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Towards improving learning outcomes for international students: the master of professional accounting embedded literacy project

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Abstract

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Keywords

embedded literacy, accounting, international students, technical skills

Disciplines

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Towards Improving Learning Outcomes for International Students: The Master of Professional Accounting Embedded Literacy Project

Anne Abraham and Mary Kaidonis

Abstract

This paper presents the University of Wollongong's collaborative project to embed English literacy in key accounting subjects of the Master of Professional Accounting (MPA). The project will develop a curriculum prototype for embedding literacy which enhances learning in general as well as English literacy at an academic/professional level. Embedding both situated and transported literacies will also assist students in understanding discipline related material and enable critical evaluation of issues within the subject.

The overall aim of the project is to improve the teaching and learning of MPA students who are predominantly international and not proficient in English, so that both their technical and English skills are augmented. Commencing with a pilot study in the foundation subject in the first semester of 2007, the project will provide a structured, systematic focus on embedded literacy, based on collaboration between accounting academics and colleagues with expertise in linguistics and learning development. The resultant constructive learning environment will enhance students' learning experiences in the subject, course and University.

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Introduction

The number of international students who have enrolled in the Master of Professional Accounting (MPA) at the University of Wollongong (UOW) has risen significantly over recent years. In 2005 and 2006, over 90% of MPA students were full fee-paying international students, predominantly from China, who obtained visas to study this course in Australia. The students range in undergraduate backgrounds, financial and English competencies and learning styles and are "high maintenance" with respect to course and subject consultation.

The MPA offers graduates from non-accounting disciplines the opportunity to meet the admission requirements of the Australian accounting professional bodies and qualify as accountants. The course is accredited by CPA Australia and The Institute of Chartered Accountants in Australia (ICAA). The MPA consists of twelve subjects which can be taken over one and a half or two years on a full time basis (or part time equivalent). Entry into the course has been offered for the past four years, and enrolments have risen considerably during this time. In 2005 the MPA represented 24 percent (180/740) equivalent full time student units (EFTSU) of the School of Accounting and Finance (SAF). Between 2004 to 2005 the MPA has grown by 93 EFTSU which represented almost 100 percent of the Faculty of Commerce's growth

in students during that time. Therefore, its continued success has an important resources impact on the School, the Faculty and the University.

Analysis of results for the foundation subject, Accounting for Managers, has indicated that as a whole, these international students are less likely to withdraw and yet more likely to fail than domestic students. The former is due to visa requirements (SIA 2006), but the latter raises concerns as to whether the English language competency of these students is sufficient to ensure that they have a fair chance of success in their studies. Although English entry scores have been increased slightly, this effort alone may not be sufficient to overcome problems of English competencies, particularly in the light of the fact that IELTS is a generic proficiency based measure originally designed as immigration indicator, rather than a measure of embedded literacy.

Improving the quality of the MPA by undertaking an initiative to improve English language competencies would also increase the likelihood of graduates obtaining jobs, since English language deficiency has been recognised as a major contributor to unemployment (Miralles 2005;.RMIT 2006).

A pilot embedded literacy project is being undertaken in Accounting for Managers with the aim of a providing a structured, systematic focus on embedded English literacy, with the collaboration of colleagues expert in this field, in order to enhance the international student learning experience in MPA course, the faculty and the University.

The next section of the paper considers two areas of literature relevant to this project: research in relation to assisting the learning of international business students from and research on embedded literacy. The third section presents a brief background to the project and is followed by a description the UOW project. The paper concludes by considering the expected outcomes.

Relevant Literature

1. Assisting the Learning of International Students

There is very little research that specifically addresses the needs of international students studying accounting. It is thus necessary to draw upon research in related business subjects. This literature can be divided into three main streams: research that suggests that English language literacy is the main factor affecting academic performance; research that argues that cultural differences are the predominant factor, and research that places English literacy as only one of a number of factors affecting performance.

The body of literature attesting to the primary importance of cultural differences in the learning of international students challenges the typical stereotype of international students, in particular Chinese students, being less able than Australian students (Volet 1999; Watkins and Biggs 1996; Weiland and Nowak 1999). Although these researchers insist that culture is the primary factor affecting the academic success of these students, many of them propose specific improvements in English language literacy as being ways to help students achieve better results (see for example: Kirby, Woodhouse and Ma 1966; Tang 1996; Tang and Biggs 1996).

The second stream of research suggests that language is only one factor amongst many, with other issues being social difficulties, homesickness and culture shock. These results have been drawn from studying international students at Australian universities (Batorowicz 1999; Wicks 1996) and at American universities (Stoynoff 1997; Tompson and Tompson 1996).

The third division of the literature demonstrates that English language competency is the fundamental issue in academic success of international students (Gatfield, Barker and Graham 1999; Pearson 1999; Wajnryb 2000). Research in this area has consisted of surveys of international students, case studies and analyses of various courses, with all researchers coming to the same conclusion: that English literacy is the dominant problem faced by international students studying abroad.

Suggestions for developing English language competencies have been offered by researchers from each of these three groups. However, most of these strategies are proposed in isolation from any particular discipline area and are thus independent of the subject being studied. Conversely, other research, both academic and vocational, indicates that “embedding literacy and English language skills in contexts that position [students] to reap rewards for learning increases motivation and persistence and boosts outcomes in employment and earnings” (D’Amico 2003, p. 13).

2. Embedded Literacy

There is a very limited amount of academic literature in the area of embedded literacy with those studies that do exist often relating to the area of learning a second language (Wiedeman 1998; Kern and Schultz 2005) or to literacy provisions for adolescents (Ovens 2002; Wellinski 2002). However, the concept of embedded literacy has become popular in many vocational training programs (DEFS 2005; LSBU 2006; NCVET 2006).

A recent UK research report (NRDC 2005a) outlined seven case studies on embedded teaching and learning of adult literacy, language and numeracy (LLN) in various practical vocational courses. Although these related to trades as opposed to university education, the findings are still relevant. The first finding was that although “there is no one effective way of organising embedded learning” but that “directly linking LLN to a practical task ... is particularly effective” (NRDC 2005b). Another finding was that providing embedded skills allowed the learners to see that LLN was “an integral part of learning for the job that that they [were] aspiring to” (NRDC 2005b).

The importance of this is highlighted by Rogers (2005) who claimed that one of the reasons for the failure of many literacy programs was that the kind of literacy training offered was “not regarded as relevant to the vocational training” because many used “a standardised school-type learning programme” (Rogers 2005, p. 1). He suggested that the most useful literacies are those embedded within the form of occupation because trainees “see this learning as immediately relevant to their own set purpose” (Rogers 2005, p. 3). Similarly, participants at the 2002 International Seminar on Literacy and Livelihoods in the Urban Contexts suggested that it is necessary to “embark on a context-specific, situated or embedded literacy in adult education programmes” (Kumar 2002).

Although concept of embedded literacy has been embraced, there have been relatively few attempts to actually define what it is. Shrubshall and Roberts (2005) suggest that there are two ways of thinking about embedding literacy: as situated literacies and as transportable literacies. They define situated literacies as those which are bound up with particular practices while transportable literacies are transported from the texts in which they are embedded to other contexts and practices. As a result of their study of classroom situations, Shrubshall and Roberts concluded that situated and transportable literacies are combined by the way in which “both literacy and subject expertise reside in the practices of a ... teacher who specialises in teaching ... distinctive courses” and that “the teacher’s expertise is central to the nature of literacy in the classroom” (Shrubshall and Roberts 2005, p. 46). Consequently, the best imparter of embedded literacies is “someone who uses these literacies regularly” (Rogers 2005, p. 4) and thus is able to embed both the learning of literacy and the specialist skills or knowledge required by the learner. To this end, the teacher becomes the facilitator of the student’s learning and provides meaningful contexts in which the student’s literacy growth is fostered (Justice and Kaderavek 2004).

The question then arises of the strategies that can be used to embed literacies within a curriculum. Pirrone (1998) studied classrooms in which computer technologies were introduced in order to facilitate student literacy. She concluded that the technology was more than the provision of computers and computer-based information. Rather, it was an integral part of the learning context and needed to be used in an intentional and generative manner. She argued that if technology was used appropriately, it would effect a change in embedded literacy practices.

Boxie (1999) also investigated technology in the learning environment by focussing on how the use of embedded literacy strategies in online activities could create enriched learning environments. After gathering data through interviews, observations, documents and assessment items, she concluded that students’ engagement increased when they saw the outcomes as valuable and that their skills in reading and writing improved as they were able to “conceptualize literacy strategies within the on-line activities” (Boxie, 1999, p. vi).

Background to the project

In 2002, the Department of Accounting and Finance at Macquarie University (MU) began a collaborative program with the National Centre for English Language Teaching and Research (NCLTR) to focus on developing oral and written skills in Master of Accounting, in addition to the generic professional skills (Dale and Lubbers 2005; Tindale, Evans, Cable and Mead 2006). As the first project of its type, this evoked considerable interest amongst UOW academics involved in the MPA, who invited Lubbers, Dale and Tindale to present a workshop in May 2006 outlining their project.

Building on this workshop, the UOW academics have begun developing their own collaborative project to embed English literacy in key accounting subjects in the MPA. The project team involves accounting academics from the SAF together with colleagues with expertise in Linguistics from the Faculty of Education, academics from Learning Development (LD), the Centre for Educational Development and Interactive Resources (CEDIR) and the UOW Library.

The UOW Project

1. Objectives

The UOW project has three primary objectives. First, it aims to improve the teaching and learning of MPA students who are predominantly international and not proficient in English, so that both their technical and English skills are augmented. The second goal is to provide a structured, systematic focus on English literacy, with the collaboration of colleagues expert in this field, and thus deliver a constructive learning environment for the students. Thirdly, the project is committed to being proactive in addressing a growing problem of our MPA graduates not being employable due to their limited English proficiency.

2. Description

The UOW project will develop a curriculum prototype for embedding English literacy which enhances learning in general as well as English literacy at an academic/professional level. It will assist in the understanding of the technical material and enable the critical evaluation of issues within the accounting discipline. Rather than adopt the adjunct workshop approach of MU, the UOW project will specifically focus on the challenge of using online teaching methods to facilitate these developments and thus provide an enriched learning environment by embedding literacy strategies within online activities.

The project will commence with a pilot development in ACCY901 Accounting for Managers, the foundation subject for students commencing the Master of Professional Accounting (MPA). Achievement of the expected outcomes will provide the basis for a multi-step adaptation involving the introduction of other embedded literacy elements across all twelve subjects in the MPA.

This initial project will involve the development of two specific online components consisting of online workshops and online formative assessment tasks. These will enable students to engage more actively with the subject material by providing a flexible learning environment to complement the face-to-face delivery mode in which students are currently being taught (and by which other MPA subjects are also taught).

Initial collaboration will be undertaken between the subject coordinator and LD colleagues to develop these two new online components with a view to embedding literacies alongside technical skills. These two online components will be first available in Autumn 2007 via the ACCY901 subject website using the WebCT Vista platform.

Given that this project is specifically aimed at improving quality outcomes, extending assessment strategies and providing the basis for further development of the whole MPA course, it will support the UOW Strategic Plan by applying a quality process in the “teaching programs and practices, including course development and assessment” (UOW, 2004, p. 11). In addition, it will enhance generic skills which “are highly

valued by the profession and employer groups” (CPA Australia and The Institute of Chartered Accountants in Australia, 2005, p. 13).

The inclusion of online components will provide students with more diversity in their study, help them to extend their knowledge in the discipline of accounting and also develop their ability to use computer-based activities to find, organise and transmit information, thus demonstrating that our graduates have “coherent and extensive knowledge in a discipline” (UOW, 2005, Graduate Attribute 2) and “a basic understanding of information literacy and specific skills in acquiring, organising and presenting information, particularly through computer based activity” (UOW, 2005, Graduate Attribute 7).

In addition, this project will provide evidence to indicate that UOW is undertaking ongoing development consistent with AUQA’s affirmation that UOW recognise :”the need to further develop systems to ensure that its graduate attributes are embedded in its curriculum, teaching and assessment practices” (AUQA, 2005, p. 20).

Measurement of Outcomes

It is anticipated that there will be three levels of outcomes: at the subject level, at the course level and at the institutional level. The last of these will promote collaborative research with other institutions and the professional bodies.

1. Subject-specific outcomes

a. New online components on WebCT Vista

The introduction of the two new online components into the teaching of ACCY901 in Autumn 2007 will consolidate and complement the current face-to-face delivery method. Since there is nothing of this kind included in any MPA subject (or indeed in any postgraduate accounting subject), these innovations will fill a gap by providing both re-enforcement of subject material and additional learning experiences. The extra support provided by these tools will be of particular importance given the high number of international students who benefit by the use of presentations in a variety of media.

b. Improved student satisfaction

Student satisfaction will be evaluated using the online survey tool in WebCT Vista. It is expected that student satisfaction to be increased due to

- the reinforcement of subject material by these additional two components;
- the opportunity for students to practise online and in their own time, thus increasing flexibility, especially for students who travel from Sydney to Wollongong to attend classes, and
- the fact that the new online assessment component will allow students to resubmit after increased learning, thus providing an opportunity for them to improve on their first attempt.

c. Improved student results

It is expected that results both in the final exam and overall will improve for the reasons listed above. This will be evaluated by considering a trend analysis of results over five consecutive sessions plus in-depth interviews with students to gauge their perceptions of the embedded literacy activities..

2. MPA Specific Outcomes

Following the successful introduction and review of these development in ACCY901, similar online initiatives will be extended into other MPA subjects, the particular innovations varying with the nature of the individual subjects. The second targeted subject will be ACCY902 Applied Financial Accounting..

3. Application for External Funding

It is anticipated that the successful completion of the pilot project will provide the basis for a collaborative application to the Carrick Institute for funding to extend this project to other MPA subjects and to disseminate what has been learnt to other institutions.

In addition, UOW plans to approach CPA Australia to participate in an ARC Linkage Grant to undertake further research in this area.

Conclusion

Over 90% of UOW MPA students are full fee-paying international students who range in undergraduate backgrounds, financial and English competencies and learning styles. Such a large international cohort raises concern whether the English language competency of these students is sufficient to ensure that they have a fair chance of success in their studies. The MPA Embedded Literacy Project will provide an environment in which to improve the teaching and learning of these students so that both their technical and English skills are augmented.

The project is a collaboration involving accounting academics, linguists and experts in learning development and interactive resources. It will commence with the introduction of embedded literacies within one subject, but this will be developed into a curriculum prototype for embedding English literacy within other accounting subjects.

Anticipate outcomes are improvements in the learning outcomes of the largely international cohort, dissemination of the results to the wider academic community and collaboration with other institutions and the professional bodies in extending this research further.

References

- Australian Universities Quality Agency (AUQA), 2006, *Report of an Audit of the University of Wollongong, February 2006*, AUQA Audit Report Number 35, Melbourne: Australian Universities Quality Agency.
- Batorowicz, K. (1999) "A Fair Go? The Problems and Needs of International and non-English Speaking Background Students in Australian Universities". *Youth Studies Australia*, 18(3): 37-70.
- Boxie, P.D. (1999), *Collaborators' Perceptions: The Construction, Implementation and Effectiveness of Literacy Strategies and Technology in Partnership Classrooms*, PhD Dissertation, Washington State University, Washington, USA.
- CPA Australia and The Institute of Chartered Accountants in Australia (2005), *Accreditation Guidelines for Universities 2005*, CPA Australia and The Institute of Chartered Accountants in Australia.
- D'Amico, D. (2003) "Embedded Literacy: Strengthening the Connection Between Work and Learning". Paper Commissioned for *Workplace Learning Conference Advancing Adult Work-Based Learning: Building a 21st Century Community of Practice*. 7-10 December 2003, Chicago.
- Dale, M. and Lubbers, S. (2005) "Who Says Ethics and Pragmatics Make Uncomfortable Bedfellows? How Australia can Take a Moral Position and Gain More International Students", *AEIC 2005 Conference Proceedings* [Online] Available: <http://www.idp.com/aiec/program/Lubbers%20&%20Dale.pdf#search=%22dale%20lubbers%20model%20discipline%22> [Accessed: 1 April 2006].
- Department for Education and Skills (DEFS) (2005) "Embedded Learning" in *Raising Standards: A Contextual Guide to Support Success in Literacy, Numeracy and ESOL Provision*, DEFS [Online] Available: <http://www.dfes.gov.uk/readwriteplus/raisingstandards/embeddedlearning/embeddedlearning/skillsforlife/> [Accessed: 10 September 2006].
- Gatfield, T.J., Barker, M, and Graham, P.G. (1999) "Measuring Student Quality Variables and the Implications for Management Practices in Higher Education Institutions: An Australian and international student perspective". *Journal of Higher Education Policy and Management*, 21(2): 239-252.
- Justice, L.M. and Kaderavek, J.N. (2004) "Embedded-Explicit Emergent Literacy Intervention I: Background and Description of Approach", *Language, Speech and Hearing Services in Schools*, 35(3): 201-211.
- Kern, R. and Schultz, J.M. (2005) "Beyond Orality: Investigating Literacy and the Literacy in Second and Foreign Language Instruction", *The Modern Languages Journal*, 89(3): 381-392.
- Kirby, J.R., Woodhouse, R.A. and Ma, Y. (1996) "Studying in a Second Language: The Experiences of Chinese Students in Canada". In Watkins, D.A. and Biggs, J.B. (Eds) *The Chinese Learner: Cultural, Psychological and Contextual Influences*. Melbourne: CERC and ACER, pp. 141-158.
- Kumar, A. (2002) *Urban Literacies and Livelihoods: A Summary Report on International Seminar December 11-13 2002*, Uppingham Seminars [Online]

- Available: <http://www.uppinghamseminars.org/delhi%20seminar%202002.htm> [Accessed: 10 September 2006].
- London South Bank University (LSBU) (2006) Training Programs, LSBU [Online] Available: <http://www.lsbu.ac.uk/lluplus/dyslexia/training.shtml> [Accessed: 10 September 2006].
- Miralles, J. (2005) *Enhancing refugee literacy and employability through community engagement*, National Centre for Vocational Education Research (NCVER) [Online] Available: <http://www.ncver.edu.au/students/projects/10364.html> [Accessed: 7 September 2006].
- National Centre for Vocational Education Research (NCVER) (2006) *Review of Research: Literacy and Numeracy in Vocational Education and Training*, NCVER [Online] Available: <http://www.ncver.edu.au/research/proj/nr9005e.htm> [Accessed: 10 September 2006].
- National Research and Development Centre for Adult Literacy and Numeracy (NRDC) (2005a) *Research Report: Embedded Teaching and Learning of Adult Literacy, Numeracy and ESOL: Seven Case Studies*, London: NRDC.
- National Research and Development Centre for Adult Literacy and Numeracy (NRDC) (2005b) *Research Summary: Embedded Teaching and Learning of Adult Literacy, Numeracy and ESOL: Seven Case Studies of Embedded Provision*, London: NRDC [Online] Available: www.nrdc.org.uk/uploads/documents/doc_732.pdf [Accessed: 7 September 2006].
- Ovens, C. (2002) *Literacy for Youth: What Counts as Success in Programs for Youth at Risk?* Adult Literacy and Numeracy Australian Research Consortium (ALNARC), Victoria University of Technology.
- Pearson, C. A. L. (1999) "Workshops as Stimulating Learning environments". In K. Martin, N. Stanley and N. Davison (Eds), *Teaching in the Disciplines/ Learning in Context*, Proceedings of the 8th Annual Teaching Learning Forum, The University of Western Australia, February 1999. Perth, pp. 310-316.
- Pirrone, J.A. (1998) *Theorizing a Place for Technology with a Classroom Dialectic: A Teacher-Research Investigation*, PhD Dissertation, The Pennsylvania State University, Pennsylvania, USA.
- RMIT (2006) *English Language Studies – Bachelor of Arts*, RMIT [Online] Available: <http://www.rmit.edu.au/browse/Study%20at%20RMIT%2FTypes%20of%20study%2FUndergraduate%20Programs%2F;ID=BP186;STATUS=A> [Accessed 7 September 2006].
- Rogers, A. (2005) "Literacy and Productive Skills Training: Embedded Literacies", *Adult Education and Development*, 65, Online Journal, Available: <http://www.iiz-dvv.de/englisch/> [Accessed: 10 September 2006].
- Shrubshall, P. and Roberts, P. (2005) "Embodying Literacy: Complementary Therapy and Personal Care Classes". In National Research and Development Centre for Adult Literacy and Numeracy (NRDC) *Research Report: Embedded Teaching and Learning of Adult Literacy, Numeracy and ESOL: Seven Case Studies*, London: NRDC, pp. 39-47.

- Stoynoff, S. (1997) "Factors Associated with International Student's Academic Achievement. *Journal of Instructional Psychology*, 24 (1): 56-68.
- Study in Australia (SIA) (2006) *Student Visa Requirements*, Study in Australia [Online] Available: <http://studyinaustralia.gov.au/Sia/en/WhatToStudy/howtoapply/visarequirements.htm> [Accessed 7 September 2006].
- Tang, C. (1996) "Collaborative Learning: The Latent Dimension in Chinese Students' Learning". In Watkins, D.A. and Biggs, J.B. (Eds) *The Chinese Learner: Cultural, Psychological and Contextual Influences*. Melbourne: CERC and ACER, pp. 197-203.
- Tang, C. and Biggs, J.B. (1996) "How Hong Kong Students Cope with Assessment". In Watkins, D.A. and Biggs, J.B. (Eds) *The Chinese Learner: Cultural, Psychological and Contextual Influences*. Melbourne: CERC and ACER, pp. 159-182.
- Tindale, J., Evans, E., Cable, D. and Mead, S. (2006) "Technical and Communication Skills: Can They Both be Accommodated in a Postgraduate Program Preparing Graduates for the Professional Accounting Workplace?" *Proceedings of the Asia Accounting Academic Association 7th Annual Conference*, Sydney, Australia: Macquarie University, CD Rom.
- Tompson, H. and Tompson, G. (1996) "Confronting Diversity Issues in the Classroom with Strategies to Improve Satisfaction and Retention of International Students". *Journal of Education for Business*, 72(1): 53-57.
- University of Wollongong (UOW) (2005) "Attributes of a UOW Graduate". [online] available: http://www.uow.edu.au/about/teaching/graduate_attributes.html [accessed: 8 March 2006]
- University of Wollongong (UOW) (2004) "The University of Wollongong's Strategic Plan 2005-2007: Goals and Strategies 2002-2005". [online] October 2004, [accessed: 10 April 2006], available: <http://www.uow.edu.au/about/stratplan/university.pdf>
- Volet, S. (1999) "Learning Across Cultures: Appropriateness of Knowledge Transfer". *International Journal of Educational Research*, 31(7): 625-643.
- Wajnryb, R. (2000) *Report of the English language services (ELS) scoping project*. Lara Consultancy for the Division of Education, Arts and Social Sciences, University of South Australia.
- Watkins, D.A. and Biggs, J.B. (1996) *The Chinese Learner: Cultural, Psychological and Contextual Influences*. Melbourne: CERC and ACER.
- Weiland, R. and Nowak, R. (1999) "Academic Preparation Programs: A Schema Approach to Learning in Context". In K. Martin, N. Stanley and N. Davison (Eds), *Teaching in the Disciplines/ Learning in Context*, pp. 467-473. Proceedings of the 8th Annual Teaching Learning Forum, The University of Western Australia, February 1999. Perth:
- Wellinski, S.A. (2002) *Career Education as Literary Apprenticeship: A Case Study of Literacy Events*. Ph.D. Dissertation, Purdue University, Indiana, USA.

Wicks, R. (1996) "Effects of English Language Proficiency on the Academic Performance of International Students: A US Study". *Distance Education*, 17(1): 196-204.

Wiedeman, C.R. (1998) *Negotiating Language in Interaction in a Community of Learners: Re-conceptualizing the role of bilingualism in literacy learning and second language development*. Ph.D. Dissertation, University of California, Los Angeles, USA.