

Integrating First Year Education: Two Models

Fiona Henderson, Dana Chahal, Sepideh Fotovatian and Amanda Carr
Portfolio Language Literacy and Numeracy, Victoria University

Abstract

Victoria University identified a number of barriers to the uptake of Higher Education studies by all students but particularly low socio-economic status students. In line with Victoria University's mission and goals for social inclusion, Vocational Education and Higher Education courses which could be developed to provide more supported learning pathways for students were identified. Well developed pathways needed to address student language, literacy, numeracy and academic skills using a number of strategies as appropriate to the student cohort. Teaching and curriculum development teams formed to improve and/or build pathways within eleven courses. Two models are presented in this paper: the Diploma of Liberal Arts and the Bachelor of Education and the Diploma of Logistics and the Bachelor of Business.

Introduction

With the Australian government encouraging contestability between universities for student places, setting targets for underrepresented social groups, and focusing on workplace literacy and numeracy, meeting government requirements and addressing student needs comprehensively, efficiently and in an engaging manner has become imperative. Victoria University (VU) is a cross-sectoral university with approximately 30,000 students in the Vocational Education (VE) and Further Education (FE) sector and 20,000 students in Higher Education (HE) courses. The student body consists of large numbers of first-in-family to attend university, culturally and linguistically diverse backgrounds, international and local students, part-time, full time and mature age students.

Recognizing the unique opportunities that a cross-sectoral university offers, in 2010, VU developed the Integrated Education Program (IEP) which aims to combine its workforce, facilities and approaches to teaching and learning across sectors. The IEP will result in a number of new diplomas that align with the first year of bachelor degree courses and allow pathways into second year undergraduate programs. The IEP addresses the Australian Qualifications Framework bands 5-8 and aims to capture a larger share of the HE market; protect and grow the high level VE market; provide better support for high learning needs students; embed Language, Literacy and Numeracy (LLN) into curriculum; reduce attrition and increase transition capability and numbers; provide opportunities for international development in offshore programs; and demonstrate cross-sectoral improvements in financial margins. In July 2010 the VU education board endorsed the IEP and with it released strategic funding for its implementation.

Alongside the IEP, the university-wide LLN strategy was adopted which aims to integrate different cross-sectoral approaches to the provision of LLN support in the curriculum. While specific LLN approaches at both the VE/FE (FE for short) and HE levels have been developed based on established pedagogical and contextualized frameworks (see Background below), these approaches tend to be implemented in isolation. For example, HE academic

support usually comprises assessed units delivered concurrently with mainstream courses; contextualised LLN workshops delivered within or outside the regular timetable; resource, curriculum, and professional development; and student peer mentoring programs. At the VE/FE levels, a distinct set of approaches are adopted which includes team teaching; accredited preparatory courses; study labs; and electives imported into Foundation courses.

This paper discusses the teaching and curriculum development of two IEP diplomas: the Diploma of Arts—Education Studies which leads into the Bachelor of Education and the Diploma of Logistics which leads into the Bachelor of Business (Global Logistics and Transport). These diplomas represent two models of the integration of LLN support within the curriculum.

Background

Before outlining the models of LLN integration specific to the two diplomas, it is important to discuss the fundamental pedagogical notions underpinning the two models and on which the concept of the IEP is based.

Firstly, the teaching and learning scholarship demonstrates amply the critical link which exists between enhanced student engagement and academic success (e.g. Kuh, 2003; 2009). An effective curriculum therefore needs to be developed on effective ways of maintaining student engagement. Student engagement from a curriculum perspective is dependent on the quality and quantity of meaningful and contextualized educational activities. These may take the form of practical tasks, career related investigations, and active learning opportunities (Garraway, 2009). At the HE level, commonly adopted strategies for engaging teaching and learning include problem based learning, work based learning, and learning in the workplace (Victoria University, 2008). Effective curriculum development will also address student engagement by taking into account a range of factors affecting the student experience, such as student existing capabilities; past learning experiences; career-oriented educational needs; the range of environments in which learning may occur; various forms of delivery; and the entry level skills (Bovill, Morss, & Bulley, 2008).

A further complication, particularly in the area of LLN provision, is the ongoing tension within a curriculum between a focus on the discipline or content knowledge versus skill. Teaching academic skills and the delivery of LLN support has often been placed external to the discipline curriculum. The focus has invariably been the staging and scaffolding of student learning with an emphasis on the successful completion of assessment tasks (Victoria University, 2005) with strategies ranging from generic, decontextualised activities to more contextualised, collaborative learning activities. Enhancing the contextualized approach to academic skills support, Skillen, Merten, Percy and Trivett (1998) argue for an embedded model which integrates “tertiary [or academic] literacy instruction into subject curricula” and which is less remedial and more inclusive. Similarly, Biggs (2003) argues for participatory and student-centred learning as a successful approach for teaching and learning. He promotes a constructivist model that presents tasks that engage learners in actively constructing knowledge. This constructivist approach, with students’ learning needs as the primary focus, should develop the ability to use “generalised knowledge structures” (Lave & Wenger, 1991) further enabling students to actively construct new knowledge. Furthermore, the role of student-centred learning which is “just in time” and “just about me” has been emphasized (Kift, 2008). Biggs also highlights the role of assessment as a major driving force for learning.

More recently, Kift, Nelson and Clarke (2010) have drawn together what they consider as the various piecemeal approaches to curriculum development which have included optional extra activities and embedded, within curricula approaches to establish a transition pedagogy. Their approach builds on a study which examines retention programs in the USA and concludes that unsuccessful retention is correlated with a lack of institutional systemic and structural cohesion in their provision of peripheral activities and LLN support (Tinto 2009). The essential tenet of the transition pedagogy is that a whole-of-institution approach is needed with a purposefully designed curriculum by academic and professional teams which combines extra-curricular and within curricular approaches to maximise student engagement.

Finally, any implementation of new models such as LLN models ultimately requires a tool for measuring, evaluating and reporting on the degree of success of these models. One framework which has been considered at VU is the Australian Core Skills Framework (ACSF). This Australian government initiative addresses the capacity to re-skill and up-skill Australian adults limited by poor literacy and numeracy. It is “a tool which describes and measures English language, literacy and numeracy (LLN) skills wherever individuals work, learn and communicate” (DEEWR, 2008, foreword). While the ACSF is not being promoted as the only tool or method for capturing such information, it does build on the National Reporting System which since 1995 has been used to document the outcomes of LLN activity. The ACSF extends the responsibility for engaging with LLN from a domain of learning traditionally covered by vocational education and training (VET) qualifications into higher education. This is a challenge to be taken up by Australian universities but is being encouraged by new federal funding and targets which are an outcome of the Bradley (2008) report on directions for higher education to meet Australian workplace needs.

Model 1: Diploma of Liberal Arts and the Bachelor of Education first year combine to form Diploma of Arts – Education Studies

The Diploma for Arts—Education Studies (Dip Arts/Ed) is a one year Further Education (FE) course which is designed to transition incoming students into the second year of the Bachelor of Education (B Ed). It customises the existing VU accredited dual award Bachelor of Arts/Diploma of Liberal Arts so that it forms a stream with a specific focus on Education Studies. After the successful completion of the first year of the dual award, students can choose between multiple pathway options including continuing with the dual award or transferring into the second year of the B Ed (P-12). While the Dip Arts/Ed is designed to be equivalent to one year of study in the B Ed at VU, it is not a teacher-education program.

The goals of Dip Arts/Ed are:

- To provide a specific pathway from FE programs such as the Certificate IV in Liberal Arts into the B Ed
- To design a program that provides a high level of support for the development of literacy and numeracy capacity
- To provide a supported option for students making unsatisfactory progress in the B Ed who need to repeat compulsory first year B Ed subjects.

In September 2010, the process of developing the Dip Arts/Ed began with the formation of a coordinating team which consisted of the Dip Arts/Ed project manager, management staff from the School of Education, Victoria University College (VUC) and the Liberal Arts program. This team determined the structure of the new diploma as consisting of eight units, (worth 12 credit points each) and carried out curriculum mapping between the B Ed first year

units and the new Dip Arts/Ed structure. The mapped units comprise six foundational knowledge units: two first-year B Ed subjects, two elective B Ed subjects, and two compulsory FE units from the Diploma of Liberal Arts. Two additional FE units, one with a focus on Literacy and the other on Numeracy, were included as a means of integrating the university's Language Learning and Numeracy (LLN) support strategy. These FE units were envisaged to form the equivalents of two discontinued first year HE units (Literacy and Language; Inquiry for Mathematical Understanding) and to be delivered concurrently over two semesters (30 teaching weeks).

Following the above curriculum mapping stage, a VUC team was assigned to help develop the course content for the Literacy and Numeracy FE units. It consisted of two members working on the Literacy component (a FE Liberal Arts teacher and a HE academic skills lecturer) and their Numeracy counterparts. They collaborated with B Ed faculty members who advised on content and approaches which would complement the HE units and the overall aims of the B Ed. The current discussion focuses on the implementation and curriculum development of the Literacy component (entitled "Researching Literacies and Learning") and raises a number of issues which were encountered in the planning of the unit.

The work on "Researching Literacies and Learning" was marked by a systematic and extensive collaboration between members of the team. Central to this was the collaboration between the FE Liberal Arts teacher and HE academic skills lecturer on the one hand and the B Ed faculty members on the other in their development of course content and material. The process was enhanced by clear communication channels and regular consultations between the different stakeholders.

The model adopted for LLN support in this unit is an integrated model whereby language, literacy and academic skills form a fundamental part of the curriculum and assessment tasks. A major difficulty, however, was that content needed to be devised in which these skills would be embedded. A starting point was the content of the discontinued B Ed Literacy and Language HE unit. However, this solution was problematic since in Researching Literacies and Learning, the HE Education specialist content would not be taught by School of Education staff. This content issue was handled through consultation with B Ed staff, upon which it was agreed that the FE unit would implement a Praxis Inquiry¹ approach to research and learning rather than a strictly theory-based approach. Accordingly, whereas the mainstream B Ed course would introduce students to the field of learning and teaching, Researching Literacies and Learning would focus on Praxis Inquiry, reflective practice in academic literacy, working autonomously and collaboratively, and understanding multi-literacies in the community. The key knowledge areas would thus be centred on the Learner (whereby students enquire and reflect on self-learning; ethical and social learning; and learning through community engagement) while the key skills would include effective communication in oral and written modes through participation in an academic context; critical reading of central texts in the field including an understanding of main research methodologies in Praxis Inquiry; and contextual language development, appreciation and awareness.

While the emphasis on Praxis Inquiry controlled for content issues, it highlighted another potential complexity, namely the multiplicity of expertise required in the delivery of the unit.

¹ Praxis Inquiry Protocol empowers education practitioners to collaborate to become critically reflective, socially engaged professionals (Cherednichenko & Kruger, 2002).

The teacher of Researching Literacies and Learning not only needs to demonstrate expertise in teaching Literacy skills and significant knowledge of Education subject-matter, but is also required to assume a quasi-supervisory role: Since students are carrying out research projects (e.g. they need to develop their own research question, design and adopt an appropriate research methodology, and report on these academically), the teacher needs to supervise the students' research process and guide them on content to a certain extent. The challenge here becomes how the boundaries between content and skills knowledge are to be managed. Similarly, if students are to carry out Praxis Inquiry in schools or in the community, would student placements need to be organized and if so by whom? The preliminary solution adopted in Researching Literacies and Learning is to involve B Ed staff when specialization issues arise. However, questions of staffing and time constraints become fundamental here: how many teachers are needed to deliver the course? How is the workload divided, especially when teaching conditions for FE and HE staff are significantly different?

Another issue encountered in the planning of Researching Literacies and Learning was the demand of differing levels of support. Firstly, the Dip Arts/Ed proposes to support students with differing degrees of exposure to language, literacy and academic skills training. While students who enter through pathways such as the Certificate IV in Liberal Arts may display familiarity with these skills, those entering directly from secondary schooling or other pathways may have no or limited exposure. In other words, from the outset, different support levels may be required for incoming students to successfully complete the unit. As such, early analysis of student needs (possibly through diagnostic assessment) is required to inform the delivery of the unit. A potential diagnostic tool may be the ACSF. Secondly, Dip Arts/Ed students need to be supported in the language, literacy and academic skills required for the FE and HE units they would be concurrently undertaking. This involves not only determining the skills needed for each of these units, but also avoiding content/skill overlap and synchronizing the teaching of required skills with the structure of the concurrent taught units. The course design thus requires close collaboration between teachers and lecturers and access to HE course documents, including assessment requirements and dates, to deliver the necessary learning and skills at relevant intervals. Thirdly, students graduating from the Diploma Arts/Ed not only need to acquire skills that would allow them to succeed in the Diploma year itself, they also need to be prepared for second year HE academic skills requirements. To address this issue, the assessment tasks that students in 1st and 2nd year B Ed are required to complete were identified. These mainly consisted of digital portfolios, case studies and research reports. These assessment tasks were then divided into their composite skills, which included forming a research question, conducting a literature search and incorporating the literature in writing, adopting and utilizing methods for carrying out research, and reporting and analysing results. Activities and assessment tasks which would scaffold these skills were thus designed in the Researching Literacies and Learning curriculum.

Finally, an externally imposed issue encountered in the planning of Researching Literacies and Learning was the demand to satisfy competing requirements from different educational bodies. For example, representatives of the Victorian Institute of Teaching (VIT) stressed the importance of Diploma Arts/Ed graduating students being able to demonstrate strong equivalence with the English requirements for VCE applicants into the B Ed (English study score of 25). This meant that the curriculum needed to plan for and develop material, assessment rubrics and criteria which correspond to VIT. Assessment tasks were thus designed so that the levels of achievement paralleled those of the VCE outcomes in the three key areas of Reading and Responding, Creating and Presenting, and Language Analysis

(VCE 2007 Study Design). The VCE descriptors of achievement were incorporated into the assessment criteria for each assessment task and given equivalent numerical values and weighting. The criteria were then contextualised for the tertiary learning environment and the specific content of the Researching Literacies and Learning course. To ensure that the requirements of the VIT are met, the resources of The School of Pathways and Transitions structurally placed to validate and moderate assessments in FE may be drawn upon.

Model 2: Diploma of Logistics and the Bachelor of Business (Global Logistics & Transport)

The Diploma of Logistics aims to better prepare its graduates for future success in the Associate Degree of Logistics and the Bachelor of Business (Global Logistics and Transport). It also aims to increase workplace success by building provision into the course for the development of independent learning skills, embedding LLN with a view to strengthening academic performance and competency and incorporating diagnostics into the LLN delivery and assessment strategies to facilitate students' academic progress.

The student cohort in the Diploma of Logistics consists of recent high school graduates who attend the course full-time and mature-age part-time students who have significant work experience but some education lapse as well. Demographically, the cohort includes non English-speaking background students and students from socially and economically vulnerable communities. Therefore, it was clear that different levels of support and an authentic and efficient approach to developing contextualized learning and LLN support were needed.

The project started with a series of meetings between the two VUC academic skills (LLN) specialists who were assigned to the project and the Dip of Logistics teachers. The team agreed that the Diploma already contained foundational knowledge equivalent to the Associate Degree. However, one issue was that the eight units of credit towards the Bachelor of Business did not equate to the first year of the Degree. Secondly, areas of student ability to be improved included research and critical analysis; establishing information requirements for a research question; using technology for accessing information; locating, evaluating, organising and incorporating relevant information; synthesizing information; numerical knowledge and skills; understanding ethical and legal issues.

The meetings between LLN and content teachers aimed to identify the students' needs and skills which could enhance their employability upon graduation, or smooth their transition to HE. For example, it was discussed that strong oral presentation skills, report writing skills and the ability to build and logically support arguments were essential for the Dip of Logistics graduates. It was also stressed that part-time students with education lapse needed support in understanding the requirements of the tasks and assignments. Accordingly, it was argued that providing sample responses to assignment tasks, and step by step 'how to' guides which could be embedded in the student manuals were useful strategies. For non-English speaking background students, language support was required in terms of some modification to the language of assessment tasks as well as embedded language support (i.e., glossaries, structural clues, reflexive questions, and so on) in the texts.

The team also agreed that an early diagnostic test was needed to identify the 'at risk' students and the main gaps in the students' academic skills. The early diagnostic assessment had the potential to generate authentic feedback for LLN teachers on the main areas that demanded

greatest attention. Another essential strategy was to revise the assessment tasks in a way that could increase their potential for generating information about students' academic skills (e.g., by embedding more essay type or report writing tasks or tasks that demanded oral presentation). Finally, shortly after finalizing student enrolments, the team concluded an approach to their collaborative project which featured:

- 1) An early diagnostic assessment on Week Three;
- 2) Mapping the results of the diagnostic test against the ACSF to identify 'at risk' students as well as the common learning and LLN gaps;
- 3) Embedding learning skills and LLN in the assessment tasks designed by the content teachers;
- 4) Embedding learning skills and LLN in the students' and teachers' manuals;
- 5) Providing 'at risk' students with one-to-one learning skills and LLN individual consultation support;
- 6) In-class co-teaching by LLN and content teachers to provide an integrative approach to reinforcing the academic skills particularly in numeracy.

The following additional issues were encountered in the development of the Diploma curriculum. With regards to staffing and communication, HE lecturers and FE teachers are on different employment awards with different conditions. Bringing the two groups together requires creative and flexible management. Curriculum priorities can differ. Providing space within curriculum for embedded LLN with diagnostics, delivery and assessment of outcomes competes with content knowledge. Both teaching staff and students are often more focussed on the content knowledge and it is a challenge to link them in a meaningful manner. Also, a model of teaching and learning that is highly supported needs to carefully determine how and when to remove the support structures so that when the students enter the second year of HE they do not flounder. Differences exist with types of assessment, expectations and marking rubrics. For example: a short answer question in HE may require referencing, a theoretical and/or analytical response. Often there is an expectation that critical thinking will be demonstrated. This has not always been the case in VE. Traditionally VE and training packages have used units of competence that are marked as Satisfactory (Pass) or Unsatisfactory (Fail) whereas HE at VU has a grading system with terms such as High Distinction, Distinction, Credit, Pass and Fail aligned to a percentage range. Moreover, structurally, the current approved credit arrangements may no longer be valid. Current credit arrangements often do not fully credit first year, meaning that a student may not have a distinct pathway into second year but in fact enters the degree program having to study a range of first and second year subjects simultaneously.

Discussion

The IEP has promoted innovative collaborations between members of the university which may not have occurred otherwise. This was more so the case with the Logistics team which consisted of a number of staff new to VU than with the Education team where relationships had been established and dialogue already occurring around pathways and skill requirements. An advantage of the new Logistics staff was that they were less constrained by previously used teaching approaches; an advantage of the Education team was the common knowledge base shared by its members. Both teams needed the array of expertise members brought with them to achieve their particular IEP goals.

The issues that arose for the two models were similar and not surprising. The usual tension of a discipline/content versus skill focused curriculum arose. Here the close collaboration between VUC and HE staff was crucial to provide both a content and a skill rich curriculum. The multiplicity of roles teaching staff have to play and the requirements of distinct specialization areas also proved a challenge as these create issues of staffing and workload allocation. It may be noted here that professional development may allow more opportunities for the exchange of expertise between sectors. Finally, different entry, ongoing, and future (transition to second year) levels of support were recognized and more specifically addressed in the Education model.

Both teams also developed curriculum models which have combined academic skills and LLN approaches which have not traditionally been used by the HE and FE sectors. Student engagement and student-centredness are demonstrated in the selection of material and classroom activities particularly in the Education unit which incorporates a career-relevant Praxis Inquiry approach. Biggs' focus on assessment is also evident in both models through the many opportunities for active learning devised. Both models note the importance of contextualisation and embed LLN support within the curriculum. With Education this is achieved via dedicated and assessed units of study; with Logistics via assessment, co-teaching and "just in time" support. Finally, the elements of a transition pedagogy are present in both models. The IEPs have facilitated an institutional approach to a purposefully designed and inclusive curriculum which aims to contribute to the successful outcomes for students of these courses.

Key to further funding and the pursuit of this version of a transition pedagogy is evaluation data. Success of the models may be determined by student final results, if possible by comparing a pre-model adoption cohort of students to a post-model adoption cohort. Data will also be collected that compares an early-in-semester assessment task with a later-in-semester assessment task. These two sets of quantitative data may provide some immediate answers. However, remaining would be the evaluation of long term retention and employment outcomes of the students. While the university will track the retention rates qualitative data should be gathered about the student experience and their perceptions of skill acquisition and relevance. The ACSF has factored into measurement discussions and the Education and Logistics teams have had some professional development as a means of understanding more about the framework, the LLN and their students. Logistics will use the ACSF as a tool to profile their students while in Education deliberations on its usefulness are ongoing.

Conclusion

This paper has outlined the implementation and curriculum development of two IEP diplomas which aimed at integrating LLN support: The Education project integrates the current activity of VUC and the School of Education in designing a pathway that allows students from a wide range of backgrounds to have a clear credit bearing pathway from FE into VU's Bachelor of Education. The Logistics project integrates new activities between VUC and the Institute for Logistics and Supply Chain Management creating a pathway from the Diploma to the Associate Degree to the Bachelor Degree. The developed model builds industry and academic skills and caters for a number of exit points that are relevant to the industry.

The models presented have been developed by teaching teams working collaboratively, combining theoretical and practical knowledge of the respective student cohorts. Identifying and utilising the most appropriate combination of teaching and learning approaches for

academic skills, language, literacy and numeracy development was a significant factor. Positive outcomes have clearly been planned for and reasonably resourced. Future success will depend on the evaluation of these models, resourcing for tracking students and ongoing staff and curriculum development. The two models currently address the stipulated aims of the IEP, specifically those of social inclusion, intentional transitional pedagogies and workforce literacy and numeracy.

References

Biggs, J.B. (2003). *Teaching for quality learning at university: what the student does*, 2 edn, Buckingham: Society for Research into Higher Education: Open University Press.

Bovill, C., Morss, K. and Bulley, C. (2008) *Quality Enhancement Themes: the First Year Experience. Curriculum Design for the First Year*. Glasgow: QAA (Scotland).

Bradley, D. (2008). *Review of Australian Higher Education. Final Report*, viewed 5 September 2009, <www.deewr.gov.au/he_review_finalreport>.

Cherednichenko, B. & Kruger, T. (2002) 'Those who can, do! Teacher education as an act of personal and institutional reflexivity', paper presented at Australian Association for Research in Education, Brisbane, 2-6 December. Viewed 20 March 2011 at <http://www.aare.edu.au/02pap/che02249.htm>

Department of Education, Employment and Workplace Relations, (2008). *Australian Core Skills Framework*. Canberra: DEEWR.

Garraway, J. (2009). Success of foundation (extended programmes) in Engineering Sciences at CPUT. In *Success stories in Foundation/Extended Programmes* (pp. 50-52). HELTASA. Retrieved from <http://associated.sun.ac.za/heltasa/documents/Final%20Book.pdf>

Kift, S. (2008). 'The next, great first year challenge: Sustaining, coordinating and embedding coherent institution-wide approaches to enact the FYE as "everybody's business"', paper presented to First Year Experience, Brisbane, viewed 23 February 2010, <http://www.fyhe.com.au/past_papers/papers08/FYHE2008/content/pdfs/Keynote%20-%20Kift.pdf>.

Kift, S., Nelson, K. & Clarke, J. (2010). 'Transition pedagogy: A third generation approach to FYE - A case study of policy and practice for the higher education sector', *The International Journal of the First Year in Higher Education*, Vol. 1 (July), pp. 1-20.

Kuh, G. D. (2009). The National Survey of Student Engagement: Conceptual and Empirical Foundations. *New Directions for Institutional Research*, (141), Spring, pp. 5-20.

Kuh, G. D. (2003) "What We're Learning About Student Engagement from NSSE." *Change*, 35(2), pp. 24-32.

Lave, J. & Wenger, E. (1991). *Situated Learning: Legitimate peripheral participation*, New York: Cambridge University Press.

Skillen, J., Merton, M., Trivett, N. & Percy, A. (1998). 'The IDEALL approach to Learning Development: a model for fostering improved literacy and learning outcomes for students', University of Wollongong, <<http://www.aare.edu.au/98pap/ski98343.htm>>.

Tinto, V. (2009). 'Taking student retention seriously: Rethinking the first year of university.' paper presented to FYE Curriculum Design Symposium Brisbane, viewed 14 February 2010, <http://www.fyecd2009.qut.edu.au/resources/SPE_VincentTinto_5Feb09.pdf>.

Victoria University, (2005). *Improving Language and Learning Support for Offshore Students*, Canberra: Department of Education Science and Training.

Victoria University, (2008). *Learning in the Workplace and Community*, Policy POA081119000, Victoria University, viewed 22 June 2009, <<http://wcf.vu.edu.au/GovernancePolicy/PDF/POA081119000.PDF> >