

# Embedding Successful Pedagogical Practices: Assessment Strategies for a Large, Diverse, First Year Student Cohort

Cassandra Star ([star@usq.edu.au](mailto:star@usq.edu.au))

School of Accounting, Economics and Finance, University of Southern Queensland,  
Australia

Jacquelin McDonald ([mcdonalj@usq.edu.au](mailto:mcdonalj@usq.edu.au))

Learning and Teaching Support Unit, University of Southern Queensland, Australia

This article has been anonymously peer-reviewed and accepted for publication in the *International Journal of Pedagogies and Learning*, an international, peer-reviewed journal that focuses on issues and trends in pedagogies and learning in national and international contexts. ISSN 1833-4105.  
© Copyright of articles is retained by authors. As this is an open access journal, articles are free to use, with proper attribution, in educational and other non-commercial settings.

## Abstract

This paper argues that the transition to first year in a diverse, multi-campus, multimodal university provides significant difficulty and disorientation for school leavers and mature age and international students. Consequently, curriculum design for first year students requires an awareness of the need to provide commencing students with a framework for meeting the requirements of the academic environment. This paper illustrates how the successful practice of teaching first year students addresses the learning issues and needs of first year university students through the use of scaffolding and developmental assessment.

The case study is from a first year Faculty of Business core course at the University of Southern Queensland in Australia. It provides a range of examples of successful pedagogical practices, including examples of scaffolding and developmental assessment embedded within the course materials to support and meet student needs. The strategies to embed these support mechanisms included spreading the assessment across the semester using two assignments and a final examination. In the second assignment of the course we utilise an incremental research and assignment process that includes an exercise to deconstruct the assignment question, a short annotated bibliography, the concept mapping of the assignment argument and the assessment of a supplied essay before the writing and submission of the student's final essay. As a result of these curriculum changes, we argue that preliminary indications are an improvement in both student assignment performance and student retention.

## Introduction

Australian higher education is operating within an environment of significant change and academics are challenged to cope with these changes as they design learning environments and experiences for first year students. This changing environment is the result of a number of influences: the application of technology; greater emphasis on lifelong learning; and a significant period of commercialisation and marketisation, particularly with regard to the provision of teaching to both domestic and international students (Marginson, 2006). University teachers face many challenges as they strive to make meaning of these transformations and adapt both pedagogy and practice to meet student learning needs.

In this paper, we argue that to ensure student success in a diverse cohort, especially one encompassing adult learners and other time poor students, curriculum design should be informed by a developmental approach aimed at scaffolding student learning by building their independent learning. We begin the paper by discussing the transition to first year at the University of Southern Queensland (USQ), the features of a successful pedagogy to support first year transition in this context and a case study of the successful application of this pedagogical approach.

### **First Year Transition at the University of Southern Queensland**

First year educators are at the frontline of dealing with changing university teaching and learning and play a crucial role in the student's successful transition to university study (Krause, Hartley, James & McInnis, 2005; McInnis & James, 1995; Pitkethley & Prosser, 2001). As a regional and flexible learning university, USQ provides education to a diverse student cohort. This includes the traditional undergraduate student population straight from secondary school, mature age students, who bring a complex range of learning and life experiences and who may be engaged in full-time employment and family commitments, and on-campus and external international students. Traditionally, the university system has catered for students of an elite 'academic bent'; however at USQ many students' sociocultural, academic and linguistic backgrounds are not in tune with the traditional academic culture. USQ has a large international cohort and a high percentage of 'first generation' students. These 'first generation' students are the first of their family to undertake university education, so knowledge of university systems cannot be presumed. University educators have to address the needs of this diverse cohort, while meeting employer expectations that students will graduate into a knowledge society with more than a bundle of soon to be outdated 'discipline specific' information. This has led to an increased focus on generic graduate attributes such as communication and interpersonal skills and critical thinking.

Discussions with Faculty of Business first year course leaders have identified concerns about establishing the expectations of how both teachers and students are to behave when undertaking academic study at USQ. McInnis (2000) found that some academics believed that the calibre of students had declined and that "too many students" with "too wide a range of abilities" presented problems. These issues are addressed by Biggs (1999), who argues that academics need to address the needs of all students, not just the traditional 'academic elite' who would probably succeed at university with little academic support. This means that teachers of first year courses need to implement innovative learning strategies that meet the needs of a diverse learner cohort and foster the development of academic competencies. To deal with these demands and meet the needs of first year students, a number of pedagogical practices are recommended.

### **Features of Successful Pedagogy in a First Year Context**

These pedagogical design features are based on the recognition that the first year experience can be difficult for many students as they encounter the peculiar characteristics of 'academic learning' when they commence university. While there is an expectation by academics that students will exhibit independent learning skills, information literacy and the ability to engage in critical academic discourse, many students are ill prepared to undertake the rigours of academic study. Students may

enter university with the traditional view of learning as a process of transmitting information from the teacher (expert) to a passive learner (novice). Increasing application of the constructivist pedagogy requires learners to play a central role in constructing their own knowledge, while the teacher facilitates, but is not central to, student learning (Lave & Wenger, 1991; Vygotsky, 1978). The focus for course leaders moves away from the teacher presentation of content, where “most of the work seems to be done by the teacher, wrapping and unwrapping the subject like a present” (Mayes, 2007, n.p.). Learners become more active in organising their learning and in seeking, rather than receiving, knowledge. While acknowledging that constructivism provides a theory that is broadly based and empirically sound, learners and teachers naturally draw on their preferred learning approach, so other educational pedagogies such as behavioural and cognitive approaches may be useful in some contexts (McDonald, 2007). Whatever theory informs pedagogical practice, the case study evidence presented in this paper demonstrates the benefits of embedding teaching and learning strategies within first year courses.

The constructivist approach is based on the concepts of learning and learner-centred activities and social learning theory (Lave & Wenger, 1997; Vygotsky, 1978), and the situated construction of knowledge that relates to authentic or practice-based situations (Karagiorgi & Symeou, 2005). Constructivism recognises the dual nature of learning based on the learner constructing knowledge through individual reflection and through social interaction. This approach challenges the traditional institutional teacher-centred, transmissive pedagogy and has seen a radical transformation of the expected roles of learners and teachers.

This shift of emphasis is a key transformation in the roles of both learners and teachers and needs to be communicated to, and scaffolded for, students. The idea of scaffolding is that the learning and teaching activities are designed to allow learners to develop knowledge and skills, starting with their existing knowledge and building new knowledge with support and feedback from teachers and peers. Scaffolding must begin from what is near to students’ experience and build to what is further from their experience. Likewise, at the beginning of a new task, the scaffolding should be concrete, external and visible (Wilhem, Baker & Dube, 2001). One way of directly scaffolding student learning using developmental assessment is outlined in the case study below. Students develop their ability to write an academic assignment as the lecturer leads them through structured assessment activities. The aim is to model the steps of the academic assessment process to allow the students incrementally to build their skills and confidence, and then provide feedback at key stages of the process. Vygotsky (1978) stressed that students need to engage in challenging tasks (such as assessment) that they can successfully complete with appropriate structure and support.

There is significant debate about how to embed scaffolding into the curriculum for students. The three important points of difference in relation to this are: should the content be taught on a stand alone basis or be integrated into other courses; should the skills development be assessed or not; and, if taught on a stand alone basis, should the course be for credit or not for credit? The debate about whether skills should be taught in the context of disciplinary knowledge or in stand alone courses is in part related to the question about who should teach skills. Responses are shaped and impacted upon by the attitudes of disciplinary experts (Brancolini & Heyns, 1998). However, it is

also the extension of a larger debate questioning whether students can be taught all the 'study skills' that they need, such as referencing, in isolation from their disciplinary studies (for example, see Barnett, 1994; Rowley *et al.*, 2002; Zenios *et al.*, 2004). This has been widely criticised by other authors for failing to realise that student knowledge about academic skills is developmental (Rosen & Castro, 2002; Smith & Oliver, 2005) and thus develops over time, with different skills required at different stages, and in the context of practice within their discipline. Stand alone courses also have the tendency to teach skills in a generic way without recognition that there are subtle differences in the use of academic skills and conventions among disciplines. But within the literature there remains a steadfast divide between those who believe that information literacy should be integrated with disciplinary courses (Hepworth, 2000; MacDonald & Saarti, 2003) and those who believe that stand alone courses are most appropriate (Brancolini & Heyns, 1998; Johnston & Webber, 2003; Smith & Oliver, 2005).

Biggs (2003) suggests that constructivist "learning is the result of students' learning-focused activities which are engaged in by students as a result both of their own perceptions and inputs, and of the total teaching context" (p. 20). There are two parts of the constructive alignment approach. Students construct meaning from what they do to learn. "Learning is constructed as a result of the learner's activities" (Biggs, 2003, p. 11). So there is also a need for the teacher to align the planned learning activities with the learning outcomes to ensure the success of such an approach. This is important because "[p]oor teaching and assessment result in a surface approach (to learning) where students use inappropriate or low-order learning activities" (Biggs, 2003, p. 11). Teachers support rather than control learning, with the focus on the student learning activities. When learning contexts are designed, objectives and desired kinds of understanding are identified, and the kinds of learning and teaching activities required to teach these understandings are created and implemented. Biggs identifies this process as "constructive alignment", which is based on the premise that within a constructivist approach the alignment of objectives, learning and teaching activities and assessment will lead to deep learning (Marton & Saljo, 1976) by the students. Biggs (2003, p. 27) suggests that "constructive alignment makes the students do the real work; the teacher simply acts as broker between the student and a learning environment that supports the appropriate learning activities".

The constructivist principles of active learning, participant interaction and the joint construction of knowledge related to authentic contexts provide a theoretical framework for the discussion of the following case study; where the pedagogical process of aligning curriculum design with a philosophy of supporting first year students in transition to higher education is outlined.

### **Redesigning for Developmental Scaffolding: POL1000 at USQ**

In this case study, evaluation of past course offers showed that students were struggling to come to terms with academic expectations in their first year of university study. This section focuses on efforts to align a USQ first year course's curriculum design with a philosophy of supporting first year students in transition to higher education. In particular, it charts a careful process of course revision, which emphasises constructive alignment (Biggs, 2003) of course assessment with stated learning objectives, as well as the extensive use of scaffolding within learning materials and assessment, designed to meet the needs of students in their transition

into the university learning environment. This approach is designed to provide a high level of support to students experiencing significant social, cultural and cognitive dissonance as they relearn how to learn, and become acquainted with the norms and expectations of academic culture.

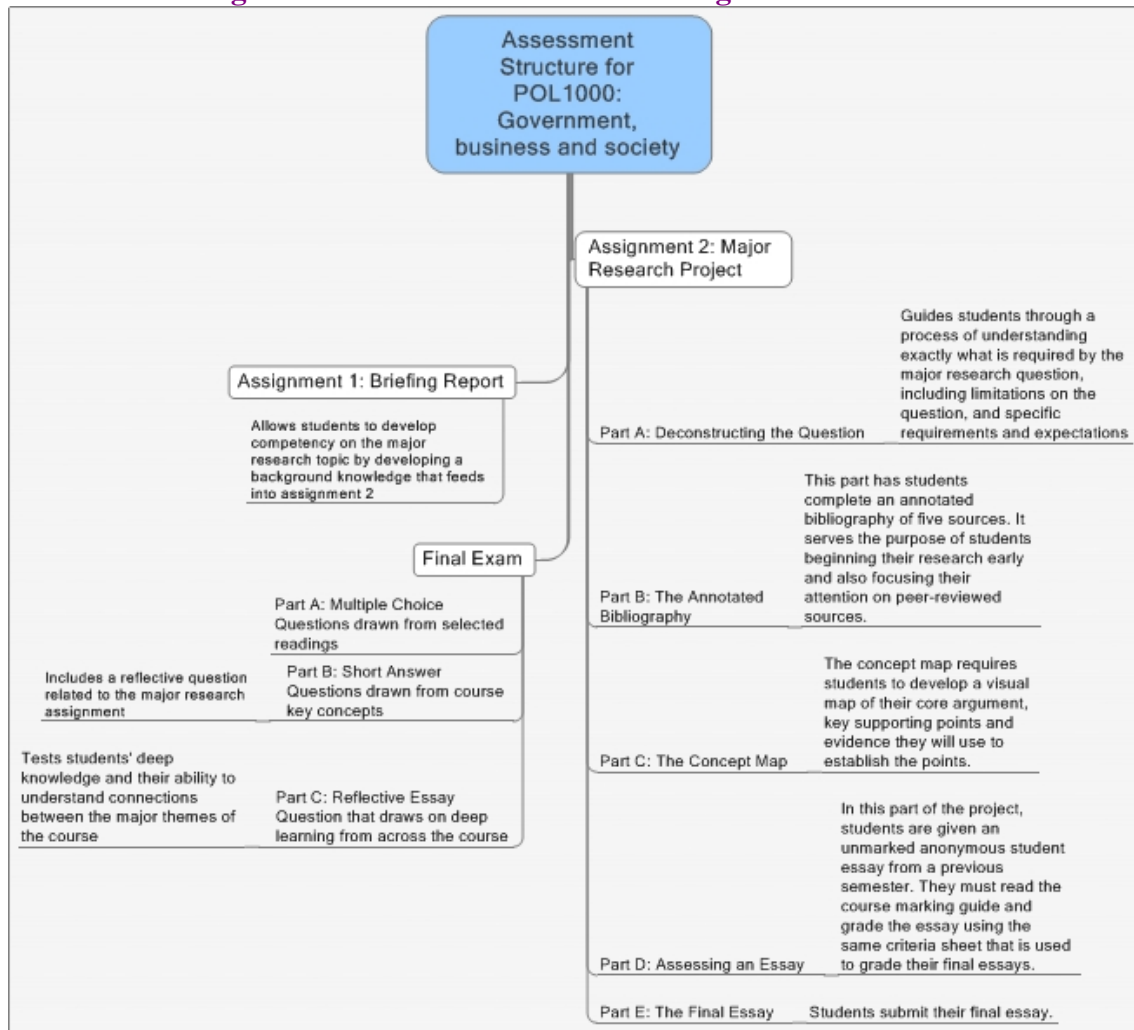
POL1000 is a core or alternative core course within all degree programs across the Faculty of Business, but it is also undertaken by students from other faculties and degree programs. The course is delivered to up to 750 students, both on campus and external to the university, across three semesters of the year. The previous course design was content heavy, characterised as high challenge, low support (Hammond & Gibbons, 2001), without any direct connection to the needs and aspirations of students. Given the diverse educational backgrounds of the students, this presented a substantial pedagogical problem to be solved. The consequent redesign of POL1000 in 2006 was approached with a number of priorities in mind. The initial set of priorities for redeveloping the course was in line with current Faculty of Business and USQ concerns about the overall student learning journey – increasing student performance, increasing retention of students in the course and reducing the significant instances of plagiarism detected in the course (for example, see USQ, 2005). Beyond these priorities was the concern that the course should encourage a deep engagement with the course material to stimulate critical thinking and to develop student learning. The other important consideration was ensuring that the course structure and assessment meet the goal of embedding the USQ graduate attributes and ensuring that students develop these skills and competencies during their time at USQ.

We argue that in this context successful pedagogy to facilitate first year transition includes a key focus on: constructive alignment (Biggs, 2003); formative and developmental assessment (Boston, 2002; Harlen & James, 1997; Klenowski, 2002; Rawson, 2000); proactive and extensive scaffolding of student learning (Biggs, 1999; Cartwright *et al.*, 2000; Fischer, 1998; Oliver *et al.*, 1998); and the central role of an active online learning community within the course (Gilbert & Driscoll, 2001; Jonassen, 1995; Slavin, 1996). Therefore the approach taken in rewriting this course was to focus strategically on course materials in three areas: learning activities; the assessment structure; and embedding graduate attributes. The rationale for these foci is a strategic one: the largest proportion of students, both internal and external, can be engaged through the course materials package rather than through on-campus lectures, tutorials or the WebCT learning environment alone, thus recognising the blended delivery nature of the course. Specifically, an assessment structure was developed which is aligned clearly with these goals, using the concept of constructive alignment (see Biggs, 1999, 2003).

The focus of student effort was another key reason behind the use of the assessment structure as a driver of change. Even if full-time, our students balance multiple commitments, and are largely identified as strategic learners (Curtis & Shami, 2002; Paton-Salzberg & Lindsay, 1993) – they focus on what counts in terms of marks. This has been referred to as the hidden curriculum (Snyder, 1971) – there is the curriculum that we set, and the curriculum that indicates what is important through assessment. Studies show that students allocate the majority of their study time outside class to assessment tasks rather than any other sort of task (see Angelo & Cross, 1993; Innis,

1996; Vos, 1991). Thus assessment reform is a key tool in changing student engagement within a course.

**Figure 1: Elements of assessment design in POL1000**

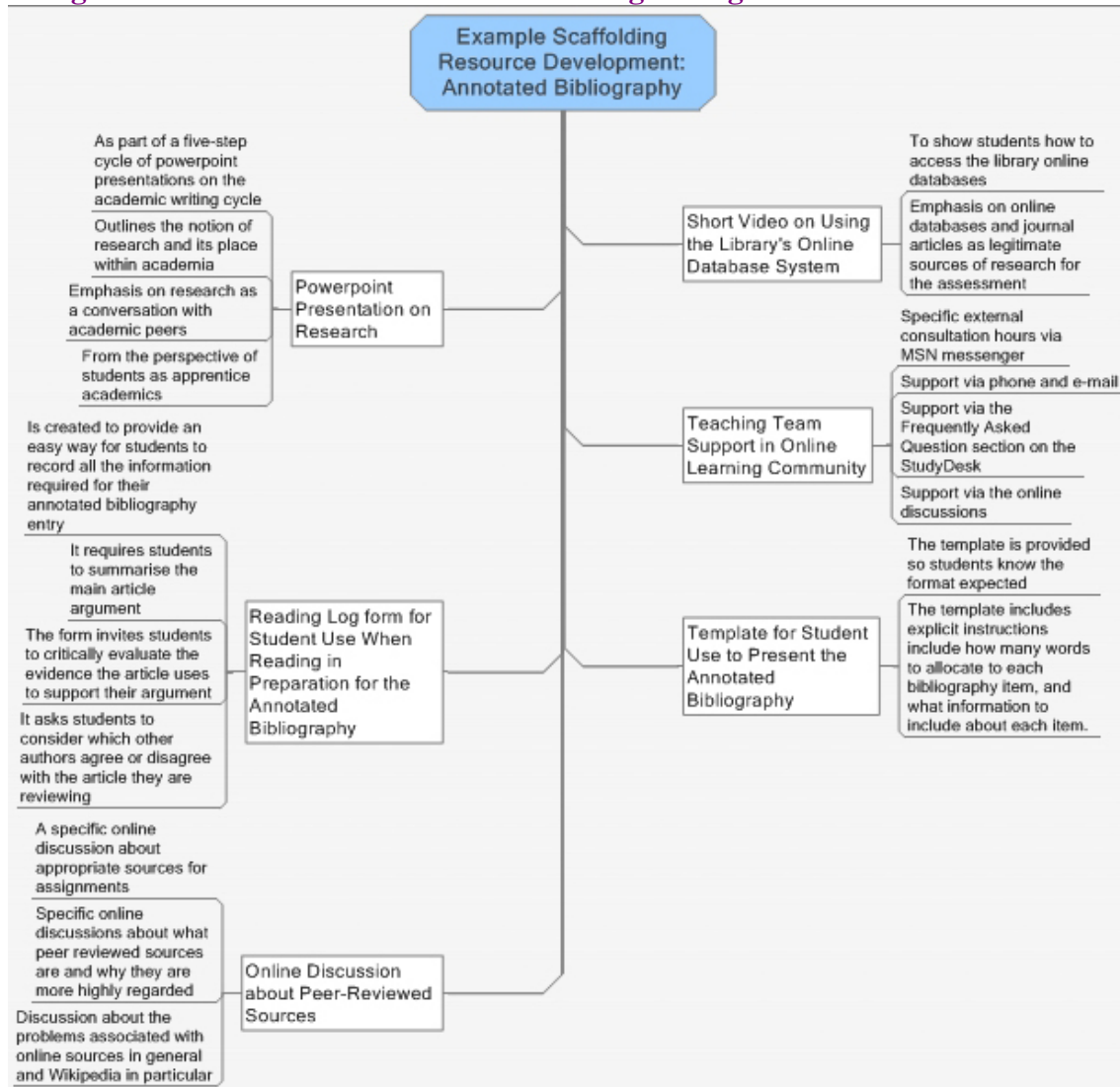


Assessment in the social sciences and humanities places a high emphasis on research, analysis, critique and written communication. Learners need to be guided and supported by someone more knowledgeable through the learning process that provides a scaffold for their learning. Vygotsky defined scaffolding instruction as the “role of teachers and others in supporting the learner’s development and providing support structures to get to that next stage or level” (Raymond, 2000, p. 176). If we want students truly to embrace the multiple steps or phases involved in academic research and writing, then we actually have to outline the steps for them. We have to demonstrate them – providing examples, models, guidance, commenting and reinforcement – but more than that we have to assess each step if we want students to embrace the full cycle of academic research and writing. Through the course redesign, this has been achieved.

Constructive alignment places the responsibility on teaching staff to craft their approach carefully and to define the learning environment clearly for students. The premise is that learning tasks and assessment requirements are consistent with learning objectives; when all elements are aligned, students will experience deep

learning and construct meaning in their activities. To achieve this in POL1000, the assessment is accompanied by scaffolding whereby students are provided not just with information about particular steps but also with explicit guidelines and instructions, examples and models that demonstrate what is required, and additional supporting resources. A significant bank of resources, including assessment templates and models, has been developed specifically for the course to ensure appropriateness for the cohort and the course's assessment items. An example of the scaffolding developed for Assignment 2, Part B, the annotated bibliography, is outlined below in Figure 2.

**Figure 2: Elements of assessment scaffolding through resources in POL1000**



Therefore, to achieve the aim of developing graduate attributes in the students, and in particular academic writing, we have placed the achievement of those goals at the heart of the learning objectives for the course and especially the key assessment piece, a major research project. This approach signals to students the importance of practising academic writing in this course, and in their university education, alongside the acquisition of content or disciplinary knowledge. The structure of the assessment task, characterised by a series of smaller formative steps that finally lead to the outcome of a written essay, is also informed by a developmental approach to

recognise the differing skill levels, education and cultural backgrounds in a large first year cohort. In the new assessment structure, there is a significant emphasis on the process of writing an essay from task deconstruction to research process to the task of building an argument outline and finally to producing the written essay. We argue that this is central to reducing plagiarism rates as it makes very clear academic norms and staff expectations and reduces student anxiety about assessment (Cartwright *et al.*, 2000).

In addition to the assessment structure and the print-based course materials, a range of dynamic, rather than static, resources and technology are utilised within the course. These resources focus on the building, support and sustainability of an interactive online learning community through the semester. These techniques include the use of WebCT peer groups, discussion forums and an online section for Frequently Asked Questions. The online environment is a key element of the course, building the learning community, rather than acting as an adjunct to the teaching materials. All these techniques and technologies contribute towards the building of a strong student learning community within the course.

The USQ StudyDesk, as well as a range of other digital delivery technologies (Breeze, the use of MSN for external consultation and podcasting), is aligned with the new course objectives. In particular, emphasis is placed in the course on building a learning community among the students, through the structured use of learning activities based around discussion questions on the StudyDesk, and links to online discussions within the course materials. A learning community is “a bounded group of students involved in cooperative learning online” (Misanchuk & Anderson, 2001, p. 2). A learning community can provide students with peer support (Citera, 1988; Rose & McClafferty, 2001), learning support (Palloff & Pratt, 1999; Van de Vusse & Hansen 2000), course engagement (Beaudin, 1999; Flottemesch, 2000) and superior learning outcomes (Gilbert & Driscoll, 2001; Jonassen, 1995, Slavin, 1996).

In this section we have argued that a successful pedagogy for first year transition includes the central elements of constructive alignment, formative and developmental assessment, proactive and extensive scaffolding of student learning, and a central role for an active online community. In the next section we explore the student learning outcomes associated with the case study course POL1000 Government, Business and Society.

### **Analysis of Student Learning Outcomes**

POL1000 Government, Business and Society is currently undergoing systematic evaluation to ensure that future course redevelopment meets the critical aims of facilitating student induction to academic culture, building a supportive learning community and scaffolding the transition towards independent learning. Continued evaluation and review are important because effective course redevelopment is iterative. This evaluation is being conducted across the three semesters of 2007 via independent peer review, student course evaluation data, online surveys, telephone interviews and focus groups. Evaluation was also undertaken in Semester 3 2006, before the course redevelopment was rolled out to students.



While data are still being collected about the impacts on student performance, there is improvement already on a number of fronts, including academic misconduct and assignment results. In comparison with earlier offerings of the course, the reduction in academic misconduct cases is substantial:

**Table 1: Cases of academic misconduct in POL1000 in 2006 and 2007**

Semester	Assignments 1 & 2		Totals*	
	Warning/Failure to cite	Penalty	Total academic misconduct	%
<b>S1 2006</b>	25	16	41	42.7%
<b>S2 2006</b>	61	23	84	47.4%
<b>S3 2006</b>	19	2	21	30.8%
<b>S1 2007</b>	8	0	8	10.6%

\*Note: Some students may have been cited more than once.

This is an excellent result for a course that has had a significant academic misconduct problem in the past. Part of the aim of the redesign has been to introduce students to the norms and expectations of academic culture, including issues around academic misconduct. We argue that there is a significant role for scaffolding and support in reducing student anxiety and thus plagiarism. Through our taking a proactive, and plagiarism prevention focused, approach through careful assessment design and the use of the MyDropBox plagiarism detection system to allow students to self-assess their work before final submission, excellent results have been achieved.

A significant improvement in first assignment performance compared with previous semesters can also be observed. These changes can be seen not only in a reduction in the fail rate but also in the improvement in the percentage of students receiving High Distinctions (HDs) and As (the equivalent of Distinctions). The reductions in fail rates are of particular importance, especially given the faculty and the university focus on improving rates of retention and progression.

**Table 2: Assignment 1 results in POL1000 in 2006 and 2007**

Semester	Number of Students (%)				
	HD	A	B	C	F
<b>S1 2006</b>	1	10	15	29	45
<b>S2 2006</b>	3.2	12.3	23.1	25.2	36.0
<b>S3 2006</b>	1.3	2.7	25.6	29.7	40.5
<b>S1 2007</b>	4.1	22.2	25.6	25.6	20.8

**Table 3: Assignment 2 results in POL1000 in 2006 and 2007**

Semester	Number of Students (%)				
	HD	A	B	C	F
<b>S1 2006</b>	3.1	9.3	20.8	40.6	26.04
<b>S2 2006</b>	0	0	3.9	43.5	52.5
<b>S3 2006</b>	0	0	1.4	39.7	58.8
<b>S1 2007</b>	5.8	19.6	27.4	11.7	25.4

Students have been overwhelmingly positive about their course experiences, with comments focused particularly on the support provided in terms of scaffolding and their learning through the research process in the written assessment. Examples of these comments are:

This assignment has been a steep learning curve in essay-writing, and assignment construction, and I have greatly appreciated your willingness to share resources (Student A, 2007).

I am really enjoying this subject...Thank you for giving me the opportunity of opening my eyes to issues I had previously not taken any interest in (Student B, 2007).

The fact that the assignment had different components and it was broken down in pieces and had to be completed on different dates made it a lot easier for me. I didn't have much interest in this subject, but it definitely did ok if natural speech me a lot ... (Student C, unedited text, 2007).

I have really enjoyed this course, have had quite a few interesting debates with friends (boy were they surprised!), good job (Student D, 2007).

While we aim for further improvements, these preliminary improvements strongly support a pedagogical approach that encapsulates the elements of constructive alignment, formative or developmental assessment, extensive and proactive scaffolding of assessment and the centrality of an online learning environment for first year students as they transition into academic culture and university norms and expectations. These results are especially gratifying given the special challenges associated with first year core courses and the diverse student cohort at USQ.

## Conclusion

In this paper, we have outlined a successful pedagogy for supporting students through their transition to academic culture and university life. The key elements of this pedagogy are constructive alignment, formative and developmental assessment, proactive and extensive scaffolding for student learning and a central role for an active online community. In the paper, we demonstrated the success of this approach through the case study of POL1000 Government, Business and Society, a first year course at USQ. POL1000 was redeveloped using the key pedagogical elements outlined above, and has led to improved student outcomes and retention. A decrease in academic misconduct, accompanied by an increase in student pass rates and overall academic achievement, highlights the strength of the pedagogical approach in supporting the student transition in this context.

## References

- Angelo, T. A., & Cross, K. P. (1993). *Classroom assessment techniques: A handbook for college teachers*. San Francisco: Jossey-Bass.
- Barnett, R. (1994). *The limits of competence*. Buckingham, UK: Society for Research in Higher Education/Open University Press.

- Beaudin, B. P. (1999, November). Keeping online asynchronous discussions on topic. *Journal of synchronous Learning Networks*, 3(2). Retrieved from [http://www.sloan-c.org/publications/jaln/v3n2/v3n2\\_beaudin.asp](http://www.sloan-c.org/publications/jaln/v3n2/v3n2_beaudin.asp)
- Biggs, J. (1999). *Teaching for quality learning at university*. Buckingham, UK: Society for Research in Higher Education/Open University Press.
- Biggs, J. (2003). *Teaching for quality learning at university* (2nd ed.). Buckingham, UK: Open University Press.
- Boston, C. (2002). The concept of formative assessment. *Practical Assessment, Research & Evaluation*, 8(9), 1-5.
- Brancolini, K. R., & Heyns, E. P. (1998). Implementing an assessment plan for information literacy. In *Living in the Future II: Selected conference proceedings*. Tuscon, AZ: University of Arizona. Retrieved from <http://dizzy.library.arizona.edu/conference/ltf2/papers/iu42398.html>
- Cartwright, P., Ryan, J., Hacker, P., Powell, E., & Reidy, J. (2000). Collaboration and interaction: Modelling explored. In *Sources of confusion: Refereed proceedings of the national language and academic skills conference held at La Trobe University, November 27-28, 2000* (pp. 61-69). Bundoora, Vic: La Trobe University.
- Citera, M. (1988). Distributed teamwork: The impact of communication media on influence and decision quality. *Journal of the American Society for Information Science*, 49(9), 792-800.
- Curtis, S., & Shami, N. (2002). The effect of taking paid employment during term-time on students' academic studies. *Journal of Further and Higher Education*, 26(2), 129-138.
- Fischer, M. (1998). Using Lotus notes learning space for staff development in public schools. *Journal of Interactive Learning Research*, 9(3/4), 221-234.
- Flottemesch, K. (2000). Building effective interaction in distance education: A review of the literature. *Educational Technology*, 40(3), 46-51.
- Gilbert, N., & Driscoll, M. (2001). Collaborative knowledge building: A case study. *Educational Technology Research and Development*, 50(1), 59-79.
- Green, W., Hammer, S., & Stephens, R. (2005). Locating learning advisers in the new university: What should be our role? In *Language and academic skills in higher education conference 2005, 24-25 November, Australian National University, Canberra*.
- Hammond, J., & Gibbons, P. (2001). What is scaffolding? In J. Hammond & P. Gibbons (Eds.), *Scaffolding teaching and learning in language and literacy education*. Sydney, NSW: Primary English Teaching Association.
- Harlen, W., & James, M. (1997). Assessment and learning: Differences and relationships between formative and summative assessment. *Assessment in Education: Principles, Policy & Practice*, 4(3), 365-379.
- Hepworth, M. (2000). The challenge of incorporating information literacy into the undergraduate curriculum. In S. Corral & H. Hathaway (Eds.), *Seven pillars of wisdom? Good practice in information skills development*. London: Standing Conference of National and University Libraries.
- Innis, K. (1996). *Diary survey: How undergraduate full-time students spend their time*. Leeds, UK: Leeds Metropolitan University.
- Johnston, B., & Webber, S. (2003). Information literacy in higher education: A review and case study. *Studies in Higher Education*, 28(3), 335-352.
- Jonassen, D. (1995). Constructivism and computer-mediated communication in distance education. *American Journal of Distance Education*, 9(2), 7-26.

- Karagiorgi, Y., & Symeou, L. (2005). Translating constructivism into instructional design: Potential and limitations. *Educational Technology & Society*, 8(1), 17-27.
- Klenowski, V. (2002). *Developing portfolios for learning and assessment: Processes and principles*. London: RoutledgeFalmer.
- Krause, K., Hartley, R., James, R., & McInnis, C. (2005). *The first year experience in Australian universities: Findings from a decade of national studies* [Final report]. Melbourne, Vic: Centre for the Study of Higher Education, University of Melbourne.
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, UK: Cambridge University Press.
- McInnis, C. (2000). *The work roles of academics in Australian universities*. Canberra, ACT: Australian Government Publishing Service.
- McInnis, C., & James, R. (1995) *First year on campus: Diversity in the initial experiences of Australian undergraduates*. Canberra, ACT: Australian Government Publishing Service.
- MacDonald, E., & Saarti, J. (2003). Pharmacology on the Internet – a WebCT course teaching information literacy for pharmacy students in the University of Kuopio. *Bioscience Education eJournal*, 1(8), 1-8. Retrieved from <http://bio.ltsn.ac.uk/journal/vol1/beej-1-8.htm>
- Marginson, S. (2006). Dynamics of national and global competition in higher education. *Higher Education*, 52(1), 1-39.
- Marton, F., & Saljo, R. (1976). On qualitative differences in learning: Outcome and process. *British Journal of Educational Psychology*, 46, 4-11.
- Mayes, J. T. (2007). Groundhog day again? Keynote for *JISC Innovative e-Learning 2007, Institutional transformation and supporting lifelong learning*, Retrieved June 11, 2007, from [http://www.jisc.ac.uk/elp\\_conference07](http://www.jisc.ac.uk/elp_conference07)
- McDonald, J. (2007). *The role of online discussion forums in supporting learning in higher education*. Unpublished Doctor of Education dissertation, Faculty of Education, University of Southern Queensland, Toowoomba, Qld.
- Misanchuk, M., & Anderson, T. (2001). Building in an online learning environment: Communication, cooperation and collaboration. In *Proceedings of the annual Mid-South Instructional Technology conference (6th, Murfreesboro, TN, April 8-10, 2001)*.
- Oliver, R., Omari, A., & Herrington, J. (1998). Exploring student interactions in collaborative World Wide Web computer-based learning environments. *Journal of Educational Multimedia and Hypermedia*, 7(2-3), 263-287.
- Palloff, R. M., & Pratt, K. (1999). *Building learning communities in cyberspace – effective strategies for the online classroom*. San Francisco: Jossey-Bass.
- Paton-Saltzberg, R., & Lindsay, R. (1993). *The effects of paid employment on the academic performance of full-time students in higher education*. Oxford, UK: Oxford Polytechnic.
- Pitkethley, A., & Prosser, M. (2001). The first year experience project: A model for university-wide change. *Higher Education Research and Development*, 20(2), 185-198.
- Rawson, M. (2000). Learning to learn: More than a skill set. *Studies in Higher Education*, 25(2), 225-238.
- Raymond, E. (2000). *Learners with mild disabilities*. Needham Heights, MA: Allyn & Bacon.

- Rose, M., & McClafferty, K. A. (2001). A call for the teaching of writing in graduate education. *Educational Researcher*, 30(2), 27-33.
- Rosen, J., & Castro, G. (2002). From workbook to web. *Computers in Libraries*, 22(1), 30-35.
- Rowley, J., Banwell, L., Childs, S., Gannon-Leary, P., Lonsdale, R., Urquhart, C., & Armstrong, C. (2002). User behaviour in relation to electronic information services within the UK higher education academic community. *Journal of Educational Media*, 27, 107-122.
- Slavin, R. E. (1996). *Cooperative learning: Theory, research and practice*. New York: Macmillan.
- Smith, J., & Oliver, M. (2005). Exploring behaviour in the online environment: Student perceptions of information literacy. *Alt-J: Research in Learning Technology*, 13(1), 49-65.
- Snyder, B. R. (1971). *The hidden curriculum*. Cambridge, MA: MIT Press.
- University of Southern Queensland. (2005). *USQ strategic plan: 2005-2009*. Toowoomba, Qld: Author.
- Van de Vusse, L., & Hanson, L. (2000). Evaluation of online course discussions: Faculty facilitation of active student learning. *Computers in Nursing*, 18(4), 181-188.
- Vos, P. (1991). Curriculum control of learning processes in higher education. In *13th forum on higher education of the European Association for Institutional Research, Edinburgh*.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (trans. by M. M. Lopez-Morillas Cole, A. R. Luria & J. Wertsch). Cambridge, MA: Harvard University Press.
- Wilhem, J., Baker, T., & Dube, J. (2001). *Strategic reading: Guiding students to lifelong literacy*. New Hampshire: Heinemann.
- Zenios, M., Goodyear, P., & Jones, C. (2004). Researching the impact of the networked information environment on learning and teaching. *Computers and Education*, 43, 205-213.