Journal of Academic Language & Learning Vol. 5, No. 2, 2011, A1-A13. ISSN 1835-5196



Embedding academic literacy – A case study in Business at UTS:Insearch

Susan Brooman-Jones, Greg Cunningham and Laura Hanna

UTS:Insearch, Level 4, 187 Thomas Street, Sydney, NSW 2000, Australia

Email: susan.broomanjones@insearch.edu.au, greg.cunningham@insearch.edu.au and laura.hanna@insearch.edu.au

David N Wilson

UTS:Insearch, Level 4, 187 Thomas Street, Sydney, NSW 2000, Australia and Adjunct Professor, Faculty of Information Sciences and Engineering, University of Canberra, University Drive, Bruce, ACT 2617

Email: david.wilson@insearch.edu.au

(Received 17 March 2011; Published online 28 November 2011)

Academic literacy has become an important issue in Australian higher education as the number of international students has grown. To be academically successful, international students, and for that matter domestic students, require a range of academic literacy skills which are most effectively acquired if they are integrated and embedded within specific disciplinary contexts. This paper presents a case study of embedding academic literacy in subjects in a business diploma, where the embedding involves implementing integrated and shared assessment between an academic literacy subject and two discipline subjects. As well as reporting the outcomes and benefits of this approach, the paper proposes that this integration of assessment extends Dudley-Evans' (2001) levels of collaborative approach to a fourth level, integrated assessment.

Key Words: embedded academic literacy, integrated academic literacy assessment.

1. Introduction

Academic literacy, "the ability of students to use the English language to make and communicate meaning in spoken and written contexts while completing their university studies" (Department of Education, Employment and Workplace Relations [DEEWR], 2009, p. 1) has become an important issue in Australian higher education as the number of international students enrolled in undergraduate and postgraduate courses has grown, with many seeking permanent residency in Australia to meet skill shortages in the Australian workforce. The DEEWR (2009, p. 2) report also emphasises that "for the retention and academic success of international students in Australian universities, a range of skills and strategies (in particular, written and oral communication) need to be made visible, explicit, and accessible and, importantly, integrated within specific disciplinary contexts" (emphasis added).

The numbers of international students enrolled in Australian universities has been on an upward trend for a number of years (Australian Education International [AEI], 2009), with international students comprising up to 35% of enrolments in some universities (Dunworth & Briguglio, 2010). As the numbers have increased, concerns that the academic literacy proficiency levels of international students are not adequate to deal with the demands of tertiary study have been expressed (Bretag, 2007; Coley, 1999; Sawir, 2005). However, international students are not the

only targets of academic literacy programs, with domestic student enrolments including significant numbers of students from Non-English Speaking Backgrounds (NESB), students who are mature age learners, and students from non-traditional educational backgrounds (Dunworth & Briguglio, 2010). Also, a significant number of students now enter Australian universities through recognised pathway programs (Barthel, 2008b) where academic and English language (IELTS) entry requirements are likely to be less than that for direct entry to university. All these groups are likely to benefit from additional assistance in their use of language to support their discipline studies and learning. There is then strong concern regarding the English language proficiency and the academic performance of both international and some domestic students entering university immediately after completing Australian secondary schooling, vocational education and training courses, and/or pathway programs.

UTS:Insearch is a higher education provider of pathway diplomas that essentially cover first year university studies as a pathway to university for students who are not offered a university place direct from school. Entry is based on high school academic performance and, for international students, English language performance (normally IELTS). As a pathway provider, UTS:Insearch is committed to ensuring that students transferring to university are well prepared for tertiary study. In 2010, the IELTS requirements for entry to the Diploma of Business (DipBus) have been increased to 6.0 (standard program) and 6.5 (accelerated program). Both versions of the DipBus have a compulsory academic literacy subject, BABC001 Academic and Business Communication, that has implemented integrated assessment with two discipline subjects, BACC001 Accounting for Business and BECO001 Economics for Business 1. In the remainder of the paper, the subjects will be referred to as *Communication*, *Accounting* and *Economics*, respectively. This paper reports on the experience of implementing this integrated assessment in Semester 2, 2010.

2. Embedding academic literacy

DEEWR's (2009, pp. 8-9) Sixth Good Practice Principle states: "Development of English language proficiency is integrated with curriculum design, assessment practices and course delivery through a variety of methods". The advice relating to meeting this principle suggests that the development of appropriate English language proficiency is more likely to occur when it is linked to discipline-specific academic activities and assessment tasks, as contextualisation within disciplines and integration of language development across the curriculum appear to be effective approaches. Barthel (2008a) also notes that the focus of academic literacy

has shifted from the provision of de-contextualised tuition in generic study skills, such as academic reading and essay writing, to language and literacy development integrated into the curriculum of the mainstream subjects students are studying for their degrees ... In an integrated approach, the literacy demands of the discipline become an explicit part of the subjects that students study. (p. 9)

Dudley-Evans (2001) defines three levels of collaborative approach that may be viewed as a relationship continuum:

• Level 1: Cooperation.

Academic literacy support is provided through independent adjunct classes that are largely generic and service students from many disciplines. Discipline academics tend "to refer students to learning support units rather than addressing students' academic learning skills themselves" (Tapper & Gruba, 2000, p. 56). The academic literacy support is regarded as remedial (Chanock, 2007) and often only the more enthusiastic students choose to attend.

• Level 2: Collaboration.

Academic literacy support is provided through independent adjunct classes that are tailored to specific requirements developed through cooperation between discipline and academic literacy staff. The support classes run concurrently with the discipline classes.

• Level 3: Team Teaching.

Academic literacy support is embedded in the discipline subject such that discipline and academic literacy staff co-teach in the same space. Academic literacy cannot be separated from discipline/subject content and a built-in or embedded approach where learning is developed through the discipline/subject teaching should be adopted (Wingate, 2006).

Separate academic literacy support (Levels 1 and 2) is argued to be an ineffective way to enhance student learning (Wingate, 2006), while embedded approaches can be immediately applied to specific subjects and courses (Tinto & Pusser, 2006). There is increasing support in the literature for embedded approaches (Andrade, 2006; Barrie & Jones, 1999; Bonanno & Jones, 1996; Crosling & Wilson, 2005; Johns, 1997; Skillen, Merten, Trivett, & Percy, 1998) and the benefits have been documented (Cochrane, 2006; Hattie, Biggs, & Purdie, 1996; Tinto & Pusser, 2006). There are also suggestions that embedded approaches can engender higher pass marks and greater retention (Bordonaro, 2008; Hammill, 2007; Huerta & McMillan, 2004).

Barthel (2008a) provides examples of successful embedded approaches, but cautions that they can be costly and complex. This may explain why, although the responses from universities (DEEWR, 2009) reported instances of embedded approaches within particular courses across a wide range of discipline areas, in general the development of embedded approaches appears to be limited and exhibits a lack of a systematic approach for embedded academic literacy support across universities. In summary, the DEEWR Final Report (2009) concluded that, although there were individual examples of embedded programs, only a few universities have explicitly espoused an integrated institution-wide approach.

Many of the examples of embedded approaches feature shared (discipline and academic literacy staff) sessions in the discipline subject schedule. This is not the model adopted by UTS:Insearch and reported here. Rather, the embedding involves implementing integrated and shared assessment between an academic literacy subject (*Communication*) and two discipline subjects (*Accounting* and *Economics*). Hence the claim proposed in this paper that this embedding, the integration of assessment, does not meet any of the three levels of collaborative approach defined by Dudley-Evans (2001) and does in fact describe a new fourth level, a level that we term "integrated assessment".

3. Case study: Overview

The Diploma of Business (DipBus) is offered as a two semester (accelerated) or three semester (standard) program. Both cohorts of students undertake three subjects in common during their first semester:

- BABC001 Academic and Business Communication (Communication)
 - This subject provides an understanding of the literacy requirements of academic business environments. It examines the principles and practice of communication in undergraduate and professional business environments through an integrated approach that supports the learning of skills across disciplines. Students have opportunities to practise and engage with the language and study skills required for undergraduate and further study in business and develop an appreciation of the communication requirements of business professionals.
- BACC001 Accounting for Business (*Accounting*)

 This subject equips students with the broad and basic knowledge and skills to deal with accounting information systems in the business environment and is also a foundation for further study in accounting.
- BECO001 Economics for Business 1 (Economics)
 - This subject introduces students to the basic concepts, theories and principles of economics, as well as their application to business decision making and strategic behaviour. It provides students with the opportunity to understand the broad economic contexts in which business operates, as well as topical economic issues presented in the financial and business media

The academic literacy learning objectives are embedded by developing shared assignments between *Communication* and *Accounting* and between *Communication* and *Economics*.

4. Case study: Description

A course-wide approach utilising integrated, assessable literacy outcomes across a program of study has been shown to provide a foundation for embedding academic literacy (Devereux & Wilson, 2008; Sin, Jones, & Petocz, 2007; Skinner & Mort, 2009). The aim in the DipBus was to scaffold academic literacy learning through an integrated approach to literacy outcomes across three of the core subjects. This involved a collaborative, team approach to the development of course materials such that the initial discussions between subject coordinators could focus on embedding discipline relevant literacy in the key learning outcomes of each subject. As a result, academic literacy outcomes were made clear and assessable in the discipline subjects, as well as in *Communication*, the academic literacy subject.

These initial discussions determined that the literacy outcomes would be embedded through a team approach to teaching and preparation for correlated assessment tasks. The assessment tasks were then designed to support and link learning activities and material across the three subjects. *Communication*, as the academic literacy subject, was to be the focal point, designed to connect to assessment undertaken in both *Accounting* and *Economics*. Therefore, in addition to developing students' language and academic literacy skills, such as paraphrasing and referencing, a key objective of *Communication* was to facilitate the transition of learning from one subject to another, and directly support learning in the discipline subjects being studied concurrently. Authentic discipline-specific material would be used as the basis of literacy-focused activities in *Communication*. The material would then form the basis of assessment tasks undertaken in both *Communication* and the discipline subjects.

Using the assessment as the point of integration also provided specific learning opportunities focused on academic literacies. The purpose and intended outcomes of assessment in higher education can be contentious and problematic for students. Assessment in a tertiary context is often where students struggle to understand what they are "expected to produce in order to successfully accomplish the requirements associated with tertiary learning" (Saltmarsh & Saltmarsh, 2008, p. 623). This production requires students to demonstrate their ability to understand the academic literacies, or "social practices embedded in context" (Jacobs 2005, p. 475), of the discipline as well as the content. The focus on developing links between the assessment undertaken in the discipline subjects and the learning in *Communication* meant the students would be given the opportunity to deconstruct and explicitly engage with the requirements of assessment in the discipline subjects as part of their activities in *Communication*, thereby clarifying discipline-specific expectations of assessment and making it a "vehicle that might guide the development of academic literacies and learning cultures" (Saltmarsh & Saltmarsh, 2008, p. 624).

While the benefits associated with integrated assessment are numerous, linking the assessment tasks across subjects posed several challenges as well. In particular, while the assessment tasks for *Communication* were to be integrated with *Accounting* and *Economics*, the subject itself needed to be independent and self-contained with its own assessable, academic literacy-focused learning objectives. The material included in the course needed to facilitate students' achievement of the desired literacy outcomes, and initiate the transferral of this learning to other subject areas. Moreover, the assessment tasks, while integrated, had to assess the desired objectives in each subject independently. These challenges were to be addressed primarily through clear communication of the assessment expectations for each assessment task. This element of the integration of assessment tasks will be discussed in further detail below.

4.1. Accounting

The general perception among students, and people in general, is that accounting is about numbers; accordingly, accounting is a popular choice among students who prefer to work with

numbers, and who like concrete answers to questions. However, accounting is also a process of communicating to decision makers (Horngren, Harrison, Best, Fraser, & Willett, 2010, p. 1), and communication is therefore an important skill in the profession – the lack of written communication skills often leads to students failing accounting subjects in business degree programs. Similarly, employers comment that new graduate hires do not know how to prepare professional looking documents for clients, and how some staff, although technically well equipped, would not be promoted due to their poor writing skills.

Foundation accounting subjects such as *Accounting* can too easily focus only on the technical skills required of accountants. There are clear rules of accounting, which can be practised and remembered, and homework exercises have "correct" answers. However, there are also complex issues to consider, and strong communication skills are required to communicate effectively the results of complex analyses. Embedding academic literacy through joint assessments in *Communication* and *Accounting* provides additional support to students studying accounting at UTS:Insearch – students have the opportunity not only to consider accounting issues, but also to receive support and feedback on their written communication skills.

4.2. Economics

Economics is concerned with current and topical real world issues and this is especially so when dealing with economic issues within a business context. *Economics* focuses on the basic concepts and theories of economics and their application to the business decision-making process. Through the structure of lectures and assessment tasks, *Economics* attempts to convey not only a basic understanding of the relevant theoretical economic concepts, but also comprehension and communication skills that can be used at a practical level on graduation to the business community.

Within *Economics*, students are encouraged to make themselves aware of current economic issues and consider their implications for business. This is done by undertaking case study analyses of real life events and drawing out the business and economic consequences. The processes and assessment tools used in these case study analyses are skills that can be applied to a critical reading of media and other reports in any field, not just economics; however, there is obviously a focus on economic issues and their impact on business decisions is obvious.

As an economist or manager in a business situation, graduates will find themselves required to analyse possible effects of legislation or regulatory laws on the economics of their own organisation. *Economics* attempts to take students beyond the basic understanding of economic theory by applying it in a business context.

The importance of written and oral communication is frequently forgotten in the increasingly complex world of business. The case study assessments focus on building the skills of critical reading of mainstream media reports, drawing out any relevant economic theory, and applying this theoretical knowledge to analyse a particular business context. Students are then required to clearly and confidently present their analysis and ideas in both written and oral formats.

4.3. Communication

Communication aims to develop students' academic and discipline literacy. The course focuses on activities that allow students to engage with business and academic content, and produce written texts and oral presentations for academic audiences. The material used in Communication is sourced from subject content related to Accounting and Economics. In Communication students are given the opportunity to deconstruct and critically analyse academic business texts, as well as to participate in discussions about concepts relevant to their studies in accounting and economics. The Communication tutor guides students through the process of analysing resources, synthesising ideas, and then the development and production of written and oral forms of academic communication.

In order to link to both accounting and economics, *Communication* was effectively divided into two. It was decided that the material related to accounting would be covered during the first

eight weeks; as a result, the first assessment task for *Accounting* would link to the first two assessment tasks in *Communication*. Then the final four weeks would focus on material from economics and the third assessment task for *Communication* would support the major written assessment task for *Economics*, due at the end of semester.

4.4. Communication and Accounting

Communication has been linked to Accounting through joint use of resource materials and correlated assessment tasks focused on one area of accounting. The area of focus, sustainability reporting, was chosen in consultation with the Accounting subject coordinator. The first assessment for Accounting required students to investigate and report on information and data about an Australian company. For this task each student was given a different company with which they were required to become familiar by investigating the company's financial information and annual report. As one element of this assessment task students were required to answer questions related to the company's sustainability report. This element of the Accounting assessment task was then supported through activities and assessment tasks completed for Communication.

To develop students' understanding of sustainability reporting, *Communication* initially focused on locating, evaluating and finding relevant information in appropriate resources. Students engaged with professional and academic texts to develop their understanding of sustainability reporting and its relevance to accounting. The first assessment task for *Communication* required students to demonstrate their ability to examine and evaluate an academic resource on this topic. The initial activities in *Communication* were designed to develop students' academic literacy skills by providing them with the opportunity to read and evaluate resources on the topic of sustainability reporting (jointly assessed in *Accounting* and *Communication*). In addition to developing students' understanding of the topic, the activities in *Communication* also focused on deconstructing the *Accounting* assignment questions and discussing expectations and planning answers.

The Australian company allocated to each student for their *Accounting* assessment task also formed a link between *Accounting* and *Communication* assessment tasks, as the company the student investigated for the first *Accounting* assessment task then became the central focus of the *Communication* major report. The major report for *Communication* was due in week nine and required students to apply their understanding of sustainability reporting, gained through the initial *Communication* workshops, to their knowledge of their company's sustainability report, gained through their first *Accounting* assessment task. The *Communication* report was the culmination of learning in both subjects. The activities in the *Communication* workshops leading up to the final report focused on getting students to apply an analytical approach to planning and developing an academic report.

The marking criteria for the assignments in both subjects were structured in a similar format. The first assessment tasks for both *Communication* and *Accounting* were evaluated based on the content, organisation of the answer, and language and mechanics. The marking criteria were examined in the *Communication* workshops and the expectations were discussed. This format was then followed through to the *Communication* report. This gave further consistency across both subjects, and reinforced the link.

4.5. Communication and Economics

From week nine the focus of the material in *Communication* shifted from accounting to economics. The final four weeks of the course were based on material designed to support students as they prepared their *Economics* report. This report required students to apply their understanding of economic theory to a current case study. It was decided that the case studies would provide the link between *Communication* and *Economics*. The same case study would be considered and analysed in both subjects. For *Communication*, students would prepare and deliver a group presentation analysing and explaining the situation in their case study. They

would then use this understanding to write up an individual report on the case study for *Economics*.

The use of common material for both *Communication* and *Economics* presented some issues for teaching and assessment. The cases were chosen by the Economics subject coordinator, but they were distributed in the Communication workshop by the Communication tutor. The main challenge was that the *Communication* tutor was not necessarily familiar with economic theory, and the information related to the relevant economic theories was not covered in the Communication workshops. The economic theory was to be discussed and taught in Economics, the case analysis was to be done in *Communication*. As a result, the group-based activities in Communication were designed to allow the students to adopt the role of the "authority" and assume ownership of their learning (an overview of the case was provided to the Communication tutor for the tutor's information). The Communication tutor would take the role of facilitator, guiding students through the critical thinking process, questioning and pointing out connections and problems in their case analysis, but letting the students bring their own learning from *Economics* to the activities. *Communication* was to act as a link to *Economics*, allowing students to develop their understanding of the case and discuss their understanding of the relevant economic theories in a peer-learning context prior to writing their major *Economics* report.

To accommodate the different use of material, the assessment requirements in each subject needed to be made clear. In *Communication*, students were to be assessed on how effectively they worked together as a group, how coherent their presentation was, and how effective their individual oral presentation skills were. In contrast, in *Economics*, students would be assessed on their understanding of the relevant economic theories, their ability to apply this understanding to the case study, and their ability to present it as a cohesive report. To further reinforce the link, the *Economics* report structure and expectations regarding language mechanics were to be the same as those for the *Communication* report. The timing of the two reports was such that the students would receive feedback on the report they submitted for *Communication* before handing in the *Economics* report. This feedback would be directly focused on areas to improve for the *Economics* report.

A further important feedback mechanism was that provided by other students. As students were familiar with the *Economics* material, they provided additional peer feedback on presentations in their adopted role of "authority" in the learning process.

5. Case Study: Feedback and Reflection

5.1. Academic Staff Perspective

Communication has supported students in achieving the learning outcomes in both the discipline subjects. By using the same subject material for assignments, students were given an opportunity to analyse discipline issues in more depth. This also gave students an opportunity to develop their written communication skills in accounting and economics contexts. This support is valuable for students in their ongoing discipline studies, particularly when academics may not have the ability or time to give detailed feedback to students regarding their writing. The link between these subjects gives students valuable feedback from experienced academic literacy teachers.

A challenge presented by the integrated assessment approach has been the continual collaboration it requires of the coordinators involved. Clear communication of tasks and expectations is essential if the overall aim of embedding literacy is to be achieved. A vital ingredient to the success of this approach is the provision of an academic literacy coordinator dedicated to the business program. This has made the transfer of ideas and material between the subjects a priority. Close proximity in the office encourages close working relationships and regular conversations.

5.2. Student Perspective

Of the 82 students enrolled in the three subjects, 79 (96.3%) responded to a survey regarding their opinions of the integrated and embedded assessment (a copy of the questionnaire is included as Appendix A). The respondents were very positive (responding "agree" or "tend to agree" on a 5 point Likert scale) about the value of the integrated assessment – the responses to the five questions in Section A of the questionnaire are shown in Table 1.

Table 1. Value of integrated assessment – survey of participating students.

Survey Questions	% Respondents Positive
It was beneficial to have common material used in the assessment tasks for the three subjects	86%
Writing the <i>Communication</i> report on the company used for the first assessment task in <i>Accounting</i> helped me develop a better understanding of the importance of effective communication in accounting	76%
Studying report writing and writing a report in <i>Communication</i> prepared me for writing my <i>Economics</i> report	85%
Presenting on the economics case study in my <i>Communication</i> class before writing the individual report for <i>Economics</i> improved my understanding of the case	82%
Using common material in the three subjects has helped develop my understanding of effective communication within business	86%

Qualitative comments regarding the benefits included:

- Saves time.
- It is helpful for understanding *Accounting* and *Economics*.
- Made me think about the relationship between *Business Communication*, *Accounting* and *Economics*.
- It made me pay more attention in both subjects.
- Extended time and work on a topic gave me better understanding.

Qualitative comments regarding the challenges included:

- Putting it all together.
- Needs clearer communication.
- Difficult to find what is useful.
- Hard to get clear picture.

The comments provided by students with regard to the benefits of using common material are very encouraging. Students' comments overall were positive and demonstrated that the use of common subject material and linked assessment tasks can assist students in developing academic literacy skills in the context of their discipline subjects. A key objective for *Communication* was to assist students in transferring academic literacy skills from the communication-based subject to their discipline subjects. All too often students compartmentalise learning and see their learning in an academic literacy subject as only applicable to that subject. Successful embedding of literacy in a program of study should be effective in overcoming this challenge.

While the feedback from the Semester 2, 2010 cohort was largely positive, the qualitative comments made about the challenges provide a good starting point for reflection on how to

develop *Communication*. Communication of expectations has been highlighted as a challenge associated with this approach. Initial implementation has required collaboration and communication between the different subject coordinators. This collaboration and communication has to also be developed and implemented within and across the different tutors teaching *Communication*, *Economics* and *Accounting* if the expectations and links between the subjects are to be clearly understood by students. This is one area of the approach that will need to be enhanced as the program continues.

6. Extending the "levels of collaboration"

As discussed in Section 2, Dudley-Evans (2001) defines three levels of collaborative approach. The integration of assessment described here does not meet any one of these levels. The collaboration between the academic literacy and discipline subject coordinators is clearly at a level beyond the independent adjunct classes that are characteristic of Levels 1 and 2. Also, the discipline and academic literacy staff do not co-teach in the same space, so the team teaching described at Level 3 does not sufficiently define the collaboration.

What differentiates the approach described here is that the embedding involves implementing integrated and shared assessment between an academic literacy subject and two discipline subjects (although importantly, while there is a high level of integration between the three subjects, each remains an independent subject which can be studied separately). This really describes a fourth level, a level we shall term "integrated assessment":

• Level 4: Integrated Assessment.

Academic literacy support is embedded in the discipline subject(s) through integrated assessment such that students undertake joint discipline and academic literacy assignments that link the academic literacy outcomes with the discipline outcomes and are co-assessed by staff.

The redesign and redevelopment of the DipBus in 2009 and 2010 afforded the opportunity to review our approach to academic literacy. Previous experience with separate, general academic literacy subjects across a range of diplomas (communication, design, engineering, IT, and science, as well as business) had illustrated that students tended to compartmentalise the learning and knowledge from separate subjects; the academic literacy subjects were on their study plan and had to be passed to complete the diploma, but students considered that they had little or nothing to do with their discipline subjects. The revised construct of the diplomas meant that each was to have its own specialised, contextual academic literacy subject. But what else could we do to tie the academic literacy outcomes to the discipline outcomes for the students?

The then recently published guide to good practice for English language proficiency (DEEWR, 2009) seemed to be a good starting point for inspiration, and quickly focused the development effort towards the notion of integrating or embedding the coverage of academic literacy in a discipline context. We expected such an approach to deliver improved academic success (Hattie, Biggs, & Purdie, 1996) and better student involvement and attainment (Tinto & Pusser, 2006), as well as enabling students to make interconnections and develop problem solving skills (Cochcrane, 2006). The work of Jones and Sin (Jones & Sin, 2003; Sin, Jones, & Petocz, 2007) was particularly relevant in its concerns with developing generic skills in a specific business context. Comparing this work with other examples of successful embedded approaches (Barthel, 2008a), led to the notion of the specific academic literacy demands of the discipline subjects driving the development of the academic literacy subject (Barthel, 2008a). It gradually became evident that the accounting and economics requirements were manifest in the assessment requirements which featured discipline specific texts. This led to the idea of developing joint discipline and academic literacy assignments. Many approaches involving joint instruction are complex, particularly in terms of timetabling and coordination, and therefore relatively expensive (Barthel, 2008a; DEEWR, 2009). We did not consider such approaches as practical, particularly as we wanted a solution that would be sustained as an ongoing program. Continued development produced a very effective model that achieves the objectives of embedding and involves collaboration and coordination, but is more practical in terms of program management – the overall process has been described above.

Academic literacy cannot be separated from discipline/subject content and students have the opportunity to deconstruct and explicitly engage with the requirements of assessment in the discipline subjects as part of their activities in an academic literacy subject. This is not Dudley-Evans' (2001) Level 1 (Cooperation), nor Level 2 (Collaboration), nor Level 3 (Team Teaching). The literature revealed no examples of similar integration of assessment and we concluded that Dudley-Evans' (2001) Level 3 described the existing end of the spectrum – our work appeared to have defined an extended fourth level of collaborative approach.

7. Conclusion

UTS:Insearch is committed to ensuring that students transferring to university are well prepared for tertiary study. To be academically successful, international students, and for that matter domestic students, require a range of academic literacy skills which are most effectively acquired if they are integrated and embedded within specific disciplinary contexts. In 2010, UTS:Insearch adopted an approach in the DipBus to scaffold academic literacy through an integrated approach to academic literacy outcomes across three of the core subjects. This involved a collaborative, team approach to the development of course materials for those three subjects. This paper has presented the implementation and outcomes of this approach and reflected on their success.

What differentiates the approach described here is that the embedding involves implementing integrated and shared assessment between an academic literacy subject and two discipline subjects. This integration of assessment does not meet any of the three levels of collaborative approach defined by Dudley-Evans (2001). What is described is a fourth level, a level that we term "integrated assessment". This is the paper's contribution to knowledge and understanding of the field.

Appendix A. Student Survey

Section A: Use of common material

1. It was beneficial to have common material used in the assessment tasks for the three subjects (*Business Communication, Accounting and Economics*).

	Tend to		Tend to	
Agree	agree	Neutral	disagree	Disagree

2. Writing the *Business Communication* report on the company used for the first assessment task in *Accounting* helped me develop a better understanding of the importance of effective communication in accounting.

	Tend to		Tend to	
Agree	agree	Neutral	disagree	Disagree

3. Studying report writing and writing a report in *Business Communication* prepared me for writing my *Economics* report.

	Tend to		Tend to	
Agree		Neutral	disagree	Disagree

4. Presenting on the economics case study in my *Business Communication* class before writing the individual report for *Economics* improved my understanding of the case.

	Tend to		Tend to	
Agree		Neutral		Disagree

5. Using common material in the three subjects has helped develop my understanding of effective communication within business.

	Tend to		Tend to	
Agree	agree	Neutral	disagree	Disagree

Section B: Reponses to open questions

- Did you find it beneficial to use common material for the assessment tasks in *Business Communication* and *Economics* and *Accounting*? Explain.
- What did you find challenging about using common material for the assessment tasks in *Business Communication* and *Economics* and *Accounting*?

References

- Andrade, M. (2006). International students in English-speaking universities: Adjustment factors. *Journal of Research in International Education*, *5*(2), 131-154.
- Australian Education International [AEI] (2009). *Study in Australia 2010*. July update. Retrieved from

http://aei.gov.au/AEI/PublicationsAndResearch/ResearchPapers/Default.htm

- Barthel, A. (editor) (2008a). Association for Academic Language and Learning (AALL Inc.) submission to DEEWR 'Good Practice Principles for English Language Proficiency for international students in Australian universities' Project. Appendix 2, Final Project Report. Retrieved from
 - $\frac{http://www.deewr.gov.au/highereducation/publications/pages/goodpracticeprinciples.asp}{x}$
- Barthel, A. (2008b). Preparing for diversity: are universities ready? *AIEC2008*, 7–10 October. Brisbane Queensland. Retrieved from http://www.aiec.idp.com/pdf/Barthe %20Fri 1140 M2.pdf
- Barrie, S., & Jones, J. (1999). Integration of academic writing skills in curriculum: making them stick: a model for generic attributes curriculum development. In G. Rust (Ed.). *Proceedings of the 6th International Improving Student learning Symposium* (pp. 268-278). Brighton, UK.
- Bonanno, H., & Jones, J. (1996). Integrating lifelong learning skills into first year collaborative approaches to curriculum design. In *Proceedings for the Improving University Teaching Conference* (pp. 297-308). Nottingham Trent University.
- Bordonaro, K. (2008). Exploring the connections between information literacy and writing for international students. *Journal of Information Literacy*, 2(2), 1-17.
- Bretag, T. (2007). The emperor's new clothes: Yes there is a link between English language competence and academic standards. *People and Place*, 15(1), 13-21.

- Chanock, K. (2007). What academic language and learning advisers bring to the scholarship of teaching and learning: Problems and possibilities for dialogue with the disciplines. *Higher Education Research & Development*, 26(3), 269-280.
- Cochrane, C. (2006). Embedding information literacy in an undergraduate management degree: Lecturers' and students' perspectives. *Education for Information*, 24(2/3), 97-123.
- Coley, M. (1999). The English language entry requirements of Australian universities for students of non-English speaking background. *Higher Education Research and Development*, 18(1), 7-17.
- Crosling, G., & Wilson, A. (2005). Creating a rich environment: Cooperation between academic support and disciplinary teaching staff. In *Critiquing and Reflecting: LAS profession and practice, The Language and Academic Skills in Higher Education Conference*. Retrieved from http://www.aall.org.au/sites/default/files/las2005/Crosling_Wilson.pdf
- Department of Education, Employment and Workplace Relations [DEEWR] (2009). Good Practice Principles for English Language Proficiency for International Students in Australian Universities. Final Project Report. Retrieved from http://www.deewr.gov.au/highereducation/publications/pages/goodpracticeprinciples.asp
- Devereux, L., & Wilson, K. (2008). Scaffolding literacies across the Bachelor of Education program: An argument for a course-wide approach. *Asia-Pacific Journal of Teacher Education*, 36(2), 121-134.
- Dudley-Evans, T. (2001). Team-teaching in EAP: Changes and adaptations in the Birmingham approach. In M. Peacock, & J. Flowerdew (Eds.). *Research perspective on English for academic purposes* (pp. 225-238). Cambridge: Cambridge University Press.
- Dunworth, K., & Briguglio, C. (2010). Collaborating across boundaries: Developing a cross-departmental approach to English language development in an undergraduate business unit. *Journal of Academic Language & Learning*, 4(1), A13-A23.
- Hammill, J. (2007). Linking study skills courses and content: A joint venture between Student Services and Faculty of Health and Environmental Sciences. *Journal of the Australia and New Zealand Student Services Association*, 29, 3-20.
- Hattie, J., Biggs, J., & Purdie N. (1996). Effects of learning skills interventions on student learning: A meta-analysis. *Review of Educational Research*, 66(2), 99-126.
- Horngren, C. T., Harrison, W. T., Best, P. J., Fraser, D. J., & Willett, R. (2010). *Accounting* (6th ed.). Sydney: Pearson Education.
- Huerta, D., & McMillan, V. (2004). Reflections on collaborative teaching of science information literacy and science writing: Plans, processes and pratfalls. In W. Miller & R. M. Pellen (Eds.). Libraries within their institutions: Creative collaborations (pp. 19-28). Binghamton: Haworth Information Press.
- Jacobs, C. (2005). On being an insider on the outside: New spaces for integrating academic literacies. *Teaching in Higher Education*, 10(4), 474-487.
- Johns, A. (1997). *Text, role, and context: Developing academic literacies.* Cambridge: Cambridge University Press.
- Jones, A., & Sin, S. (2003). *Generic Skills in Accounting Competencies for Students and Graduates*. Sydney: Pearson Education Australia.
- Saltmarsh, D., & Saltmarsh, S. (2008). Has anyone read the reading? Using assessment to promote academic literacies and learning cultures. *Teaching in Higher Education*, 13(6), 621-632.
- Sawir, E. (2005). Language difficulties of international students in Australia: The effects of prior learning experience. *International Education Journal*, *6*(5), 567-580.
- Sin, S., Jones, A., & Petocz, P. (2007). Evaluating a method of integrating generic skills with accounting content based on a functional theory of meaning. *Accounting and Finance*, 47, 143-163.

- Skillen, J., Merten, M., Trivett, N., & Percy, A. (1998). The IDEALL approach to learning development: A model for fostering improved literacy and learning outcomes for students. In *Proceedings of the 1998 AARE Conference*. Melbourne: Swinburne University. Retrieved from http://www.aare.edu.au/98pap/ski98343.htm
- Skinner, I., & Mort, P. (2009). Embedding academic literacy support within the electrical engineering curriculum: A case study. *IEEE Transactions on Education*, *52*(4), 547-554.
- Tapper, J., & Gruba, P. (2000). Using a 'conference' model to teach communication skills in a communication across the curriculum program. *Language and Learning Across the Disciplines*, 4(1), 55-65.
- Tinto, V., & Pusser, B. (2006). *Moving from theory to action: Building a model of institutional action for student success*. Washington, DC: National Postsecondary Education Cooperative, Department of Education.
- Wingate, U. (2006). Doing away with 'study skills'. *Teaching in Higher Education*, 11(40), 457-469.