

Gaining leverage: Multiple approaches to embedding academic literacies within a tertiary context

Nicola Dunham

Unitec Institute of Technology
ndunham@unitec.ac.nz

Dulcie Brake

Unitec Institute of Technology
dbrake@unitec.ac.nz

Elizabeth Kernohan

Unitec Institute of Technology
ekernohan@unitec.ac.nz

Natalie Savery

Unitec Institute of Technology
nsavery@unitec.ac.nz

***Abstract:** The embedding of literacies has become a national venture within tertiary contexts in New Zealand (Tertiary Education Commission, 2008). From the literature it is evident that within such contexts literacies issues come under varied banners; Language, Literacy and Numeracy (LLN); Functional and life skills; critical and cultural literacy; and academic literacies (Ministry of Education, 2010). Such literacies discourses are further compounded by the way in which the process of embedding is considered. In response to the calls for embedding of academic literacies, an Institute of Technology and Polytechnic in Auckland created four faculty level academic literacies advisory positions. As these faculty advisory roles have progressed it has become evident that the demands for responding to academic literacies issues are as complex as the discourses of academic literacies and embedding themselves. This paper will describe the role and strategies taken by these academic literacies advisors in responding to the teaching and learning of academic literacies in a number of discipline areas. Exemplars of practice will be presented from the disciplines of Applied Technologies, Nursing, and Business. Through the exemplars, attention will be given to outlining the process involved in developing responsive teaching and learning practices towards academic literacies, and the significance played by contextual factors. Use of the exemplars will also serve to highlight the challenge of the multiple literacies demands within tertiary learning environments including operational definitions of academic literacies from the perspectives of the faculty academic literacies advisors.*

Introduction

Interest into academic literacies has been an ongoing area of concern in tertiary education since student success has become equated with quality, where student attrition and failure to

complete have been taken as indicators of poor educational service provision. Quality has become tied with economics, evident in New Zealand through changes in funding for the tertiary education sector (Ministry of Education, 2007), and moves to business styles of management (Dreaver, 2003). Discourses of quality are significant given the increased place that tertiary education holds within current society, with credentials being indicative of social participation and citizenship (Delanty, 2001; Moodie, 2008).

The place of tertiary education changes as society adapts and evolves and is shown through changing perceptions of knowledge and knowledge production. This changing knowledge landscape impacts on the nature of societal participation in tertiary education, as evidenced in the following statement from the Tertiary Education Commission (TEC) New Zealand: “Changing technology, globalisation, a shift to knowledge based industries, and an increasing focus on quality are all contributing to the demand for a more literate and numerate workforce” (2008a, p. 6). With literacies being about engaging with forms of knowledge, education acts as a bridge between the multiple ways of knowing within complex societies (Northedge, 2003). The academic context is one of many learning contexts. As such it has its own conventions in terms of knowledge construction and communication. In its bridging role the academic environment is not in itself value free, academic ways of knowing being given authority over the non-academic. In this line of argument literacy in the tertiary context is further complicated by the demands of the academic genre calling for students to develop academic literacies to navigate the academic landscape.

Tertiary Institution requirements to embed *academic literacies*

The drive to embed academic literacies within tertiary institutions is emphasised in discourses of social participation in a knowledge society. This is evidenced by the New Zealand TEC which states that; “New Zealand has a significant proportion of adults who are unable to participate effectively or fully in a knowledge society” (2008b, p.4), with a further concern that in 1996; “almost half of all adults aged from 16-65 years old had pressing literacy and numeracy needs” (2008b, p. 4).

The TEC and the Ministry of Education (MoE) have played significant roles in promoting the embedding of literacies within New Zealand’s tertiary institutions (Ministry of Education, 2009). Much of the TEC’s focus has been on work-based learning (TEC, 2008a). The specifics of literacies within the academic context as *academic literacies* are not clearly defined which leads to diverse understandings of literacies within academic contexts. An example of the diversity in conceptual understanding of literacies and academic literacies within tertiary contexts is evidenced within the multiple case study findings of New Zealand Tertiary providers. In the review of the case study findings on the embedding of literacy, language and numeracy within academic contexts it was noted that:

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 (Leach, Zepke, Haworth, Massey University, & Isaacs, 2010, p. 60).

The importance of definition is raised within the exemplars of practice which will be discussed after a brief introduction to the institutional context.

Institutional context

The following exemplars of practice have come out of the embedding process of Unitec Institute of Technology, Auckland. The institution's academic literacies policy was developed in response to the transitional needs of students as they engage in the academic environment of their chosen discipline. Within this policy document the academic literacies are defined as including language, content and cultural knowledge in effective communications. Systems of communication include those of speaking, reading, and writing, listening, calculating and thinking.

Institutional curriculum development led to the creation of four faculty-level academic literacies advisory positions. Three of these positions were established for an 18 month period to assist the embedding of the academic literacies policy as part of the wider eLearning Teaching and Learning strategy. At the same time as appointing the Faculty Academic Literacies Advisors (FALA), elearning coordinators were also recruited within each faculty. Whilst it was initially envisaged that these faculty positions would be closely aligned the reality was somewhat different due to the attention given to elearning via resources including budgets and elearning departmental champions already established within departments.

As work within these faculty advisory roles has progressed it has become evident that responding to academic literacies issues are as complex as the discourses in which they are situated. The following sections of the paper will describe the role and strategies taken by these academic literacies advisors in responding to academic literacies in a number of discipline areas. Exemplars of practice will be presented from the disciplines of Applied Technology, Nursing, and Business. Through the exemplars, attention will be given to outlining the process involved in developing responsive teaching and learning practices towards academic literacies, and the significance played by contextual factors.

Communities of practice (CoP) for embedding academic literacies within applied technology

Within the Faculty of Technology and the Built Environment a multi-faceted approach to raising the profile of academic literacies was developed drawing on a CoP approach, and through networking. The faculty reflects its trades-based roots and comprises the departments of Building Technology, Construction, Engineering, Electro technology, Transport Technology, and Plumbing and Gasfitting.

The embedding process began with six department-based, two-hour workshops, in collaboration with the eLearning Advisor, to explain the academic literacies policy and to establish a shared understanding of what academic literacies might mean in an applied technology context. The interpretive differences were apparent among the prestigious disciplines of engineering and construction, compared to the trades-based transport and plumbing and gasfitting. While the former considered literacies to be academically focused,

the latter's needs were for basic adult literacies. It became apparent that there was a general reluctance to do that airy fairy-stuff called academic literacies.

To gain leverage in some departments, I made a conscious decision to join endeavours with the academic literacies team established within the centralised teaching and learning unit. In 2010, the literacies team was strategically involved in the trialling of the National Assessment Tool (NAT). I saw the NAT as a way in to embedding literacies in applied technology programmes, given that NAT testing of students enrolled on Level 3 courses was a TEC requirement from 2011, as is the assessment of Youth Guarantee students. TEC tied this requirement to institutional funding. Learners are pre-tested, literacies initiatives are implemented, and the cohort is re-tested at the end of the course to establish final LLN levels. To provide a sense of scale of NAT use in the faculty in semester one, 332 students enrolled across seven streams at Level 3 were assessed in Numeracy and Reading (twice) and in semester two 319 students are undergoing the same process. Some Level 4 and 5 programmes have also utilised the NAT as a diagnostic tool, with pedagogically useful results.

To provide an indication of the LLN needs of the average polytechnic student, the NAT was used in 24 programmes, from Level 2 to 5, up to March 2011. Of the 750 learners tested for numeracy - 46% were below step 5 on the TEC progressions; of the 902 learners tested for reading - 80% were below step 5; and of the 166 learners tested for writing - 60% were below step 4. The demands of a Level 3 course alone requires learners to be at step 4 or 5 on the TEC progressions. This indicates that literacies interventions need to be implemented in every programme.

My involvement in the NAT has been in supporting staff to administer it, then supporting their response to the NAT-generated data on the student cohorts literacies and numeracy needs. Knowing how to respond to the NAT reports is significant in assisting staff to develop effective LLN interventions. Faculty staff are provided with ongoing training in literacies development, resources, workshops, and one-to-one meetings/discussions. I am confident that T&BE staff are now aware of what is available to them to achieve the institutional goal to .become better equipped at recognising and addressing academic literacy needs of students.(Unitec Academic Literacies Policy, 2008.)

The Teaching Numeracy CoP was a joint venture with Phil Kane from the NCLNA. Staff can attend hands-on sessions on campus one afternoon a month, which enables tutors from diverse teaching departments to share best practice, ideas and resources. Wengers (1999) CoP model has been adopted widely within the institution with both online and face-to-face CoPs operating. I network with many CoPs as I saw the need to link the faculty to the other aspects of literacies activity Unitec-wide.

The recently opened Northshore campus has impacted on my role, many applied technology programmes are now provided on two campuses. Student retention and success is a key issue. Through the NCNLA I organised Unitec event in the form of a professional development workshop on Engaging Youth, Maori, and Pacific Island learners. This was a faculty initiative that went viral with 36 Unitec staff enrolling for the one-day workshop.

Collaborative strategies for embedding academic literacies in nursing

The *Faculty of Social and Health Sciences* is Unitec’s largest faculty with 11 departments and over 1000 staff members. The faculty size and multiplicity of disciplines lends complexity to the embedding of literacies. Literacies embedding within this faculty has been significantly informed by TEC’s Language, Literacy and Numeracy strategic initiative to integrate the teaching of literacy, language and numeracy (LLN) in all NZQA level 1-3 courses (TEC, 2008a). Embedding literacies in programmes above foundation level has required a deep, targeted response tailored to the needs and professional contexts of individual departments. Definitions of literacies are contextually driven and are underpinned by significant work-related discourses.

In 2011 the two FALAs have worked collaboratively with the first year nursing team to embed literacies in an applied skills course that directly prepares students for clinical placement. The embedding process was closely aligned with the specific language and workplace communication skills required for clinical practice. The nursing practice team wanted to increase the opportunities to prepare students for work prior to going out to their clinical placements and respond to the specific language needs of learners, particularly students with English as an Additional Language (EAL). Developing language competency, in particular sociopragmatic competency, is critical to prepare students for nursing clinical placement and the workplace (Ako Aotearoa, 2010; Holmes and Major, 2003).

A substantial review of the research literature led to the development of a ‘collaborative literacies embedding model’ for working with staff and students (see Figure 1).

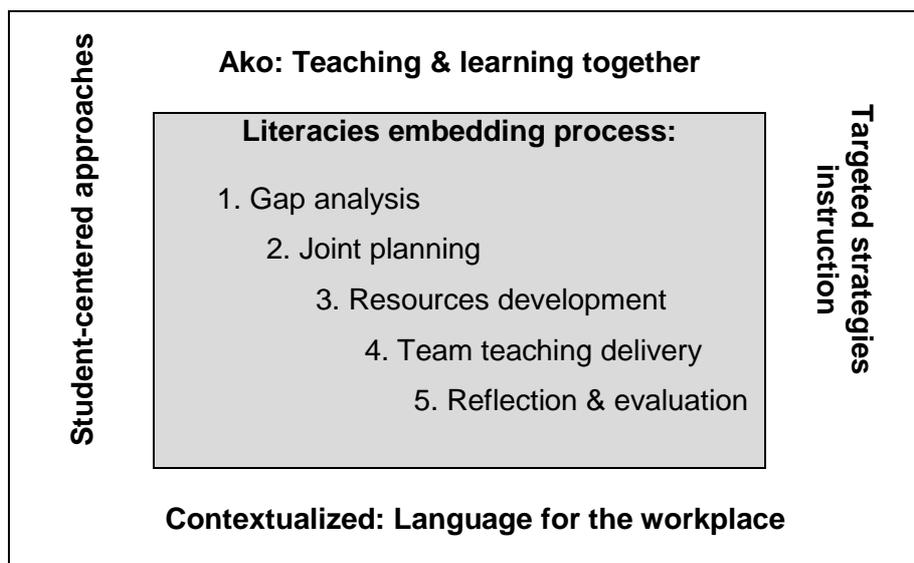


Figure 1: Pedagogy and process for “Collaborative Literacies Embedding” (Savery, 2011)

The pedagogy inherent within the model is based on “ako” or reciprocity (Kahikitiha, 2008) through vocational staff and literacies advisors working and learning together. Team approaches to literacies embedding have proven effective both internationally (National Research and Development Centre, NRDC, 2007) and within New Zealand (Whatman, Potter and Boyd, 2011), where planning, observation and teaching may take place as a team giving opportunity to learn from each other. Drawing out the literacies for clinical practice took place as part of the shared planning process which enabled the teaching team to have input into the planning and delivery of the lessons.

The model utilises student-centred teaching and learning approaches, including deliberate acts of teaching in response to learners' diagnosed literacy needs (TEC, 2009). A gap analysis is essential to identify gaps between the literacy demands of the course and learners' needs. Strategies and language skills practiced are determined by the needs of the professional environment, and include the explicit teaching of medical terminology, listening for specific information at handover, reflective writing on clinical practice, numeracy and language for charting patient data, and the development of social Kiwi-English to enhance nurse-patient communication. In this model group work activities and cooperative learning encourage dialogic interaction and allows space for language practice and development.

Positive student evaluations and teacher feedback have led to refinement to the model and subsequent interest in replication in other disciplines. The collaborative approach is proving effective in engaging staff and students; however, there is a need for formal evaluation of learner benefit and efficacy of the model for raising literacy levels. A collaborative approach is time consuming and resource intensive, requiring substantial institutional investment and commitment. Issues of sustainability of the embedding work also need to be addressed through programme and course documentation rewrites. Future directions for the Faculty Academic Literacies Advisors include further promotion of the model as a vehicle for professional development, and an action research project with the nursing practice team in 2012 to examine the efficacy of the collaborative literacies embedding model.

Course development for embedding academic literacies in Business, Marketing & Management

The Faculty of Creative Industries and Business academic literacies have tried to work towards taking an integrated approach to embedding academic literacies. In endeavouring to do this academic literacies was understood as consisting of three central elements; discourse, participation and skills. The concept of discourse is informed by Foucaultian theory in that it is more than ways of thinking and producing meaning, involving knowledge, social practices and power relations (Foucault, 1972). The elements of academic literacies are regarded as connected to core experiences of student identity, voice, position and power, as shown in figure 2. The value of using this conceptualisation of academic literacies was that it helped avoid a pure skills focus and aligned with wider institutional curriculum development.

When academic programmes are associated with professional education, which is the case in many of the departments within Unitec, academic literacies become positioned alongside professional literacies. Alignment between these literacies should be sought but to uncritically assume this alignment is in place has the potential of negatively influencing student adaptation to the academic environment.

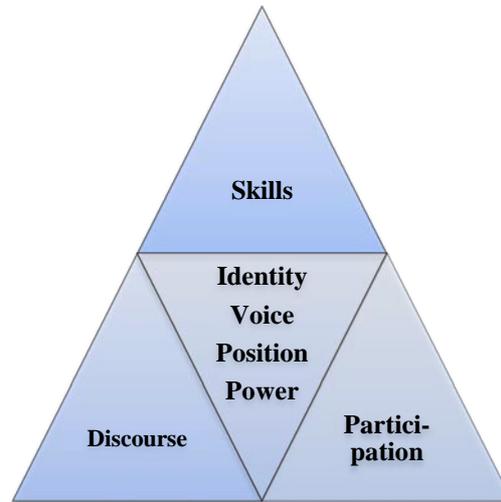


Figure 2: Conceptual image of the components of academic literacies (Dunham, 2011)

Within the faculty's *Department of Accounting and Finance* and the *Department of Marketing and Management* concerns regarding student preparedness for tertiary study, low retention and success rates and concerns for groups of diverse learners such as Maori, Pacific and international students resulted in a strategic approach to course development to embed academic literacies. The core development team consisted of the FALA, programme leaders, the Head's of Department. The initial embedding process of developing a new 15 credit course sitting within the first semester of entry onto the bachelor degree programmes was later re-envisaged as two 15 credit courses, part A and B, covering the whole of the first year of study.

Planning the new course for embedding academic literacies began with the use of a matrix of seven questions through which the professional literacies and academic literacies were identified. Once the seven question matrix had been completed the team set about to identify which academic practices held most significance for this stage of study and the discipline in terms of skills, participation and discourses.

The next phase was to work on developing learning outcomes. This was done by reviewing profiles from professional organisations and institutional graduate profiles. Profile statements were grouped according to similar themes, of which the following were identified:

- Dispositions for professional success
- Technical skills for professional success
- Communication for professional success

Specific learning outcomes emerged from these core profile areas with assessment events and teaching and learning events falling out of these learning outcomes. The assessments were designed to facilitate student transition and engagement into the tertiary context (Leeds Metropolitan University, 2009). The assessments build on the principles of meta-learning and student awareness of self within the learning process, collaborative learning, self and peer assessment and inquiry.

The most significant aspect of the embedding process came within the teaching and learning events designed to use academic literacies processes within the delivery of discipline content knowledge. Teaching and learning events were planned around whole class teaching, small

group tutorials and online learning events. Embedded within each lesson was the direct teaching of academic literacies as supported by the institutional policy: The discipline expert also being knowledgeable in teaching academic literacies.

The overarching aim of the course development was to fully embed academic literacies within each teaching and learning session, the learning outcomes, and formative and summative assessment. Whilst this would be welcomed within each lesson of *every course* it is understood that this is a high benchmark to reach, especially given it is argued that within tertiary education precedence is given to professional experience over teacher education.

Discussion

The exemplars have served to highlight the challenge of the multiple literacies demands within a tertiary institution. It is apparent from the exemplars that the format for embedding academic literacies has been influenced by the contexts in which we found ourselves as FALA's. Within applied technology academic literacies equated to basic adult literacy, within Nursing to vocational skills, and within Business and Marketing academic literacies was associated with becoming a successful business professional. Strategies for embedding academic literacies do not only differ *between* tertiary organisations (Leach et al, 2010), but also *within* an institution, be it at a faculty, departmental, programme or staff level. These contextual layers add complexity to the embedding process and call for strategic, responsive approaches to embedding. In all these examples the discourses of work and social participation are prominent, which is significant given the institutions position within the tertiary education sector and the community needs it caters to.

It is very hard within literacies discourses to avoid deficit positions of some form or another. Whilst within the exemplars there was a sense of portraying literacies issues as a teaching and learning, and hence a *teacher and learner* concern, there was still a sense of focusing on what is not or cannot be done by respective parties. It is argued that what is missing from the discourse of academic literacies is the acknowledgment that literacies demands change as society changes and as such there is no final solution compatible with pre-established time frames.

Concluding comments

Faculties are large and include diverse departments with their own contextual literacies. Being able to respond to such diversity at a faculty level would be enhanced through the identification of departmental academic literacies champions who have the contacts with colleagues but also the discipline knowledge that informs the literacy needs for students and teachers. Literacy needs within tertiary environments are ongoing and responsive to wider societal change and as such will be an ongoing feature of the teaching and learning environment.

References

- Ako Aotearoa. (2010). *Finding a voice: Supporting ESL nursing students' communication in clinical placement*. Retrieved from <http://ako.aotearoa.ac.nz/ako-hub/ako-aotearoa-central-hub/resources/pages/findingvoice-supporting-esl-nursing-students%E2%80%99-comm>
- Dreaver, G. (2003). *Student attrition in higher education: 'What was that you said?': Ambiguities arising from varied contexts and definitions in distance and open learning*. Open Polytechnic New Zealand Repository Working Paper 5. Retrieved from <http://repository.openpolytechnic.ac.nz>
- Delanty, G. (2001). *Challenging knowledge: The University in the knowledge society*. England; Philadelphia: The society for Research into Higher Education & Open University Press.
- Findsen, B. (2009). The professionalism of adult educators: Issues and challenges. *Journal of Adult Learning Aotearoa New Zealand*, 37(1), 27-43.
- Freudenberg, B., Brimble, M., & Cameron, C. (2011). WIL and generic skill development: The development of business students' generic skills through work-integrated learning. *Asia-Pacific Journal of cooperative education*, 12(2), 79-93.
- Foucault, M. (1972). *The archaeology of knowledge*. Abingdon: Routledge.
- Holmes, J., & Major, G. (2003). Talking to patients: The complexity of communication on the ward. *Vision – A Journal of Nursing*, 11(17), pp. 4-9.
- Leach, L., Zepke, N., Haworth, P., Massey University, & Isaacs, P. (2010). *One size does not fit all: How five tertiary education organisations embed literacy, language and numeracy: Case study findings*. Wellington: Ministry of Education.
- Leeds Metropolitan University. (2009). *Designing assessment first-year assessment and feedback*. Leeds: Leeds Metropolitan University.
- Ministry of Education. (2007) *Profile and trends 2006: New Zealand's tertiary education sector. Tertiary sector performance analysis and reporting*. Retrieved from <http://www.educationcounts.govt.nz>
- Ministry of Education. (2008). *Ka Hikitia - Managing for Success: The Māori Education Strategy 2008 – 2012*. Retrieved from <http://tereomaori.tki.org.nz/Curriculum-guidelines/Teaching-and-learning-te-reo-Maori/Aspects-of-planning/The-concept-of-ako>
- Ministry of Education. (2009). *Tertiary education strategy 2010-15*. Wellington: Ministry of Education.
- Moodie, G. (2008). *From Vocational to higher education: An international perspective*. England; Philadelphia: The society for Research into Higher Education & Open University Press.
- National Research and Development Centre for adult literacy and numeracy. (2007). *Summary report "You wouldn't expect a maths teacher to teach plastering..." Embedding literacy, language and numeracy in post-16 vocational programmes – the impact on learning and achievement*. Retrieved from <http://www.nrdc.org.uk>
- Northedge, A. (2003). Rethinking teaching in the context of diversity. *Teaching in Higher Education*, 8(1), 17-32.
- Nursing Council of New Zealand. (2007). *Competencies for the registered nurse scope of practice*. Wellington: NCNZ.
- Tertiary Education Commission. (2008a). *Literacy, Language and Numeracy Action Plan 2008 – 2012: Raising the literacy, language and numeracy skills of the workforce. Ako Tuāpapa*. Wellington: Tertiary Education Commission. Retrieved from www.tec.govt.nz
- Tertiary Education Commission. (2008b). *Learning progressions for adult literacy and numeracy: Background information*. Wellington: Tertiary Education Commission.
- Tertiary Education Commission. (2009). *Teaching adults to listen and speak to communicate: Using the learning progressions*. Wellington, New Zealand: TEC.
- Unitec. (November, 2008). *Academic Literacies Policy*. Auckland: Unitec.
- Wenger, E. (1998). *Communities of practice: Learning, meaning and identity*. Cambridge: Cambridge University Press.
- Whatman, J., Potter, H., & Boyd, S. (2011). *Literacy, language and numeracy: Connecting research to practice in the tertiary sector*. Wellington, New Zealand: Ako Aotearoa.