. She needs to write what she has seen without adding emotion into it, and then she does interpretations in the next section.

And students would know they had to write in that way, keeping emotion out of it? Was it modelled, or was she told how to do that?

I haven't taught her that, she would have been shown in the workplace. She would have picked that up from the co-workers. She also has planning time with [team leader] therefore she could be taught on the job.

So, in terms of the language, literacy and numeracy development, it's largely done in the workplace through modelling, so it's really dependent on the workplace having a good role model and having a good standard of documentation? And allowing the student time to learn those things, building it into the work plans for the whole group?

Other students who don't have this, and there are students who don't have this, I know will need extra support. I encourage them to attend workshops, child development classes. So, as an RTO, we need to have other options to support students, if the workplace is not seen as providing the level of support.

(Site 3)

One of the activities in the Diploma of Child Care requires reflection/evaluation on the success of a program. Being able to write an evaluation is underpinned by literacy skills such as note-taking, selecting relevant material, structuring a report, and writing in the appropriate genre. This was directly covered by the teacher in a one-to-one session with the learner.

Video of teacher to student: Evaluations need to have what worked, what didn't work, why it didn't work, why it did work? So you need to give reasons why things are happening in your room, why your program is running. Not only do we talk about experiences, we also talk about transitions and routines, so you can assess whether changes are needed.

For her assessment, she will choose a couple of the performance criteria from the unit. For example, for this PC [performance criteria] to do with child observation, she needs to do this over 5 weeks: Complete five sheets, which cover five developmental domains (lists) for each child. Detailed observations are required. Observations have to be written in a non-judgemental way. She needs to write what she has seen without adding emotion into it. She then offers interpretations in next section.

So this is now me teaching her about evaluations, what needs to go in them, and the purpose of them. An evaluation is usually about a page long, and we ask students to write them on the back of their program, so we can relate to the experiences.

In an evaluation you need to make sure everything is in there: experiences, transitions, routines, you might have an experience that didn't work, wasn't popular with the children. The evaluation needs to include (if the experience didn't work) why it didn't work. Could it

be a developmental thing, could it be the way you set it up, could it be the time of day? You need to assess everything you do, and then you make things better next time.

When you are working with children, the whole focus must be on the children, so if you are writing reports you are not being an effective worker. I advise students to keep a little pocket book, and take short notes while they are still interacting, so they don't forget details, then write more detailed notes in program time. (Site 3)

A range of resource-based teaching and assignments also supplemented teaching in the workplace. As the facilitator noted:

In terms of their written work: approaching that from the professional angle so that they can write regardless of whether they are writing for a committee, or parents, or older children.

We do work on those, and that is why we provide the assignments, because that gives them the challenge of writing that form of documentation, whether it is research or policy. There are units in our work folder about writing policy. They need to be able to do those things to pass the course.

(Site 3)

Teaching listening and speaking

Oral communication activities were a focus of aged care and child care teaching. This included teaching reporting, questioning, and active listening skills.

Small group activity was one approach used by classroom facilitators to provide opportunities for learners to develop skills such as asking questions, clarifying and paraphrasing/reporting back to the whole group.

Whole group discussion of relevant topics also provided opportunities to develop skills in asking questions to clarify issues.

Video: The teacher showed an OHT with a case study about culture and change in country of origin, and old memories, then initiated a discussion with the class.

What I'm doing here is I'm trying to elicit questions/examples, as soon as the students start to ask questions I shut up ... I try to bring quieter people in. One student is not getting much practice in English in the workplace; I try to give lots of practice in class. (Site 2)

Active listening skills were taught explicitly in the classroom, through pair work in reflecting back.

At this level, we do things like Rogerian listening, they can't go wrong with that, it doesn't interfere with anyone's thinking, it's just about listening and reflecting back and empowering the person.

(Site 1)

Aged care workers need to attend to the emotional health of their clients, so it is important that they are trained to listen carefully to the words the aged person uses. Workers also need to know that their own choice of words can influence the emotional wellbeing of the client. Active listening for key words as indicators of an aged person's psychological or emotional health was also explicitly taught in the classroom.

Video: We need to understand how some people learn helplessness, and how the words they use indicate how they are feeling. They might be managing quite well, and then something happens to their health and they start feeling vulnerable. If you or the family start saying, 'We're really worried about you living on your own now, you might have another fall, or whatever', the person starts to feel they are not managing. We use the term self-efficacy to describe this state of mind. Basically it means what you think you can handle and what you think you can't. If they have low self-efficacy, the person says things like: 'I give up, I can't manage. It's all too much'. If you have a successful intervention at this point and organise support, self-efficacy becomes more positive. People say, 'I can handle this, leave it to me.' 'Let me help you with that'. If you listen to the words they use, you can monitor their self-efficacy and take action to prevent them sliding into depression.

One of the things I am aware of is that some of the students are working in HACCS [home and community care services], not just residential or nursing care. I am trying to develop their awareness and use of this language, these words. These also relate to the concepts about empowerment. (Site 1)

Also important was directly teaching the technical, medical and professional vocabulary required in the work role.

It's important students understand the medical abbreviations. In the nursing homes they attend handover and the nurses use the abbreviated forms. They have to be aware of those.

(Site 2)

Because of the important role childcare workers have in developing the language of the children in their care, the childcare teacher focused on the worker's own language usage.

Video: Student comments on activities: 'Sometimes we dance to music, and crazy stuff like that'.

Crazy: That word is bugging me, I don't think it is an appropriate word to use, and even though it's not offensive, I need to talk to her about her language use in the next session. What does she mean by the word crazy? I'll get her to define that to me in the next visit.

So encouraging students to be conscious of the language they use is part of how you see your role?

Definitely, if we are early childhood educators we're teaching children how to use language. I'll be saying by using the word crazy out of context, what does it mean? Is there another word you can use? (Site 3)

The language, literacy and numeracy specialist teacher included a section on teaching colloquial language which her predominantly non-English speaking background students encountered in the workplace.

I guess workplaces and staff rooms would be full of examples of colloquial expressions that they need?

There's a lot of colloquial language. I've got sheets of colloquial language they have to learn like 'he's really grumpy today'. They've got to learn things we take for granted. The way I teach is that I'll put the expression up on the board, then we'll discuss what they mean, and then I'll put them into pairs and have them run a dialogue where they use only colloquial expressions and check how the meaning has come across. It's good fun.

When you discuss it in class they have the opportunity to ask you about things they have heard out there. The students bring back so much into the class from the workplace. (Site 2)

Extending students' vocabulary of everyday non-technical words was also an important activity in the classroom with the English language specialist.

I saw this as an opportunity to revise their understanding of the word 'negotiation'. They used 'compromise' so I jumped in there to check that they knew what it meant. (Site 2)

One of the Aged Care facilitators used action and enquiry learning to develop discussion and reading skills.

I like this method of working, it's enquiry-focused action learning. You just give a little vignette of something and you expose it to the class and out of that they tease out what they think the issues are. You have that lovely discussion, then you get them to choose an issue that interests them, and then they come back the next time and they share what they have found. I use it in various combinations all the time. But what I like about it very much is that it helps them to develop a holistic view of a particular case or issue to do with older people and all the things that determine their health; their perspective for their purposes.

Once TAFE students get used to [enquiry and action learning] they love it, they talk about the concepts. Interpreting the reading from their perspective for their purposes. They learn that you can't look at people's social and emotional health in a vacuum. (Site 1)

Teaching numeracy

We witnessed no direct teaching of numeracy skills in our observations. The units being taught did not make explicit reference to numeracy skills.

Teaching 'learning to learn'

All facilitators integrated 'learning to learn' activities in their teaching and there were integrated into the first sessions. This was to support learners where the teaching was workplace-based and students needed independent learning skills to complete assignments, attend additional classroom-based activities, or use the internet for support. Also important was assessing as soon as possible whether the student was going to need support with learning strategies:

The first few sessions are about setting things up to learn. There are some students whom I do have concerns about. I expect a high level with the Diploma; if they are going to write documents for parents and community groups, they need to be able to show me by the end of the course that they can present work professionally.

I have an interview called a pre-training interview with the student before we actually start support visits, or assessments, and I go through the workbook with them. They have already been through it at the first session called 'Getting Started', but I go through it again, give them instructions on how to set up their folder, and the first assessment. This is where I determine the level of their listening skills, and how much they have taken in of what I have said. I go through each question with them so they have an understanding of what is required.

The assessment visit tells me how much was this student was listening, how much they absorbed, how well they set up their workbook. The length of answers doesn't matter, but if students miss the point or skip questions, that's when I know they need extra support, and I make sure the communication is more regular. (Site 3)

Evidence of assessment activity directed towards literacy requirements

All facilitators assessed language, literacy and numeracy in their assessment practice.

Competence in the performance criteria of the Community Services and Health Training Package is demonstrated in the workplace, and all registered training organisations studied had developed extensive assessment activities based around workplace performance. This required a team teaching or workplace partnership model in two of the registered training organisations studied. The third registered training organisation employed a facilitator with qualifications and experience in child care who was able to complete the assessments in the workplace.

How is the assessment conducted for this unit (Cultural diversity)? The unit is largely underpinning knowledge, and what students would be showing in competency terms: the assessment is 'observation of work performance, 'authenticated logbooks', 'supporting statements from supervisor'. So I guess you would be looking for that transfer across to the workplace?

I work with a nurse: I do the communication and theory, she does more of the teaching of practical nursing skills. The way we assess is she goes out into the workplace more than I do. All of the students have a supervisor's checklist that covers things we mightn't see, but which occur in the workplace. When they think they are ready, they ask their buddy or supervisor to watch them do it, and then they check it off. With this unit, some of the things are on the checklist because there is a lot of communication in there. So they are assessed through the supervisor's checklist, and we've got specific questions and hypotheticals in class.

I was struck by how it would be difficult to assess the writing in the workplace, those largely structured forms, so is it a tick, or a word, a sentence, a paragraph?

Mostly like the bowel charts, they're ticks.

But I would not pass someone in the course who could not write a report. Got to have that writing skill ... progress notes must not be too subjective. (Site 2)

Yes, they have a competency manual, with a checklist of skills, Elements & PC, they do an observation, questioning, self-assessment, report documentation, date, at the end there's a time sheet, there's a task as well, so they have the actual skills they need. (Site 1)

Conclusions

While the research is based on a small sample, the following observations in relation to the practice of integrating adult literacy in training programs are offered.

The research methodology

The methodology used in this research, 'video stimulus recall', although difficult to set up from a practical and ethical point of view, proved a valuable tool for capturing teaching and learning in vocational training. If ethical issues can be accommodated satisfactorily, video material of this kind would provide a useful professional development resource for VET professionals.

Features of integrated approaches

As a result of ANTA's commitment to building language, literacy and numeracy into standards/policies/workplace documents, these skills are now more visible in the vocational education and training sphere. The crucially important role of language, literacy and numeracy skills in the workplace has been identified, such that their inclusion in training programs is given due consideration.

In this study the registered training organisations studied appear to have two approaches for dealing with the delivery of language, literacy and numeracy skills. On the one hand, it would seem from the data that there is clear evidence of screening out learners who do not have prerequisite levels of appropriate language, literacy and numeracy skills. On the other hand, they also all accept the need and provide support for language, literacy and numeracy development as part of the course for those learners who have been accepted into the course. All three registered training organisation expressed high demand for the courses in this study, suggesting that language, literacy and numeracy was used as an unofficial selection tool. Despite this practice being observed in these three sites, we are satisfied that language, literacy and numeracy in the community services and health context is being integrated or 'built in' to delivery.

Integrated approaches share some of the features of workplace learning proposed by Courtney and Mawer (1995), Mawer (1999) Falk, Smith and Guenther (2002) and Billett (2001). However, the format of integrated approaches is continuing to develop in response to the reforms of the National Training Framework, whereby language, literacy and numeracy have become more explicitly described, delivery options more flexible, and pedagogy has moved from transmission to constructivist approaches.

The following features are considered central to successful integrated approaches.

A constructivist pedagogy

An integrated approach is based on a belief that adults bring skills and knowledge to their work and learning, and that it is the role of the facilitator to introduce the learner to activities through which the communication practices essential to their work performance build on their personal experience

and knowledge and use of language. A deficit model of language, literacy and numeracy is rejected and is incompatible with this pedagogy.

An explicit model of language

In integrated approaches, the provision of language, literacy and numeracy skills relies on their being explicitly described in standards and built into training activities, along with direct strategies designed to develop socially and culturally appropriate communication practices. This research suggests that a generalist vocational facilitator is equipped to deliver an integrated approach, provided they have a framework for conceptualising linguistic practices in the workplace context and in the training package, and have the capacity to facilitate strategies and activities which enable trainees to develop critical workplace communication.

A multi-disciplinary approach

To deliver integrated training effectively and efficiently it is essential that training organisations adopt a multi-disciplinary approach (Mawer 1999; Billet 2001). Integrated approaches require indepth knowledge of the culture and practices in the industry, expertise in education, and some knowledge of applied linguistics. It would be rare, although not impossible, to find these skills sets in one facilitator; they are more likely to be found in a team of facilitators delivering a mix of onthe-job and off-the job training.

A framework for describing language, literacy and numeracy

Facilitators need a framework of language, literacy and numeracy development in which to consider and plan the training documentation and to identify the workplace communication practices to be incorporated into the training. Moreover, it is important that facilitators construct activities in which learners can develop, rehearse and use linguistic and numeric functions that will not necessarily be learned by simple exposure or even immersion.

Analysis of training package and workplace context

In order to develop responsive and collaborative curriculum, facilitators need to be familiar with the training package and to understand the linguistic demands outlined in the standards. They also need to be familiar with the discourse of the industry and specific workplaces, that is, to understand and be able to analyse the communication practices commonly used. This informs their professional judgement of students' needs.

Capacity to identify critical points of intervention

Within the limited time available for training, facilitators working in integrated training need to identify linguistic skills critical to the communication practices of the workplace and highlight critical points of intervention, and, to facilitate learning, construct direct teaching activities at these points.

Direct instructional activities

An integrated approach to training provides for direct instructional activities for facilitating literacy and numeracy. Common strategies used in community services training have been identified, although this list could be expanded from those observed in this study. Key activities include the following:

- ♦ introducing key industry and technical terminology
- ♦ scaffolding learners' access to complex legal and theoretical texts by chunking and/or rewriting some texts, providing oral support, paraphrasing and by dictation. The learner is supported in understanding complex texts by the facilitator breaking the information into smaller sections of the original text
- ♦ modelling text types common in the professional discourse and industry

- ♦ introducing specific text types or genres used in the industry and teaching their linguistic structures and providing opportunities to rehearse their use in a low-risk environment
- ♦ simulating report writing in course activities
- ♦ providing note taking activities for guiding observations and evaluations
- ♦ facilitating oral communication through structured small group activities
- ♦ modelling active listening activities
- ♦ anticipating features of workplace practice to guide future experience
- ♦ reflecting on observations of the learner's own language in the workplace.

Accounting for learners' perceived needs

In the modern VET environment where students enrol to gain qualifications, there seems to be little room for direct negotiation with students in relation to the curriculum. However, it is clear that facilitators do adjust to learners' perceived needs.

Implications

Further research

This research piloted a methodology for observing and documenting teaching practice in a vocational context. Unfortunately, only limited access to sites within a single industry was managed. It would be useful for this research to be replicated in other industries to build up a picture of integrated approaches across the VET system in Australia.

Professional development

The outcomes of this research have many potential implications for the professional development of VET professionals. There is great flexibility in the choices available to registered training organisations to deliver training to meet the needs of their clients. Program facilitators may need a range of skill sets to carry out these functions or to work in multi-disciplinary teams. This project demonstrates that an understanding of the role of language, literacy and numeracy in enabling learners to perform competently in the workplace and to prepare for lifelong learning is not only an equity issue, but also critical to the success of all training and indeed, to the workplace itself.

The issue of the skill sets required by VET practitioners needs to be thoroughly re-examined in any scoping of workforce development by the Innovation and Business Industry Skills Council, and in conjunction with further research on how generic skills, such as language, literacy and numeracy, are handled in the context of the high-level review of training packages undertaken by ANTA.

The facilitators in our study were chosen randomly within the nominated site categories. As evidenced by the research, all had broad and deep skills. The well-developed skill sets of facilitators were an amalgam of industry knowledge, pedagogy, and language, literacy and numeracy awareness and strategies, and the individual facilitators had acquired these skills in very different ways. The numbers and opportunities for developing these skill sets need to be expanded in the future if we are to maintain and increase the skills of all VET practitioners.

It is vital that all facilitators teaching in industry areas have a sound knowledge of the requirements of that particular industry. If a language, literacy and numeracy specialist is to work in an industry role, the training organisation needs to provide professional development for the facilitator in relevant workplaces.

A Reframing the Future professional development project supported VET practitioners at Site 3 and assisted in developing strategies for planning and integrating language, literacy and numeracy into delivery. This demonstrates another means by which the skill sets of VET practitioners can be

expanded. It is vital that these professional development programs continue, and continue to prioritise language, literacy and numeracy integration into workplace training.

There has been much criticism that workplace trainer and assessor training does not prepare VET practitioners adequately for supporting integrated delivery of language, literacy and numeracy (McGuirk 1999). Many of the issues raised in this research were evaluated as part of the review phase of the Certificate IV Assessor and Workplace Trainer. Skills required by VET practitioners for integrating language, literacy and numeracy into planning, delivery, assessment and evaluation of courses have been included within the core units of the Training and Assessment Training Package, the possession of which, from 2005, will be a requirement for those entering the VET sector, and for those delivering workplace trainer and assessor training. These include:

- → identifying language, literacy and numeracy in training packages
- ♦ identifying language, literacy and numeracy skills in the workplace
- ♦ identifying learners who may need support with language, literacy and numeracy skills in training and assessment
- ♦ devising assessments which do not make undue demands on language, literacy and numeracy skills of learners
- ♦ ensuring a variety of teaching strategies which do not make undue demands on language, literacy and numeracy skills of learners.

Funding issues

Our research sites were situated in Victoria where, it would appear, there is no additional systemic funding over and above 'nominal hours funding' made available to support learners enrolled in VET courses who may require language, literacy and numeracy support to enable them to succeed in their course of study. This means that registered training organisations must make a 'commercial' decision about how much support a learner will require, and whether this can be provided within the resources available. At Site 3, training support was tailored to accommodate learners' needs, and flexibility was provided for learning options and in the time allowed for completion of the qualification. Some registered training organisations may be able to provide support by utilising resources available in other areas of the organisations (Sites 1 and 2), but this support is not necessarily tailored to the needs of the learner in relation to the course. Other registered training organisations seek additional funding from other sources, for example, WELL funding. However, those undertaking VET as part of a traineeship are ineligible for WELL funding. Places in the courses we examined were highly competitive. Given these resourcing issues, registered training organisations are more likely to adopt a 'basic skills' model, and exclude learners who do not have the basic skills necessary to succeed. Language, literacy and numeracy skills were used to select participants in all three of the sites. The language, literacy and numeracy skills which are taught are those required in the workplace and identified within the qualification. The extent to which the underpinning (prerequisite) language, literacy and numeracy skills are taught will depend on these resourcing issues.

Other states do have funding mechanisms to support learners to develop prerequisite language, literacy and numeracy skills. Future research in those states where additional funding is available may reveal whether the basic skills approach is as prevalent as it is in the sites examined in the research.

The sites in this study did not include on-the-job WELL delivery in which to explore the extent to which underpinning language, literacy and numeracy are directly taught and assessed. We are not able to draw conclusions about the extent to which students would be assisted with basic language, literacy and numeracy skills, should they be enrolled in courses such as these.

Support materials

All three facilitators drew on supporting resources to assist them in their teaching of the qualification. One facilitator had not looked at the training package and relied on supporting materials to interpret the language, literacy and numeracy requirements integrated into the units she was teaching. This highlights the important role that the supporting materials play in the interpretation of the standards as does the provision of teaching and learning resource materials. ANTA's quality assurance process must continue to evaluate supporting resources to ensure that language, literacy and numeracy have been appropriately dealt with.

References

- Adult Literacy Basic Skills Action Coalition (ALBSAC) 1995, *Thinking, working, learning: A guide to developing effective communication practices in the food processing industry*, ALBSAC, Sydney.
- Adult Migrant Education Programme website, viewed June 2004, http://www.immi.gov.au/amep/what/history00.htm.
- Australian Committee for Training Curriculum Products Limited & Australian Education Council 1995, National communication skills modules, ACTRAC, Melbourne.
- —— 1998, National communication skills modules, ACTRAC, Melbourne.
- Australian Council for Adult Literacy 1990, Adult literacy in Australia towards the agenda for the 90s: A source book on literacy related issues, ACAL, Sydney.
- Australian Council of Trade Unions 1987, Australia reconstructed, ACTU, Melbourne.
- Australian Language and Literacy Council 1996, Literacy at work: Incorporating English language and literacy competencies into industry/enterprise standards, ALLC & National Board of Employment, Education and Training, Canberra.
- ANTA (Australian National Training Authority) 1999a, Workplace communication: Incorporation of language, literacy and numeracy in training packages, ANTA, Brisbane.
- —— 1999b, Workplace communication new steps booklet: Incorporation of language, literacy and numeracy in training packages, ANTA, Brisbane.
- —— 2000a, Handbook for training package developers, ANTA, Brisbane.
- —— 2000b, Built in, not bolted on, ANTA, Brisbane.
- —— 2003, Shaping our future, ANTA, Brisbane.
- Babalis, F 1998, 'Interactive learning–enterprise based training into the new millennium', in *Literacy on the line*, ACAL conference proceedings, Australian Council for Adult Literacy, Adelaide.
- Bean, R 1994, 'Integrating communication and skills training', *Open Letter: Australian Journal for Adult Literacy Research and Practice*, vol.5, no.1.
- Bean, R, Duffy, J, Manides, M, Pearson, G, Wolkenberg, T & Wyse, L 1996, *More than money can say. The impact of ESL and literacy training in the Australian workplace*, vols 1 & 2, Department of Employment, Education, Training and Youth Affairs, Canberra.
- Benton, L & Noyelle, T 1992, Adult illiteracy and economic performance, OECD, Paris.
- Billett, S 2001, Learning in the workplace: Strategies for effective practice, Allen and Unwin, Sydney.
- Bruner, J 1960, The process of education, Harvard University Press, Cambridge, MA.
- Business Council of Australia 1989, Enterprise bargaining: A better way of working, BCA, Melbourne.
- Carmichael, L 1989, 'Award restructuring: Implications for skill formation and training', Australian Council of Trade Unions website, viewed July 2004, http://www.actu.asn.au/public/news/1065074487_19659.html.
- —— 1992, *The Australian Vocational Certification Training System,* National Board of Employment, Education and Training, Canberra.
- Castleton, G 2001, 'Adult literacy a decade after the white paper', Literacy Link, October 2001.
- Castleton, G & Wyatt Smith, C 1995, 'NESB workers literacies: A health and safety issue', *Open Letter: Australian Journal for Adult Literacy Research and Practice*, vol.5, no.2.
- Catelotti, H 1999, Breakthrough: A national communication strategy for the utilities, electrotechnology and lift industries, National Utilities, Electrotechnology and Lift Industries Industry Training Advisory Board, Sydney.
- Chappell, C 2004, 'Contemporary vocational learning: Changing pedagogy', paper presented at the seventh Australian Vocational Education and Research Association Conference, Canberra, viewed November 2004, http://www.avetra.org.au/Conference_Archives/2004/papers.shtml>.
- Chappell, C, Hawke, G, Rhodes, C & Solomon, N 2003, High level review of training packages phase 1: Report, ANTA, Brisbane.
- Coates, S (ed.) 1994, *The National Framework of Adult English Language, Literacy and Numeracy Competence*, ACTRAC, Melbourne.
- Coates, S 1996, 'Workshop on the processes of incorporation and integration of language, literacy and numeracy competencies into standards and training programs', unpublished report prepared for ANTA, Brisbane.
- Coates, S, Fitzpatrick, L, McKenna, A & Makin, A 1996, *National Reporting System*, ANTA/Department of Employment, Education and Training, Melbourne.

- Commonwealth of Australia 1991a, Australia's language and literacy policy, AGPS, Canberra.
- —— 1991b, Australia's language and literacy policy, companion papers to the policy, AGPS, Canberra.
- Communication in Education and Training 2001, *Negotiating workplace training*, Department of Education, Science and Training, Canberra.
- Cope, B & Kalantzis, M 1995, 'A pedagogy of multiliteracies: Designing social futures', paper presented with other members of the New London Group at the twenty-first Australian Reading Association national conference, Sydney.
- Cope, B & Kalantzis, M (eds) 2000, Multiliteracies: Literacy learning and the design of social future, Routledge, London
- Courtenay, M & Mawer, G 1995, Integrating English language, literacy and numeracy into vocational education and training: A framework, ALLP Adult Literacy National Project, Foundation Studies Training Division, TAFE NSW, Sydney.
- Cumming, J, Fitzpatrick, L, McKenna, A & McKenna, R 1997, *More than a reporting system*, Language Australia, Melbourne.
- Dawkins, J 1988, Industry training in Australia: The need for change, ministerial statement, AGPS, Canberra.

 —— 1989, Improving Australia's training system, AGPS, Canberra.
- Del Grosso, C 2001, 'Driving change—Redefining workplace literacy for truck drivers', *Literacy Link*, vol.21, no.6.
- Del Grosso, C & McKenna, R 2000, WELL communicated, a national strategy for the transport and distribution industry, TDT, Melbourne.
- Department of Education, Science and Training 2004a, WELL Programme website, viewed August 2004, http://www.dest.gov.au/ty/well/.
- —— 2004b, Workplace English Language and Literacy 2004–05 guidelines, DEST, Canberra.
- Eyles Miltenyi Davis Pty Ltd 1989, *English in the workplace: A shrewd economic investment*, Office of Multicultural Affairs, Department of the Prime Minister and Cabinet, Canberra.
- Falk, I, Smith, R & Guenther, J 2002, Workplace communication: Making language literacy and numeracy in training packages work, Adult Literacy and Numeracy Australian Research Consortium, Melbourne.
- Falk, I & Miller, P 2001, Review of research: Literacy and numeracy in vocational education and training, NCVER, Adelaide.
- —— 2002, Non/working lives: implications of 'non standard work practices' for literacy and numeracy, Adult Literacy and Numeracy Australian Research Consortium, Melbourne.
- Fitzpatrick, L & Coates, S 1996, Applying the NRS: A guide to using the National Reporting System, Adult Community and Further Education, Melbourne.
- Fitzpatrick, L & Roberts, A 1997, Workplace communication in national training packages: A practical guide, Language Australia, Melbourne.
- Fogolyan, R, McKenna, R, McRae, C, Fraser, M, Wood, S, Stone, R 2003, 'Innovative adult language, literacy and numeracy delivery models: From a personal development to a capacity building model', in *Metropolis to desert sands: Literacy in multiple environments*, proceedings of the Australian Council for Adult Literacy conference, Alice Springs.
- Francis, R, 1992, 'Trade unions and training: The changing role of unions is the promotion of and policy for training', *Critical Forum*, vol.1, no.2.
- Galbally, F 1978, Migrant services and programs: Report of the Review of Post-arrival Programs and Services for Migrants, AGPS, Canberra.
- Garner, B 1998, 'Describing program practice: A typology across two dimensions', *Focus on Basic*, vol.2, issue B.
- Gee, J 1996, Social linguistics and literacies, Taylor & Francis, London.
- Goodman, Y, Watson, D & Burke, C 1987, Reading miscue inventory alternative procedures, Richard Owen Pub, Katonah, NY.
- Goulborn, B 1998, A new assessment tool, ANTA, Brisbane.
- Graves, D 1983, Writing: Teachers and children at work, Heinemann, London.
- Green, W, Hodgens, J & Luke, A 1997, 'Debating literacy in Australia: History lessons and popular f(r)ictions', *Australian Journal of Language and Literacy*, vol.20, no.1.
- Gribble, H 1990, 'Resisting hijack and seduction: Dangers and delights in award restructuring for adult literacy and basic education', *Fine Print*, vol.12, no.2.
- Gyngell, C 2001, 'The WELL program—10 years old and still going strong', *Literacy Link*, vol.21, no.6. Hager, P 1997, *Learning in the workplace: A review of research*, NCVER, Adelaide.
- Haines, C & Bickmore-Brand, J 2000, Language literacy and numeracy in national training packages, Adult Literacy and Numeracy Australian Research Consortium, Melbourne.
- Hawke, G 2002, 'Keeping curriculum relevant in a changing world', paper presented at SENAI International Seminar, Belo Horizante, Brasil, Research Centre for Vocational Education and Training.
- Hawke, R J 1988, Speech given at the opening of the National Science and Technology Centre, Canberra. Hodgens, J 1994, 'How adult literacy became a public issue in Australia', *Open Letter: Australian Journal for Adult Literacy Research and Practice*, vol.4, no.2.
- Horne, D 1964, The lucky country, Penguin, Melbourne.

- Hummel, K 1998, 'Contractor safety training resources', in *Literacy on the line*, proceedings of Australian Council for Adult Literacy Conference, Adelaide.
- International Labour Organization 2002, *Learning and training for work in the knowledge society*, report IV (1), International Labour Organization, Geneva.
- Kalantzis, M 1992, 'Just how clever? Restructuring, literacy and multiculturism', *Critical Forum*, vol.1, no.1. Kangan, M (chair) 1974, *TAFE in Australia: Report on needs in technical and further education*, AGPS, Canberra.
- Kelly, A 1998, 'Receipting rate payments: How well are these skills captured in the office–administrative standards for level three trainees', in *Literacy on the line*, proceedings of Australian Council for Adult Literacy conference, Adelaide.
- Kelly, A & Searle, J 2000, Literacy and numeracy on the motorway: A case study of the effects of the inclusion of literacy and numeracy competencies within the Civil Construction Industry Training Package, Language Australia, Melbourne.
- Lankshear, C 1992, 'Issues in adult literacy', Critical Forum, vol.1, no.1.
- Lo Bianco, J 1987, National policy on languages, AGPS, Canberra.
- Local Government Industry Training Advisory Board 2004, *The Local Government WELL Project: A national WELL strategy for local government*, Department for Education, Science and Training, Canberra.
- Long, P 1989, Literacy for productivity: A study of adult literacy in the workplace, Australian Council for Adult Literacy, Melbourne.
- Lukin, A 1998, *Numeracy at Work project report*, ANTA, Department of Education and Training NSW, NSW Adult Migrant Education Services, NCVER, NSW Mining ITAB, Canberra.
- McGuirk, J 1999, *Literacy and numeracy in the Certificate IV in Assessment and Workplace Training*, Adult Literacy and Numeracy Australian Research Consortium, Language Australia, Melbourne.
- —— 2001, Adult literacy and numeracy practices, 2001: A national snapshot, TAFE NSW, Sydney.
- McKenna, R 1998, Growing on, Forestry and Forest Products Skill Council, Melbourne.
- —— 2001, 'Public safety WELL report', unpublished report to Public Safety Industry Training Advisory Board.
- McKenna, R & Fitzpatrick, L 2004, Building sustainable adult literacy provision: A review of international trends in adult literacy policy and programs. Detailed analysis—support documents, NCVER, Adelaide. McKenna, R & Wignall, L 1998, Tenfold return, ANTA, Brisbane.
- McMeniman, M, Cumming, J, Wilson, J, Stevenson, J & Sim, C 2000, 'Teacher knowledge in action', in *Impact of educational research*, Department of Education, Training and Youth Affairs, Canberra.
- Mawer, G 1992, 'Developing new competencies for workplace education', *Critical Forum*, vol.1, no.2.
- —— 1994, The National Framework of Adult English Language, Literacy and Numeracy Competence: Application to workplace settings, ACTRAC, Melbourne.
- —— 1999, Language and literacy in the workplace, Addison Wesley and Longman, London.
- Mayer Committee 1993, Putting general education to work: The key competencies report, Australian Education Council, Melbourne.
- Mikulecky, L 1988, Literacy for the workplace, Indiana University, Bloomington, IND.
- Miller, P & Falk, I 2000, Communication and catering competencies: A case study of literacy and numeracy inclusion in a training package, Adult Literacy and Numeracy Australian Research Consortium, Melbourne.
- National Board of Employment, Education and Training 1993, *Incorporating English language and literacy competencies into industry standards*, NBEET, Canberra.
- NCVER (National Centre for Vocational Education Research) 1999, Research at a glance: Competency-based training in Australia, NCVER, Adelaide.
- National Reporting System (NRS) website, viewed 26 June 2005, http://www.nrs.dest.gov.au.
- OECD (Organisation for Economic Co-operation and Development) & Statistics Canada 2000, *Literacy in the information age: Final report of the International Adult Literacy Survey*, Statistics Canada, Ottawa.
- Perisce, S 2002, 'Training packages: Locked out or invited in?', in *Bridging the divides*, proceedings of Australian Council for Adult Literacy conference, Sydney.
- Purcell, R & Cielens, M 1998, Workplace language and literacy in action, final report, National Staff Development Committee for VET, Adelaide.
- Rural Training Consultants of Australia 1996, 'Evaluation of the effectiveness of incorporating language, literacy and numeracy competencies into industry standards using the ALLC model and the National Reporting System', unpublished report, Rural Training Consultants of Australia, Canberra.
- Sanguinetti, J 2000, *The literacy factor: Adding value to training*, Adult Literacy and Numeracy Australian Research Consortium, Melbourne.
- Schofield, K & McDonald, R 2004, Moving on ... Report of the high level review of training packages, ANTA, Brisbane.
- Sefton, R, Waterhouse, P & Deakin, R (eds) 1994, *Breathing life into training*, National Automotive Industry Training Board, Melbourne.
- Smith, F 1978, *Understanding reading: A psycholinguistic analysis of reading and learning to read*, 2nd ed., Holt Rinehart and Winston, New York.
- —— 1982, Writing and the writer, Heinemann Educational Books, London.

- Smith, M 2002, 'Malcolm Knowles, informal adult education, self-direction and andragogy', *Encyclopedia of informal education*, viewed July 2004, <www.infed.org/thinkers/et-knowl.htm>.
- Sticht, T 1997, Functional context education: Making learning relevant, National Adult Literacy Database, Montreal.
- TAFE NSW, Access Division 1996, Working together, TAFE NSW, Sydney.
- —— 1998, Customising working together for industry, TAFE NSW, Sydney.
- —— 2001, 'Approaches to the integration of language, literacy and numeracy in recent or recently revised training packages', unpublished report to ANTA, Sydney.
- TAFE NSW, Foundation Studies Training Division 1996, Strategies for success, TAFE NSW, Sydney.
- Trennery, R 2000, *Investigating literacy, language and numeracy in training packages*, Adult Literacy and Numeracy Australian Research Consortium, Melbourne.
- Virgona, C & Waterhouse, P 2003, 'Fitting into boxes: Proceduralisation and the challenge to diversity', in *City of Darebin managing diversity*, conference proceedings, Common Ground Publishing, viewed July 2004, http://ManagingdiversityConference.Publisher-Site.com/>.
- Waterhouse, P & Sefton, R 1997, 'Teachers at work: Utilising professional teaching skills in industry settings', *Australian Journal of Education*, vol.43, no.3.
- Watson, M, Nicholson, L & Sharplin, E 2001, Vocational education and training literacy and numeracy: Review of research, NCVER, Adelaide.
- Wignall, L 1998 Built in not bolted on, ANTA & Department of Education, Training and Youth Affairs, Melbourne.
- Wyse, L & McKenna, R 2001, 'Specificity of communication in training packages', unpublished report to ANTA, Melbourne.

Appendix 1: Analysis of language, literacy and numeracy

This appendix contains the analysis of language, literacy and numeracy in units of competence from the community services and health training packages used in research sites.

This mapping was completed using a methodology developed in the Negotiating Workplace Training Project (Communication in Education and Training 2001).

Table 2: CHCCS405A: Work effectively with culturally diverse clients and co-workers (certificate III)

				INNO III GICALUIS [IEVEIS]	[easis]		MNO depect
		₩~	W 0C	0°	ZΥ	S ~	Procedural
Elements	Relevant policies and procedures manuals, legislation and standards	There is not	enough inf	ormation at	oout the con	ditions of pe	There is not enough information about the conditions of performance to allocate an NRS level. Information about the social context places it at
Apply an awareness of culture as a factor in all human behaviour Contribute to the development of relationships based on cultural	Organisation's mission statement, strategic and business plan	about level 3.	S				
Communicate effectively with culturally diverse persons	Other documentation relevant to the work context such as:						
Resolve cross-cultural misunderstandings							
Performance criteria refer to oral communication, following work practices, referral processes, interpreters	 organisations protocols for access to interpreter services 						
Effort is made to sensitively resolve differences, taking account of cultural considerations	Assessment Observation of work performance						
Range of variables	 Authenticated portfolio/log book Supporting statement of supportion 						
Compliance with duty-of-care policies of the organisation							
Collection and provision of information	♦ Experience and/or formal/informal learning						
Communication	Context of assessment						
Body language	This unit is most appropriately assessed in the						
Knowledge of the principles of equal employment opportunity, sex,	workplace or a simulated workplace environment under the normal range of work conditions.						
inde, usability, a ne-discrimination and similar registration and the implications for work and social practices	A diversity of assessment tasks is essential for						
Knowledge of availability of resources and assistance within and external to the organisation in relation to cultural diversity issues	holistic assessment.						
Knowledge of the role and use of language and cultural interpreters							

CHCINF8B: Comply with information requirements of the aged care and community care sectors Table 3:

R W OC N LS Proce	Training package analysis	Workplace context analysis		NRS	ndicators	[levels]		NRS aspect
			Ľπ	≥ κ	00 4	z -	LS	Procedural

Elements

Maintain accurate records

Contribute information to the development and implementation of the service delivery plan in accordance with role and responsibilities

Comply with the administration protocols of the organisation

Work within a legal and ethical framework to meet duty of care requirements

All performance criteria refer to language, literacy and numeracy Provide written reports and workplace forms that are clear,

Provide written reports and workplace forms that are clear, concise, factual and reflect legal and organisational requirements

Document the client's health/service records according to organisational protocols

Follow organisational protocols to protect confidentiality of the client's health/service records

Use health terminology and common abbreviations appropriately

Assist in completing assessment tools and collecting data

Participate in case conferences Identify and incorporate the client's preferences when developing

the service delivery plan

Report changes in the client's needs, abilities and circumstances Provide accurate verbal reports to supervisor, colleagues and/or

Complete workplace forms and documents in accordance with organisational timeframes, protocols and procedures

health professionals

Reading

- Organisational info: standard operating procedures, occupational health and safety
 - ♦ Individual's care plan
- ♦ Charts: blood pressure, bowel movements etc.
 - ♦ Workplace noticeboard
- ♦ Information related to own employment

Writing

- Progress notes: observational style
- Information on charts: blood pressure
 - ♦ Personal notes
- ♦ Personnel forms

Oral communication

- Provide clear concise information
 - ♦ Clarify information/instructions

Numeracy

Reading and interpreting numbers, e.g. thermometers, medicines,

Reading

Reading skills may range from understanding the names on envelopes/ correspondence to reading pamphlets to determine their relevance to an enquiry

Writing

Writing skills may range from the need to fill out a simple form to completion of a short report

Oral communication

Oral communication skills are required to fulfil the job role in the organisation/service

Oral skills may include listening to enquiries and providing simple factual information relevant to the workplace and client ground

information relevant to the workplace and client group Language used would most commonly be English; however, a community language may be appropriate according to the organisation's policies and

Literacy competence is required to fulfil the procedures of the organisation/ service, and according to the support available in the workplace

accreditation requirements

Numeracy

Numeracy competence required to fulfil the procedures of the organisation/ service, and according to the support available in the workplace

Numeracy tasks may range from the need to count supplies to recording information on an organisational form

Elements (continued)

Demonstrate an understanding of legislation and common law relevant to work role Recognise signs consistent with financial, physical or emotional abuse of the client and report to an appropriate person

Range of variables

Changes in behaviour may be reported verbally or written

Client records and case history may include all records related to the aged person's health status

Workplace forms and documents include:

- ♦ job sheets, time sheets, rosters
 ♦ client contact registers including telephone calls
 - ♦ meeting registers and records ♦ purchase orders and invoices
 - ♦ promotional materials

Records may be:

accounting records, e.g. account for payments, petty cash payments, purchases

- ♦ client records, e.g. client statistics, client details, contact numbers etc.
 - assessment and referral records
 - - sign on/sign off sheetspurpose designed report forms

Non-verbal (written)

- ♦ Progress reports
- Incident reports

Rights are detailed in

- Industry and organisational service standards
- Industry and organisational codes of practice and ethics
 - ♦ Accreditation standards
- ♦ International and national charters

Note: R = reading; W = writing; OC = oral communication; N = numeracy; LS = learning strategies.

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	MAY			-			
Training package analysis	Workplace context analysis		NRS in	NRS indicators [levels]	evels]		NRS aspects
		ድ 2	≥ ∘	8 4	z g	LS LS	Public
		<u>ष</u>		0	<u>¤</u>	<u>¤</u>	Personal
Elements and performance criteria	Writing	Writing					
Identify the purpose of the group	Written communication competence to complete	Impossible to map	o map				
Rules for group behaviour are discussed and established with all group members	reports required by the organization. The complexity of reports may vary	Oral communication	nunication				
Establish relationship with the group	Literacy support for completing reports may vary	Negotiates or establishing	Negotiates complex problematic spoken exchanges effectively by establishing a supporting environment, bringing different points of	olematic sp. g environme	oken exchar ent, bringing	nges effect g different p	Negotiates complex problematic spoken exchanges effectively by establishing a supporting environment, bringing different points of view
Group is informed of resources available to meet group's needs	Olai collinuii cauoli	togetner					
Clear communication is modelled to group members	Oral communication skills including: asking	Uses language to make hypotheses, plan and influence others	age to make	hypotheses	, plan and i	influence ot	hers
Group members are encouraged to use clear and appropriate communication	information in the workplace setting	Adjusts stress and intonation in order to convey mood and meaning Speaks intelligibly with effective pronunciation, intonation, stress, ge	ss and inton lligibly with e	ation in ord ffective pro	er to convey nunciation,	/ mood and intonation,	Adjusts stress and intonation in order to convey mood and meaning Speaks intelligibly with effective pronunciation, intonation, stress, gesture
Communication and interactions with group are appropriate to aim and purpose of group	Language used may be English of Community language, depending on the client group	and rhythm Has establis	shed register	flexibility a	nd sensitivit	ty and inter	and rhythm Has established register flexibility and sensitivity and interprets register as
Participants are encouraged to agree on and abide by a set of appropriate guidelines		related to so	related to social relationships pertaining to a range of contexts	ships pertai	ning to a raı	nge of cont	exts
Organise resources for group activities							
Reports on the use of resources are completed if required							
Reports are completed to standard required by organisation							

Table 5: CHCAC6C: Support the older person to meet their emotional and psychosocial needs

:							
Training package analysis	Workplace context analysis		NRS indi	NRS indicators [levels]	vels]		NRS aspects
		ъ В	3 €	2 OC	z a	LS na	Public
Elements	Writing	Writing					
Support the older person to remain engaged with their social network and the wider community	 ♦ Progress reports ♦ Case notes 	Makes notes from spoken or written texts on familiar topics	from spoker	or written	texts on fam	iliar topics	
ional activities [so that] the	♦ Incident reports	Uses basic models to produce a range of text types Sequences writing	lodels to pro riting	duce a ranç	ge of text typ	ses	
specific feeds of the older person [are] recognised and reported to	Oral communication	Uses introduc	ctory phrases	s which ind	icate that a f	act or an o	Uses introductory phrases which indicate that a fact or an opinion is being
Provide the older person with information about community networks and activities available to them	Reporting may include: <pre></pre>	onered Uses page layout to support text structure	yout to supp	ort text stru	ıcture		
Support the older person to meet their emotional and psychological needs	√ telepriorie ♦ face to face	Oral communication	ınication				
Recognise and accommodate the older person's cultural and spiritual preferences	Appropriate communication	Negotiates complex problematic spoken exchanges effectively by establishing a supporting environment, bringing different points of view together	omplex probl a supporting	ematic spo environme	ken exchanç nt, bringing o	ges effectiv different po	ely by nts of view
Acknowledge particular needs and refer to an appropriate individual/agency	♦ Empathy ♦ Non-judgemental care	Uses language to make hypotheses, plan and influence others	je to make h	ypotheses,	plan and in	fluence oth	ırs
Support the older person who is experiencing loss and grief	 ♦ Observing and listening ♦ Respect for individual differences 	Adjusts stress and intonation in order to convey mood and meaning	s and intonal	tion in orde	r to convey I	mood and r	ıeaning
Utilise appropriate communication strategies	♦ Cross-cultural communication	Copes with a range of unfamiliar accents when listening	range of unf	amiliar acc	ents when li	stening	
Recognise and accommodate the older person's expressions of identity and sexuality		Accurately interprets mood and meaning conveyed through stress and intonation	erprets moo	d and mea	ning convey	ed through	stress and
		Establishes register flexibility and sensitivity and interprets register as related to social relationships pertaining to a range of contexts	əgister flexib ial relationsh	ility and se ips pertain	nsitivity and iing to a rang	interprets r ge of conte)	egister as ts

Note: R = reading; W = writing; OC = oral communication; N = numeracy; LS = learning strategies; na = not applicable.

Table 6: CHCPR4A: Provide opportunities and experiences to enhance children's development	to enhance children's development						
Training package analysis	Workplace context analysis		NRS indi	NRS indicators [levels]	vels]		NRS aspects
		S E	≷ κ	0C 5	z e	LS	Public Procedural Cooperative
Elements	Writing	Writing					
Establish an environment that can foster children's environment	 Written records of observations 	Makes notes from spoken or written texts on familiar topics	from spoker	or written	texts on fan	niliar topics	
Provide creative and challenging opportunities which stimulate	 Program plan (list and explanation) 	Uses basic models to produce a range of text types	nodels to pro	duce a ran	ge of text ty	sed	
learning and development of the child	 Program planning documents 	Sequences writing	riting				
Plan and implement a program for the day Knowledge of child development, interests, resources, policies and	 Program evaluated documents Record keeping 	Uses introduo offered	ctory phrase	s which ind	icate that a	fact or an c	Uses introductory phrases which indicate that a fact or an opinion is being offered
procedures	♦ Diary	Uses page layout to support text structure	yout to supp	ort text stru	ıcture		
	Oral communication	Oral communication	unication				
	Consultation with other professionalsSelection of activities, e.g., stories	Has established register flexibility and sensitivity and interprets related to social relationships pertaining to a range of contexts. Uses language to make hypotheses, plan and influence others	ned register ficial relations!	lexibility an nips pertair ypotheses,	id sensitivity ling to a ran plan and ir	and interp ge of conte	Has established register flexibility and sensitivity and interprets register as related to social relationships pertaining to a range of contexts Uses language to make hypotheses, plan and influence others
	♦ Communicating with children/parents♦ Communication with assessor	Has command of structures, registers, vocabulary and idiom required in conversational exchanges.	id of structur al exchange	es, register s.	s, vocabula	ry and idior	required in
		Copes with a range of unfamiliar accents when listening	range of un	amiliar acc	ents when I	istening	
		Accurately interprets mood and meaning conveyed through stress and intonation	terprets moc	d and mea	ning conve)	ed through	stress and

Note: R = reading; W = writing; OC = oral communication; N = numeracy; LS = learning strategies; na = not applicable.

Training package analysis	Workplace context analysis		NRS ir	NRS indicators [levels]	evels]		NRS aspects
		ж Б	≯ κ	0C 2	N a	LS	Cooperative
Elements	Writing	Writing					
Ensure the environment fosters play and leisure	Written program plans, incorporating evaluation	Uses basic models	: models				
Assist children to develop their play and leisure	Diary records	Can produ	ce short writ	Can produce short written texts with accuracy in appropriate genre	າ accuracy in	n appropriat	te genre
Assist children to participate in a wider range of play and leisure	Oral communication	Makes not	es from spok	Makes notes from spoken or written texts on familiar topics	ı texts on fan	miliar topics	
experiences	Using language to interest children in activities	Uses page	layout to su	Uses page layout to support text structure	ucture.		
Adopt a variety of foles to enhance play and leisure as appropriate	Reflection with assessor on program	Oral com	Oral communication	_			
		Has establ related to s	ished registe social relation	Has established register flexibility and sensitivity and interprets related to social relationships pertaining to a range of contexts	nd sensitivit) ning to a ran	y and interp nge of conte	Has established register flexibility and sensitivity and interprets register as related to social relationships pertaining to a range of contexts
		Uses langu	age to make	Uses language to make hypotheses, plan and influence others	s, plan and ir	nfluence oth	hers
		Has comm conversati	Has command of structures conversational exchanges.	Has command of structures, registers, vocab and idiom required in conversational exchanges.	rs, vocab an	nd idiom rec	quired in
		Accurately intonation	interprets m	Accurately interprets mood and meaning conveyed through stress and intonation	aning conve)	yed through	h stress and
		Adjusts str	ess and into	Adjusts stress and intonation in order to convey mood and meaning	er to convey	mood and	meaning

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Table

Training package analysis	Workplace context analysis	NRS	NRS indicators [levels]		NRS aspects
		л в	≷ ო	0C 2	Procedural Cooperative
Elements	Writing	Writing			
Gather detailed information about the child	Examples of program plans	Uses basic models			
Record information in appropriate ways Use information from observations to develop understandings of	Observations and developmental profiles of five children	Makes notes from spoken or written texts on familiar topics Uses basic models to produce a range of text types	ooken or written texts o produce a range of	on familiar topi text types	S
the child	Oral communication	Sequences writing			
Use information from observations with children and family members	Process of communicating information to parents	Uses introductory phrases which indicate that a fact or an opinion is being offered	rases which indicate	that a fact or ar	opinion is being
Use information to plan the program		Uses page layout to support text structure	support text structur	o)	
		Oral communication	uo		
		Has command of structures, registers, vocabulary and idiom required in conversational exchanges	uctures, registers, vo anges	cabulary and id	iom required in
		Accurately interprets mood and meaning conveyed through stress and intonation	mood and meaning	conveyed throu	gh stress and
		Adjusts stress and intonation in order to convey mood and meaning	itonation in order to	convey mood an	id meaning
		Uses language to make hypotheses, plan and influence others	ake hypotheses, plar	and influence	others
Note: R = reading; W = writing; OC = oral communication; N = numeracy; LS = learning strategies; na = not applicable.	tcy; LS = learning strategies; na = not applicable.				

Appendix 2: Interview schedules

This series of questions guided interviews with key stakeholders at the research sites.

Interview schedule for facilitators

Our interest is in how much people integrate the teaching of communication skills/reading, writing, speaking and listening into overall teaching of subject matter or whether they are taught separately ... and we're looking at four different training models.

We've chosen this training package because of the level of communication skills in the training package. The cue questions for facilitators were structured around a plan, prepare, teach and evaluate scenario. The interview prior to the video sequence covered plan and prepare. The video stimulus recall session covered teach and evaluation.

Cue questions

Can you tell us a little about the background of the students who are accessing the course? Purposes? Employed?

What language, literacy and numeracy levels would you expect students to have when coming into this course? Do you have an expectation of the level they will have reached at the end of the course?

Do you have a pre-training selection process? What is it based on?

What workplace tasks do you want them to be able to do by the end of the course?

In terms of their reading and writing?

In terms of their speaking and listening?

Computer skills?

What are the language, literacy and numeracy demands of the training?

As a classroom-based RTO what are the strategies you have to ensure that what happens in the classroom is reflective of what happens in the workplace?

Prepare

Which unit(s) will you be planning to cover in this session? How does this fit with the Packaging at this level?

Where does this fit in the sequence of learning?

What teaching activities have preceded this session?

Plan

What reading, writing, oral communication and numeracy skills have you identified in the unit(s) you are teaching in this session?

Are these skills also important in the workplace? What workplace documents do learners need to be able to read and write?

What strategies will you use to teach these skills?

Do you include assessing language, literacy and numeracy skills as part of your assessment plan?

Do you see language, literacy and numeracy skills development as part of normal delivery, like any skill area when you are planning training, or do you see it as an issue for only a small number of learners, or both?

If seen as an issue for a small number of learners:

- ♦ How do you know they are having difficulties?
- ♦ Do you change your teaching strategies knowing a small number are having difficulties?
- ♦ What strategies do you use to assist learners with language, literacy and numeracy difficulties?
- ❖ Do you have training materials and learning activities which support learners with identified language, literacy and numeracy needs?

Teach

Show video and stop to illustrate teaching of language, literacy and numeracy skills

What skills were you teaching at this point?

What teaching and learning strategies do you use to develop language, literacy and numeracy skills while developing vocational skills?

Evaluate

What has assisted you to develop teaching skills in this area?

If you could nominate one or two areas of professional development you think would be useful for yourself, what would they be?

Interview schedules for RTO managers

Our interest is in how much people integrate the teaching of communication skills/reading, writing, speaking and listening into overall teaching of subject matter or whether they are taught separately and we're looking at four different training models:

We've chosen this training package because of the level of communication skills in the training package.

Can you tell us a little about the background of the students who are accessing the course? Purposes? Employed? Pathways?

What language, literacy and numeracy levels would you expect students to have when coming into this course? Do you have an expectation of the level they will have reached at the end of the course?

Do you have a pre-training selection process? What is it based on?

Were many applicants rejected on these grounds? Do you know what has happened to these students?

What workplace tasks do you want them to be able to do by the end of the course?

In terms of their reading and writing?

In terms of their speaking and listening?

Computer skills?

What strategies do you have for teaching these skills?

What are the language, literacy and numeracy demands of the training?

As a classroom-based RTO what are the strategies you have to ensure that what happens in the classroom is reflective of what is required in the workplace?

In terms of assessment, what strategies do you have for ensuring the language, literacy and numeracy is at the benchmark level?

Is there assessment of these skills in the workplace setting?

What strategies do you have for assessing underpinning knowledge?

What strategies do you have to support students who are falling behind because of low levels of language, literacy and numeracy?

What strategies does the RTO have in place to make sure all the teachers here are conscious of the language, literacy and numeracy issues that might affect students?

Is there additional pd that you would like teachers to have in regard to language, literacy and numeracy in VET?

Interview schedules for enterprise managers/supervisors

Our interest is in the training student, not the children themselves, particularly the communication skills you think a child care worker needs.

Can you give us some back ground to your centre, the cultural and linguistic backgrounds of families and staff?

How important are communication skills in the day-to-day working at the centre?

Are there any skills which managers/supervisors would see as more important than others?

Are there some communication areas which are more difficult than others? What about dealing with parents, can that be difficult? Is it difficult with the diversity of languages you have here? Can you give us some examples of common reading, writing, oral communication and numeracy tasks in the workplace and that you see students dealing with in their training.

There's a lot of writing around the walls, what is the purpose of it?

How do you see your role with the RTO in supporting the students in on-the-job training?

How do you compare on-the-job and off-the-job training?

Appendix 3: Communication in Education & Training P/L— Ethical clearance process

CHECKLIST (Please use checklist before submission of your application)

NOTE:

- 1. This application form is to be completed for all research and research-based teaching projects which involve human participants including: surveys, interviews, experiments, depictions and examination of documents.
- 2. The application must be completed with **sufficient detail**. Attach extra documentation where necessary. Insufficient detail can delay the granting of approval.
- 3. If the project is in response to a tender application, please attach a copy of the brief, and the submission.

3. If the project is in response to a tenuer application, piease attach a copy of the orien, and the submissi	1011.	
PLEASE ENSURE THAT YOUR APPLICATION INCLUDES THE FOLLOWING:-		
Copy of proposed consent forms (where applicable)	()	
Copy of Plain Language Statements/advertisements (Information/explanatory material for participant () Copy of questionnaire(s) to be used in the project (if applicable)	s) ()	
Have all signatures been obtained? (see Application Form Declarations)		
,		
Office Use Only		
Name of Project Investigation of the integrated approach to the delivery of adult literacy		
Project Ref. No. 1		
This project will be considered by the Ethical Consultant on 30 / 4 / 04		
·		
Proposal approved		
Signed		
Date		

PROJECT DETAILS (ATTACH DOCUMENTATION FROM SUCCESSFUL TENDER)

1.1 Project Title (limit of 15 - 20 words)

Investigation of the integrated approach to the delivery of adult literacy

1.2 Objectives of Proposed Research (brief explanation of the aims/main objectives for the proposed project, including, if applicable, a clear explanation of any hypothesis being tested.)

This investigation tests a number of hypotheses about an effective integrated approach to adult literacy delivery. These are:

- Trainers and assessors require a framework for understanding literacy and numeracy practices in a workplace
- Trainers and assessors can apply this framework to develop and customise training to meet the Training Package units of competency
- Trainers and assessors can use explicit instructional strategies to develop literacy and numeracy skills while developing vocational skills
- 1.3 Background to Proposed Research (a sufficient summary of previous observations and most significant sample list of publications, etc., to give a simple description/rationale of why the project is being proposed.)

There has been little investigation of teaching and learning practices in adult literacy in Australia. Studies have been conducted in the US identifying and comparing different approaches to adult literacy delivery, and a typography of programs developed (Garner, B, 1998). Research funding in Australia does not support a study of the effectiveness of a range of program types. This proposal suggests a study of one of the most prominent and distinctively Australian approaches, the integrated approach.

The integrated or 'built in' approach to teaching adult literacy has developed in Australia following the development of an explicit model by the Australian Language and Literacy Council in 1996 (ALLC, 1996). The WELL Programme has provided seeding funding for workplace delivery that has promoted the integrated approach. Innovative forms of provision have been developed using WELL funds over the last decade.

Since the development of Training Packages to structure the delivery of recognised skills in the VET sector, the inclusion of language, literacy and numeracy, has become more explicitly described, 'building in' the development of literacy practices concurrently with the development of vocational skills. These developments were promoted by ANTA's Workplace Communication initiatives in 1997 – 8 and have been embedded in guidelines for Training Package Developers and within standards of practice in assessment, teaching and learning in the Australian Quality Training Framework documents.

It has been claimed that the integrated approach is a dominant form of provision and that it is an effective model. (McGuirk, 2001; Falk, 2001). The approach is also gaining international attention in Ireland and the U.S. There are some moves to promote the WELL funding model and an integrated approach to promote literacy education in conjunction with other areas of social policy such as health and welfare services. On the other hand, others have questioned the extent to which the model is used in mainstream training (Falk, 2001; Watson, 2001) and its effectiveness.

Falk, I & Millar, P 2001 Review of research: Literacy and numeracy in vocational education and training, NCVER.

Garner, B 1998, *Describing program practice: a typology across two dimensions*, in 'Focus on Basics', Vol.2, Issue B, NCSALL.

McGuirk J, 2001, Adult literacy and numeracy practices 2001: a national snapshot, NSW TAFE. Watson M et al, 2001, Vocational education and training literacy and numeracy: Review of research, NCVER.

1.4 Description of project (an outline in PLAIN LANGUAGE and with sufficient clear detail, incl. stages, methodology / participant recruitment and selection arrangements, human participant numbers/type involved.)

Planning and preparation:

Establish a group of critical friends to advise on methodology and location of research sites.

Identify Training Package as basis for research

Identify sites (4) for study

Approach and negotiate access to training with RTOs.

Gain written permission to video and observe a sequence of training sessions, using *video stimulis recall* methodology.

Interview RTO staff: Conduct, and audio record, interviews with RTO staff and enterprise personnel prior to observation and video recording of practice

Video sequence of teaching

Record participant's analysis of video

Analysis of data

Report identifying features of good practice in delivery of integrated literacy.

1.5 Ethical implications of proposed project

The research focus or outcomes are unlikely to have ethical implications

There are two areas that may cause concern in the project methodology:

Some filming of teaching may take place in Aged Care or Child Care facilities. While the client of the agency is not the object of the research, s/he may be captured on camera. We will seek to avoid this happening, but will seek clearance in anticipation of this being an issue. Also note that the video will not be used beyond the research team

Videoing of a teacher's practice. This would not be made available to anyone outside the project team.

1.6 Duration (ie period of data collection involving human participants/subjects)

Proposed commencement date: 1st May 2004

Estimated duration: 6 months

1.7 Funding source

National Centre for Vocational Education Research (NCVER)

2. PROJECT WORKERS AND QUALIFICATIONS

2.1 Co-investigators: Rosa McKenna & Lynne Fitzpatrick

Rosa

Qualifications: BA, Dip Ed, Cert IV in AWT

Position: Director, Communication in Education & Training P/L

Lynne

Qualifications: BA, MA, TSTC, Grad Dip Special Education, Cert IV in AWT

Position: Director, Communication in Education & Training P/L

- 3. CLASSIFICATION OF PROJECT (Please indicate YES or NO clearly)
- 3.1 Does your research involve human subjects?

YES / NO (If YES, please complete Section B.)

3.2 Does your research or teaching impinge in any way upon the individual privacy of the subject? This includes the distribution of questionnaires or interviews in which information or opinions are solicited.

YES / NO (If YES, please complete Section C.)

4. RESULTS OF RESEARCH

4.1 Describe any potential applications of any research findings.

The research may be used to inform teaching practices in relation to adult literacy in vocational training programs. It may also be useful in discussions about the need for an increase in professional development for teachers about literacy in the VET sector.

4.2 Describe any potential abuses/ misapplications of the research results and preventive/ minimisation measures to be employed

The video of teaching practice provides the only possible avenue for abuse of the research. It is our intention that this be used solely as a stimulis for the teacher to recall 'moments' in their teaching. Once there is no further use for the video in terms of the project it will be returned to the teacher. There will be no copies made.

The findings of the research are unlikely to lead to any sort of misapplication.

5. DECLARATION (Please also ensure signature/s on Section B Declaration)

I/We, the undersigned declare that the information supplied in this application is true and accurate to the best of my/our knowledge.

Principal RESEARCHER's signature:

Date:

Communication in Education & Training P/L Director Signature:

Date:

Section B

RESEARCH OR TEACHING INVOLVING HUMAN SUBJECTS

- 1. Will the free and informed consent of all subjects be obtained in writing? YES / NO If YES, please attach a copy of the consent form you propose to use.

 (Official consent forms attached.)
- 2. Will the subjects be made aware of the precise purpose of the research? YES / NO If NO, give full explanation of circumstances.

 If YES, please attach a copy of the plain language statement you propose to issue to prospective participants (See Communication in Education & Training P/L plain language statements).
- 3. Will the subjects be notified of the results of the research? YES / NO IF NOT, why not?
- 4. Are any of the proposed subjects of your research under the age of eighteen? YES / NO IF YES, *give details*.

The subjects are not under 18 years, but it is possible that children under 5 years may be captured incidentally on video.

5. DECLARATION (For Co-investigators)

Signatures:

We the undersigned have read the current *National Statement on Ethical Conduct in Research Involving Humans* and accept responsibility for the conduct of the research procedures detailed above.

Co-Investigator/s	
(a)	Date:
(b)	Date:

Communication in Education & Training P/L Research Consent Form:

I,	of
Hereby & Train	consent to be a subject of a human research study to be undertaken by Communication in Education ing P/L
and I un	derstand that the purpose of the research is to improve training
I acknov	vledge
1.	That the aims, methods and anticipated benefits of the research study have been explained to me.
2.	That I voluntarily and freely give my consent to my participation in such research study.
3.	I understand that results will be used for training research purposes only
4.	That I am free to withdraw my consent at any time during the study, in which event my participation in the research study will immediately cease and any information obtained from me will not be used.
	Signature: Date:

I,	of
•••••	
·	give permission for
and I u	volved in a research study being undertaken by Communication in Education & Training P/L nderstand that the purpose of the research is to improve training and that involvement for the ion means the following:-
I ackno	wledge
1.	That the aims, methods and anticipated benefits have been explained to me.
2.	That I voluntarily and freely give my consent for the institution/organisation to participate in the above research study.
3.	I understand that results will be used for training research purposes.
I agi	ree that
4.	The institution/organisation MAY / MAY NOT be named in research publications or other publicity without prior agreement.
5.	I / We DO / DO NOT require an opportunity to check the factual accuracy of the research findings related to the institution/organisation.
6.	I / We EXPECT / DO NOT EXPECT to receive a copy of the research findings or publications.
Signatu	re: Date:

Communication in Education & Training P/L Research Consent Form:

CONSENT ON BEHALF OF A MINOR OR DEPENDENT PERSON

I,		of	
Hereby give consent for my son / daughter / dependent			
to be a subject of a human research study to be undertaken by Communication in Education & Training P/L I understand that the purpose of the research is to improve training.			
I acknow	vledge		
1.	That the aims, methods	and anticipated benefits have been explained to me.	
2. research		reely give my consent to my child's/dependant's participation in such	
3.	I understand that aggreş in academic journals.	gated results will be used for training research purposes and may be reported	
4.	Individual results will not be released to any person.		
5.	That I am free to withdraw my consent at any time, during the study in which event my child's/dependant's participation in the research study will immediately cease and any information obtained will not be used.		
	Signature:	Date:	
NOTE:	The parent or parents, or t	person(s) having guardianship of the child must sign the consent form.	

NCVER adult literacy research project

Communication in Education & Training P/L is conducting a National Centre for Vocational Education Research (NCVER) literacy research project: *Investigation of the integrated approach to the delivery of adult literacy*. The purpose of this research is to identify and describe the literacy practices developed using an integrated training approach in the Australian Vocational Education and Training system.

Information for teachers involved in research sites.

English language, literacy and numeracy skills have been integrated explicitly into the Community Services and Health (CSH) Training Package. Our research will look at how the English language, literacy and numeracy integrated into the CSH Training Package is being delivered, by looking at four different delivery settings.

The investigation will consider the following research questions:

How is literacy conceptualised in practice by RTO and enterprise personnel in the VET system?

What literacy practices are developed in an integrated approach?

What teaching and learning strategies are employed?

What are the key factors that might describe the 'integrated model' of adult literacy delivery?

Project methodology

The project will be using *video stimulus recall* as a way of prompting teachers to reflect on their teaching practice (For more information on this methodology see McMeniman, M, Cumming, J, Wilson, J, Stevenson, J and Sim, C, 2000, 'Teacher Knowledge in Action', in *Impact of Educational Research*, DETYA, p.389).

This would involve teachers participating in:

- A preliminary interview (audio recorded) to ask you about how you prepare and plan and what teaching strategies you employ in relation to literacy and numeracy. These interviews will be transcribed for analysis.
- Observation and filming of sequences of teaching. A videotape will be made of teaching activity. Teachers would indicate when the timing of this would best fit with their teaching program. (approx. 2 hours or teaching session).
- A follow up interview (audiotaped) as soon as possible after the videotaping. (Later the same day would be ideal, the next day would also be good). The video is replayed with the teacher. The purpose of the video is to prompt the teacher's recall of teaching events. The teacher is encouraged to stop the tape at any point they want to highlight. The audiotape of the *video stimulus recall* will be transcribed for analysis. No further use will be made of the video.

The project is able to compensate teachers for the time they have made available to participate.

Project outcomes

A report which addresses the research questions above.

Timelines

In order to have the project completed by the due date we need to video and interview in May, 2004.

Thank you for your interest in this project

Rosa McKenna and Lynne Fitzpatrick

Should you have any concerns about the conduct of this research project, please contact Communication in Education & Training P/L, Level One, 490 High St, Northcote VIC, 3070 (P) 03 9486 3318



This report is part of the Adult Literacy National Project, funded by the Australian Government through the Department of Education, Science and Training. This body of research aims to assist Australian workers, citizens and learners to improve their literacy and numeracy skills.

Research funding is awarded to organisations via a competitive grants process.

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