



MINISTRY OF EDUCATION

Te Tāhuhu o te Mātauranga

‘One size does not fit all’

How five tertiary education organisations
embed literacy, language and numeracy

Summary report

This series covers research on teaching and learning in literacy, language and numeracy and analyses of international surveys on adult literacy and numeracy.

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KEY FINDINGS

The overarching research question guiding this project was: *How do tertiary education organisations profile, develop and deliver effective literacy, language and numeracy within programmes?* This section addresses this question by synthesising conclusions listed at the end of each case study into an integrated set of findings. These integrated findings are related to the literature.

Although all case study conclusions are supported by data, not all conclusions listed at the end of the case studies are synthesised here. Only the case study conclusions identified in all five organisations are synthesised. Case study conclusions not synthesised nevertheless offer valuable information about the provision of embedded literacy. Eight findings were synthesised.

1. In all case studies an ‘embedded literacy champion’ has emerged from within the organisation. The champion acts in various ways. Usually an individual who envisions and drives developments, energises and motivates people, the champion could be at the top of the organisational hierarchy, but could also be a literacy enthusiast. In two cases the champion works with an organisational unit that enables selected individuals to spread enthusiasm and structure across the organisation. This is the only finding not referred to in the literature we reviewed.
2. All case study sites have developed strong philosophies in favour of embedding literacy. The meaning given to the concept, however, differs among organisations. In two instances the core of this philosophy is to develop functional literacy or literacy to build human capital (Reio et al., 2005) – a literacy that prepares people to function successfully at work, at home and in the community (Skills for Life Development Centre, 2006). In another, the focus is on developing critical, human and social capital literacies at the same time (Crowther et al., 2003). Yet another organisation sees functional literacy as just one element in a holistic vision that also features critical and cultural literacy (May, 2009).
3. In all case studies there is a clear involvement in and commitment to embedded literacy across the whole organisation. But again there are differences in the way this is conceived, developed and implemented. In one case it is the main business of the organisation; in two others it operates alongside other programmes; in the remaining two it is envisioned and managed by the strategic management of the organisation and operated locally in different geographical locations. This ‘same but different’ view of embedding literacy finds support in the literature. Millar and Falk (2002) argue that embedded literacy is ‘built in not bolted on’ and the Skills for Life Development Centre (2006) calls for a whole-of-organisation approach. This finding also supports the notion that ‘one size does not fit all’ (Rogers & Kramer, 2008) and that there is no single perfect model for embedding literacy (Casey et al., 2006).
4. A range of planning and policy documents have been developed in all organisations. Such documents support the whole-of-organisation approach (Skills for Life Development Centre, 2006). They include official documents such as applications for funding, investment plans for the Tertiary Education Commission and literacy embedding overviews. But other documents have been prepared to suit the needs of each organisation. These documents have different formats and content. For example, one organisation has a medium-term development plan, and another has an extensive document that focuses on embedding literacy not only within programmes but also within a very strong institutional philosophy, while others have produced a variety of policy documents, project guidelines and teaching

resources. According to Casey et al. (2006), the availability of planning documents is necessary for the successful implementation of embedded literacy.

5. In all case studies we found a strong emphasis on learners and learning, with a number of participants noting a shift from teacher-directed transmission to constructivist and learner-centred approaches (Burt et al., 2003). While the learner, their needs and interests are considered central in all five organisations, they also recognise that learning should be personalised not individualised – tailored to suit individual needs but not forcing them to learn by themselves (Green & Howard, 2007). In all case studies there is evidence that they prefer their learners to work in groups, although individual tuition is possible in some. Learner focus also featured when tutors discussed the need for learners to be involved in planning for learning (Skills for Life Development Centre, 2006), for flexibility in teaching methods (Tusting & Barton, 2007) and for active learning (Balatti et al., 2006).
6. One of the recurring reasons given to support the view that ‘one size does not fit all’ is that literacy learning needs to fit the context for which learners are being prepared. In all case studies this is the very rationale for embedding literacy. This view is supported by Burt et al. (2003) and the Nunavut Literacy Council and Northwest Territories Literacy Council (2007), who add that literacy learning also needs to be authentic to the student. Within this consensus, however, there are differences in the way contextual authenticity is interpreted. In three case studies the context is primarily vocational, and embedded literacy has a functional focus. In two organisations the functional focus is affected by other considerations: language learning in one and cultural literacy in the other.
7. In all case studies we found a very strong commitment to training and professional development of staff. Researchers in the field emphasise that such commitment to upskilling staff is vital when embedding literacy (Berghella et al., 2006; Casey et al., 2006; Dymock, 2007). Organisations offer a qualifications track for their staff. In most this is well advanced with a number of staff having already gained certificates; in some the expectation may be for new staff to hold a literacy qualification. In some organisations there is also a ‘bottom-up’ approach that emphasises mentoring and other personal support (Wickert & McGuirk, 2005).
8. The seven integrated findings report conclusions common to all case studies. We also found diversity within these commonalities. Under each integrated finding lurk at times subtle differences in the way the finding is conceived and implemented. This finding emphasises again that ‘one size does not fit all’ (Rogers & Kramer, 2008) and that there is no single perfect model for embedding literacy (Casey et al., 2006). This eighth finding is possibly the most informative one. Despite the commonalities, there are considerable differences in the provision of embedded literacy.

1 INTRODUCTION

This summary outlines findings from a project funded by the New Zealand Ministry of Education. The research was designed to answer the following question: *How do tertiary education organisations (TEOs) profile, develop and deliver effective literacy, language and numeracy (LLN) within programmes?* A number of sub-questions sought information about the profiles of LLN in TEOs: their governance and management, the way they organise and deliver the teaching of LLN, and how they provide training and development for tutors.

The research design used for the project was case study, “an intensive, holistic description and analysis of a single entity, phenomenon or social unit” (Merriam, 1988, p. 16). Five cases were researched in organisations deliberately chosen from across the sector: one wānanga, one Institute of Technology and Polytechnic (ITP), two Private Training Establishments (PTEs), and one Industry Training Organisation (ITO). Organisations known to be embedding LLN were invited to participate.

While each aspect of the project was planned collaboratively, individual case studies were researched by a researcher who contacted the organisation, liaised with a contact person, visited the site/s, gathered and analysed the data and wrote up the case. Data-gathering methods included document analysis of relevant organisational documents, interviews with managers who had responsibility for LLN provision, and focus group interviews with vocational teachers who were embedding LLN in their practice and with literacy specialists.

As with any research, there are limitations with this study. It is a snapshot at the time the data was gathered, during the early days of the embedded LLN initiatives. Already organisations will have moved on. While the five cases were deliberately chosen to reflect different parts of the tertiary sector, they are not representative of the whole sector. Moreover, participants in each case study do not necessarily represent all the people involved in that organisation. In this kind of study the researcher is not an objective bystander; each case and the project findings in some way reflect interpretations of the data gathered. Finally, as in all research, the focus of the study was shaped by the specified research questions. Different questions may have elicited different information and findings. The summary needs to be read with these limitations in mind.

1.1 Relevant literature

The project began with a review of relevant international and national literature to inform the case studies. The Skills for Life Development Centre (2006, p. 8) definition of embedded literacy in vocational contexts backgrounds the study:

Embedded teaching and learning combines the development of literacy, language, and numeracy with vocational and other skills. The skills acquired provide learners with the confidence, competence and motivation necessary for them to succeed in qualifications, in life and work.

Literature is increasing rapidly as interest grows in adult LLN and as research centres, especially in the United Kingdom and Australia, report on a variety of projects. There are also a growing number of studies in Aotearoa New Zealand, supported by the Ministry of Education, the Tertiary Education Commission (TEC) and the Department of Labour. A theoretical framework and guidelines for embedding in different sectors have been published (TEC, 2009a, 2009b, 2009c and 2009d). Some recent studies focus on provision for Māori and Pasifika (e.g. May, 2009; McMurchy-Pilkington, 2009; Mlcek et al., 2009; White et al., 2009); some explore ESOL in the workplace (Wright, 2008).

Internationally, interest is growing in LLN provision and in findings related to what works for adult students in different contexts. The review noted the emergent nature of this international literature. Four strands in the international literature can be identified: vocational LLN, English as an Additional Language (EAL) and biliteracy, LLN practice, and critical literacy/New Literacy Studies (NLS). Some studies found benefits from embedding (Casey et al., 2006; Roberts et al., 2005; Skills for Life Development Centre, 2006; Vorhaus, 2006), although embedding was understood in different ways. There is no single perfect model of embedding. Rather, there is evidence that multiple, not unitary, approaches to provision work best, that more flexible patterns of participation are needed (Vorhaus, 2006), and that a 'one size fits all' approach is not the best (Rogers & Kramer, 2008).

Factors associated with successful embedding include a 'built in not bolted on' approach (Millar & Falk, 2002; Wickert & McGuirk, 2005); a whole-of-organisation involvement and commitment (Ní Chinnéide, 2008; Skills for Life Development Centre, 2006); a close collaboration between vocational and LLN teachers (Barton & Pitt, 2003; Callan & Ashworth, 2004; Casey et al., 2006); identification of learners' needs in terms of both vocational and LLN provision (Guthrie, 2008); and planning (King & Bingman, 2004), professional development (Berghella et al., 2006; Casey et al., 2006; Dymock, 2007) and resource development (Berghella et al., 2006).

1.2 Structure of this summary

In the following sections we first present summaries of each of the five case studies. Each ends with specific conclusions as is appropriate in a case study design. The case studies are ordered on the basis of TEOs' experience in providing embedded LLN, from the least experienced at the time of writing to the most experienced. Then eight themes that emerged in all five of the cases are synthesised from individual case study conclusions into overall findings. These findings, when linked to the literature, are particularly valuable as they emerged from such different contexts.

2 WĀNANGA CASE STUDY

He whakapahuhu kahukura

This case study investigates how one wānanga is preparing to provide embedded literacy, language and numeracy (LLN). It documents how the institution attempts to follow its own vision for literacy using its foundation principles of working with and for Māori while at the same time working with government. At the time of writing, embedding literacy is still a project, an aspiration, although strategic thinking and planning are for a whole-of-institution approach. The objectives of the Wānanga are captured in the following statement:

We want to ensure that our programme provision encompasses three things, cultural literacy, critical literacy and functional literacy and that they are interlocked and linked. They all support each other in the emancipation and conscientisation of our students so that we can improve the lot of others and they can experience higher levels of wellbeing and freedom.

This objective is to be achieved with a student-centred approach that is not based on deficit thinking. Embedded literacy is seen as both student focused and, within that, strengths based.

That is the approach I would like to see because literacy for Māori has a huge history for being uncomfortable, you know, can't read, can't write, get the smack, remedial class take you out or bring someone to sit next to you, all of those kind of little things that have huge memories and painful memories for some people. So I would love to be able to make sure the literacy is stealth, subtle, painless and people just know that in some way it's happening but they aren't sure just how it's happening but it's happening and they are feeling great because of it.

This case study provides a number of insights into the profiling, development and delivery of embedded literacy within the Wānanga. The following conclusions can be drawn.

- The vital contribution of literacy and numeracy for Māori success is recognised and has historically been highly profiled within the organisation.
- The model of literacy education profiled within the organisation focuses on a holistic literacy inclusive of cultural, critical and functional literacies.
- Philosophy, development and practice are shaped by ongoing conversations within the organisation, conversations that are informed by diverse views and assumptions.
- The organisation has achieved a consensus to embed cultural, critical and functional literacies in foundation-level vocational programmes.
- This view of literacy belongs to a situational, social practice discourse thought to be well matched to Māori needs and aspirations, but that can be in tension with a narrower technical and economic discourse.
- Strategic thinking about developing embedded holistic literacy is ongoing. This aims for a whole-of-organisation approach that is currently piloted in one part of the organisation.

- A strategic document has been prepared that contains both a strong philosophical position and a detailed implementation plan.
- The strategy is being implemented by a high-level steering committee whose members penetrate to all levels of the organisation and who oversee curriculum design and staff training.
- A bottom-up approach is evidenced in the pilot programme that is expected to inform and influence programmes across the organisation.
- A strong learner focus is evident among staff.
- Staff training is ongoing and plans for developing new approaches are being prepared.

3 INSTITUTE OF TECHNOLOGY AND POLYTECHNIC CASE STUDY

Experiences of embedding LLN

This case study explores the organisational factors affecting delivery of embedded LLN in an Institute of Technology and Polytechnic (ITP). The ITP offers a wide variety of courses, from certificate to degree level, that focus on vocational outcomes. It offers face-to-face and online modes, part- and full-time courses. It also has a recognised regional facilitation role.

Organisational change for embedded literacy has been driven from within the organisation, led by organisational staff and supported by the governing body. A key goal is to “include literacy and numeracy embedding in (its) core business at organisational level”. LLN policies and quality assurance processes have been developed, new LLN positions created and appointments made, capability funding approved, and a commitment given to professional development. Partnerships with other regional providers and Industry Training Organisations (ITOs) are encouraged and fostered.

The approach to vocational education is holistic. Literacy and vocational skills training are seen to complement each other.

I don't see ... much of a division between the two. ... I like to look at the whole person. ... embedding literacy is good for that because I think it gives grounding not only in your vocational field and your course-specific literacy and numeracy but it's going to enlarge your views as a person as well.

Staff see value in having a variety of forms of provision. Teaching is student centred. Different views on functional and critical literacy emerged:

... nearly all functional. ... I think it [critical literacy] would blow the mind of half the vocational tutors.

Yet, others think there is a place for critical literacy:

Many people would argue that you could teach critical reading from the initial introduction to reading. ... I do not believe you have to be at a certain maturational level to be a critical person and understand how people are positioning you against themselves.

Key issues for the organisation were time pressures, getting replacement tutors, fears that LLN funding might disappear, and staff having to complete an additional (literacy) qualification.

The organisation is fully supportive of embedded LLN and is progressing as follows:

- There is a whole-of-organisation focus.
- A champion influences organisational commitment to LLN.
- Government funding and professional development have been a major driver, though there is also a professional commitment to LLN provision.
- Policies and procedures inform organisational direction and practice.

- An organisational plan for developments to 2011 is in place.
- There is a commitment to professional development.
- Some partnerships with ITOs have been developed.
- Staff appointments support LLN delivery.
- Teaching is student centred; LLN provision is student centred.
- LLN provision is promoted as ‘good teaching’, as ‘deliberate acts of teaching’ and as ‘built in not bolted on’.
- Partnership between flexible learning, staff development and LLN is fostered.
- While aligning with the government model of embedded LLN, staff also understand that there is no single model of embedded provision.
- The friendly approach of the ‘specialists’ is a key factor in tutor take-up; these people work well together and with tutors.
- Opportunities exist for vocational and literacy specialists to work together.
- While some focus on functional literacy, there is recognition of critical literacy.

4 ENGLISH LANGUAGE PRIVATE TRAINING ESTABLISHMENT CASE STUDY

Adult English as an Additional Language literacy, language and numeracy

This case is of a Private Training Establishment (PTE) offering programmes for adults with English as an Additional Language (EAL). The PTE has two campuses, both in regions designated as refugee resettlement areas, and both sites have only EAL students. One campus has 100 students, mainly from Asian nations, with equal proportions of international and permanent residents and refugees (PRs); the other enrolls only PRs, many with low or pre-literate levels of English and first language literacy.

The core programme offered is a two-year Certificate in English for Living in New Zealand (ELNZ). This includes in-house modules, ESOL (English for Speakers of Other Languages) unit standards, and general unit standards related to literacy, numeracy (e.g. measurement), business processes (e.g. computer skills), communication (e.g. interview skills), and work and study skills. Students can pursue an academic strand or an employment strand, or a combination of these. Some students with tertiary qualifications in their first language are preparing for examinations such as the International English Language Testing System (IELTS) for university entry, or Occupational English Test (OET) for entry to nursing training. Students can also receive one-to-one or small group literacy, language and numeracy support from the literacy specialist.

Literacy is broadly interpreted as communicative competence - knowing when to say what and to whom.

We don't only have language literacy, we have cultural literacy, and we have employment literacy. ... If you are trying to transition people into work ... you have to make them aware not that they are wrong in what they do, but we do it differently.

The importance of LLN to this organisation is captured by the following comment:

LLN is the priority. It's huge. ... It's like the same as breathing – for us. ... It's all we do.

Embedding is seen as motivating for adults as it builds on subject knowledge learners often already have. This leads to a belief in unit standards, which are seen as providing 'good bones for learning'. Flesh can be put on the bones according to the needs of learners. Teaching is learner centred. Flexibility is used to meet individual learner and group needs and to help students transition to work or further study. Embedding also encourages collaboration between different teachers, including access to a variety of learning resources.

The organisation is fully involved in and committed to embedded LLN and is progressing this kaupapa as follows:

- Embedding LLN creates authentic, contextualised learning that addresses functional needs.
- Staff and organisational flexibility is necessary to cope with external and internal changes.
- Funding-driven and assessment-oriented organisational cultures can be counterbalanced by student-centred approaches.

- Student-centred approaches become an integral part of organisational culture when driven from the top.
- Collaborative teamwork enhances the effectiveness of planning, meeting student needs, assessment, materials development, and professional support.

But the case also identified a number of emerging issues:

- Links between ESOL and general assessment measures may need clarifying.
- Adult Literacy Progressions may be inappropriate for lower-level EAL needs.
- Prioritising oracy over literacy needs in LLN provisions for EAL learners can be problematic.

5 PRIVATE TRAINING ESTABLISHMENT CASE STUDY

Embedding LLN in vocational programmes

This case study is of a medium to large organisation that provides a range of qualifications in specific content areas as well as courses through its family/whānau programme and learning centre. Having offered literacy learning for many years, the PTE is looking to widen the delivery of LLN to include workplace literacy and is now beginning to deliver a National Certificate in Adult Literacy Education (NCALE).

Ensuring that learners have the literacy and numeracy to successfully complete their programme of learning is central to its operations. A positive learning culture, including collaborative relationships and good teamwork, provides for ongoing formal and informal support across the whole organisation. Central to the discussion at all levels of the organisation are the welfare and learning needs of the learners to successfully negotiate their courses. The literacy needs of learners are established through an initial assessment process. This assessment identifies the education needs of the learner for the course as a whole and, in particular, the LLN assistance that will be required. The learning centre is pivotal to the embedding of LLN. Provision takes a variety of forms including one to one, and workshops contextualised to individual courses.

The strong commitment to the LLN programme is founded on the proven results of the tuition and the outcomes for learners.

Our students do progress in significant numbers to places like university, which is pretty much unheard of out of Training Opportunities Programmes (TOPs) courses considering they walk in the door meeting the TOPs criteria. So our commitment to literacy comes from proven results and we believe it makes a difference and we have evidence to say that that is the case. There is a commitment to literacy too in the sense that it is as a business. ... We have developed good expertise, good resources, good systems and we are acknowledged for those and so we see ourselves in a strategic direction also moving and staying with literacy.

The organisation is fully supportive of embedded LLN and is developing a culture that has as its focus successful outcomes for learners in both LLN and vocational qualifications.

- A specific person who acts as a champion for literacy within the organisation can be identified.
- There is a learning centre with a focus on the development of initial assessment, and on support for both learners and vocational tutors, as well as on monitoring and evaluating progress.
- The PTE maps qualifications and courses onto the progressions to identify LLN needs and requirements.
- The development of a matrix for learners and classes identifies the LLN needs of each learner for the programme they are currently undertaking.
- Close collaboration between vocational and literacy specialists is evident.
- There is provision of time for literacy specialist tutors and vocational tutors to plan and evaluate their work collaboratively.

- Methods used involve a threefold approach to literacy provision: embedded, one on one, and contextualised workshops.
- There is ever-increasing confidence in their teaching among tutors who gain a literacy qualification with organisation support.
- There is regular provision of ongoing professional development, mentoring and support.

6 INDUSTRY TRAINING ORGANISATION CASE STUDY

The integrated workplace learning project

The ITO identified shortcomings in LLN skills among support workers as barriers to their completing their base qualifications. The ITO sought and gained funding from the Tertiary Education Commission to develop the *Integrated Workplace Learning Project*, which included 34 providers, five of whom were surveyed. This project aimed to help support trainees with their workplace literacy demands while they were also completing an industry-specific national certificate, and sought to support employers and workplaces to begin to understand and address workplace literacy needs.

The case found general agreement among participants that embedding literacy in workplace training was important, worked well and was sustainable, even though it also faced some challenges. The philosophy underpinning the project is captured by the following statements:

We don't have one model; we try to keep it personalised. There are some commonalities on what seems to work, but we keep personalising it.

I think embedding literacy ... is putting the trainee or learner in a situation whereby they feel empowered to be actually able to engage in the topic, think through it, learn a little bit more as they go along and then actually relate it back to their work.

We want a sustainable model of teaching and learning ... around literacy that we can embed into our programme and develop our support workers into becoming more independent learners, to have more confidence around language and reading and then thinking about that reading and what it means to them in terms of their practice and how they can translate their knowledge into practical skills.

The ITO provided the vision and organisation behind the project. Individual providers are fully supportive of embedded LLN and are developing learning cultures that focus on successful outcomes for learners in both LLN and vocational qualifications. Adult education principles underpin practice, a view of literacy as social practice is evident in the focus on both work and life skills, and both learners and trainers are well supported. The following summarises the data:

- Embedding literacy in workplaces is championed from within the ITO.
- Workplaces also have LLN champions seeking to create learning organisations to support their employees.
- All sites recognise the importance of identifying, supporting and developing LLN needs of employees while at the same time upskilling employees in workplace practice.
- There is a broad understanding of the nature of LLN. This aligns well with the wider communication needs of individuals, including critical thinking, and not just reading and writing.
- Workplaces are reviewing their own internal resources through the learning from this project and employees voice their opinions with confidence on what could be improved.

- Workplaces agree that the ITO model being implemented is sustainable. The professional development approach (literacy tutors, educational qualifications, workshops, trainers' resource folder, improvement of workbooks) is seen as effective.
- Group training is seen as a good model for developing social practices and supporting cross-cultural needs.
- Trainers are beginning to shift their teacher-directed training to a constructivist and learner-centred approach.
- Organisations notice improvement in employees' confidence, quality of workplace practice and desire for ongoing learning.

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