# Supporting and evaluating transitional learning for international university students

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In 2007, as part of its response to the continuing diversification of students, Central Queensland University introduced a for-credit undergraduate course, The Principles of University Learning, focusing on 'learning to learn' in the Australian university context. The aim was to support the transition of learners with diverse prior learning experiences into the Australian model of education requiring independent and active learning strategies deployed in critical engagement with diverse materials in changing contexts. This paper presents research conducted to evaluate the outcomes of the course reflected in quantitative and qualitative data collected for a total of 144 course graduates. Grade Point Average (GPA) results collected over three terms of study were reviewed for course graduates. In addition, research also reviewed qualitative data related to the course to establish its effect on student perceptions about learning. This report includes background information and rationale as well as research results identified over 2008-09.

## Introduction

Central Queensland University's (CQU) decision to introduce a for-credit course focused on learning to learn in 2007 was exceptional in the university sector where the convention is to provide learning support as a preliminary or peripheral option not counting towards the student's formal program of study. All courses benefit from evaluation of outcomes and as the intended outcomes of this course were to improve learning experiences and achievements for diverse learners across all courses, a CQU Learning and Teaching Grant was awarded to support research of quantitative and qualitative data for 144 course graduates of 2007-08. This paper presents a summary of issues backgrounding transitional challenges for diverse students and conventional university learning support provisions then describes course development, objectives and outcomes.

## Background: student diversity & curriculum

The demographic diversification of students participating in higher education has continued for the last two decades as a consequence of rapid and continuing technologisation engendering a globalised 'knowledge economy' in which participants who are able to learn, unlearn and re-learn (Malloch Brown, 2006) remain current and effective in a discipline or professional field. Age, gender, cultural background, first lanAn important question confronting the

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guage, geographic location and even prior education no longer prohibit individuals from entering university programs as universities create flexible pathways to accommodate the backgrounds and needs of their diverse students.

The following trends indicate the complexity of this diversification in Australian universities. The total number of persons studying for a qualification who attained a bachelor degree increased from 14 per cent in May 1997 to 21 per cent in May 2007 which represents the most notable increase of all educational sectors (ABS, 2007a). Not only are there more Australians entering university per capita, but they derive from increasingly disparate social contexts reflected, for example, in the changing trends in student age under half of the 2.5 million Australians studying for

a qualification in 2007 (43 per cent) were in the 15 to 19 age group (ABS, 2007b) - and study mode - university students studying from home increased 4 per cent per year between 1982-1993 (ABS, 1995). A further

contributing factor to increased student diversity in Australian universities has been steadily growing numbers of international students moving from under 19 per cent of all enrolments in 2001 to over 25 per cent in 2008 (Ross 2008, p.6). At CQU, the proportion of international students is significantly higher at over 40 per cent. Clearly, any notion of a 'typical' student as an Australian high school graduate studying fulltime on Campus is increasingly redundant.

CQU has experienced particularly dramatic diversification of its student population for two main reasons: first, as a regional institution, it provides programs across vast distances allowing students in diverse locations and communities to study internally or by distance; second, CQU's interstate metropolitan campuses attract large numbers of international students from over a hundred different countries. An important question confronting the institution and its teaching staff is: how can curriculum be revised to accommodate the needs of such diverse learners?

# How the sector incorporates learning how to learn

Like most Australian universities, COU offers internal study support options and services for all students at no extra cost through dedicated 'skills centres' including the CQU Communications Learning Centre and Learning Skills Units. These centres are proactive and effective offering academic skills workshops, short courses and individual advice in person and over the internet as required. Many students elect to take advantage of these services; many don't. A key reason students may not participate in such 'add on' study support sessions is the natural tendency to prioritise workloads associated with for-credit course work.

A quick survey of universities in Australia confirms that study skills support is widely available in diverse modes including one to one and group based sessions, face to face and remote mode, as well as text based support online or in print. Group-based, delivery modes are referred to by a host of terms including but

> not limited to: 'courses', 'workshops', 'units', 'tuto-

rials', 'lectures' and 'programs'. Schedules for these sessions are almost invariably accompanied by careful qualification and reminder that such learning sessions

are 'not for credit' towards a degree. The reluctance of Faculties to credit the study of 'learning' itself is by no means confined to Australian universities. US and UK based universities also tend to offer study support as a 'not for credit' service although the availability of such support seems more limited than within Australian institutions and is more commonly available as a foundation or preparatory, fee-based study program rather than a value added service for enrolled degree students (UCLA and Coventry University are examples).

At a recent symposium on the standard of English communication skills achieved by Australian university graduates (AEI, 2007), many industry representatives bemoaned the reluctance of university Faculties to include continuing English communication development as part of for-credit courses. Plentiful study texts are published by institutions explaining to students how to succeed at Australian universities and English expression, written and oral, technical and stylistic, features centrally in such study skills texts. However, if universities do indeed seek to promote active and collaborative learning as recommended by Chickering and Gramson (1994), they must move beyond a text based strategy. Those institutions who accept that learning to learn, unlearn and re-learn is not only beneficial but crucial for learners to progress both in their

university program and as lifelong learners in a professional career may include a 'learning to learn' course as a legitimate and for-credit unit in a program of study recommended to students across disciplines. This is what has happened at COU.

# Course rationale, objectives and design

In 2006, a multidisciplinary group of academic staff worked in a consultative team to develop a first year university course, the Principles of University Learning (PoUL) EDED11449, designed to facilitate the transition of students into the critical model of university learning and teaching common to most 'western' universities. The provision of such a course at CQU was driven by large enrolments of international students from diverse cultural and linguistic backgrounds who had experienced prior learning and teaching approaches that were different from and even incommensurable with current Australian approaches which emphasise independent learning, active student engagement and critical discourse. Instead, many international students have learning and teaching expectations framed in teacher-centred practice and examination-only assessment. Rather than simply teach students to write an essay or report or reference the work of other authors, this course sought to make encultured approaches to learning explicit, invited students to reflect on their own learning and teaching preferences and expectations in relation to the Australian model, and provided guided development of independent and collaborative learning skills and strategies across the range of common assessment modes.

Initially, the course was offered to international students only. In 2008, the Course was revised and extended to include domestic students, both internal and flex on the assumption that all students can benefit from explicit guidance in developing metacognitive self-awareness and competence, information literacy skills and appropriate English communications for academic purposes. Collaborative learning achieved by students in international-domestic teams is a key ambition for the course now that both cohorts are enrolled and future research may test whether this was achieved and to what effect. As international student and domestic student collaboration and integration is notoriously elusive and sparsely researched (Sawir, 2008) this promises to be a valuable exploration. The research undertaken and reported in this paper was restricted to research of the academic progress and

qualitative commentary of the 144 international students who successfully completed the course in 2007-08 and continued studying at the university for one further term.

The course was premised on fundamental principles articulated in constructivist accounts of learning which emphasise the active engagement of learners in authentic tasks and the 'adaptive' cognitive process of 'coming to know' (Thanasoulas, n.d.; Jaworski, 1993). Constructivism acknowledges a personal involvement in learning where learners '...interpret what they hear, read and see on the basis of their previous learning habits. Students who do not have appropriate backgrounds will not be able to accurately 'hear' or 'see' what is before them' (Thanasoulas, n.d., p.4).

Where students originate from widely diverse sociocultural backgrounds, an emphasis on comparing what is new with what has been previously learned enhances the capacity for all learners to revise or adapt their concept of 'knowledge' and how it is properly constructed. These constructivist values are reflected in three of the seven Principles of Good Practice in Undergraduate Education which are widely accepted and applied in the Australian university sector:

- · Developing reciprocity and cooperation among students.
- Using active learning techniques.
- · Respecting diverse talents and ways of learning (Chickering & Gamson, 1994).

The learning outcomes of the course are articulated as follows:

On successful completion of this course, you should

- 1. Compare and contrast different conceptions of learning and how these influence student and instructor approaches to learning and teaching.
- 2. Explain the purposes, defining characteristics and changing nature of universities.
- 3. Apply principles of effective learning to your own study as the basis for successful lifelong learning.
- 4. Utilise a range of written, communication, presentation and teamwork skills relevant to University learning and global practice, (EDED11449 Course Profile, 2007).

As the course sought to develop independent learning as well as collaborative learning assessment tasks were designed to allow for development and demonstration of both. Assignment one required regular submission of individual reflections on learning as well as self-paced online Information Literacy Quizzes (ILQs). Assignment one promoted extensive engagement with the Blackboard Course Management System common to CQU courses ensuring that students became skilled in navigating the technologies supporting their learning at COU. As self-reflection is seen as a vital component of student engagement (Krause, 2006) and assists in coping with change (Clarke, 2005) reflective tasks were considered particularly suitable for new international students. The ILQs and the online submission of reflections also allowed students to receive vital instruction as well as feedback on their citation techniques via Safe Assignment reports. As international students are frequently disciplined for plagiarism (Anyawanu, 2004; Ballard & Clanchy, 1991) this was considered a useful safeguard for first year international learners.

Assignment two required students to form a group and work collaboratively to develop and deliver an oral presentation in answer to a critical question posed by the group. This task was designed in alignment with constructivist principles to encourage students to take responsibility for their own learning by framing their own questions. In addition, purposive team work and speaking in public are authentic tasks common in professional practice.

As the development of this course was motivated by student diversity and represented an act of collaborative curriculum renewal, it was useful to evaluate the extent to which course objectives had been realised and to disseminate findings among the university community. As student diversity and curriculum renewal are topics of concern across the sector and are current Australian Learning and Teaching Council priorities, research findings may be of interest to the university sector generally, particularly in relation to how such a course, and specifically, such assessment strategies can affect academic standards across all courses.

## Research method

The key questions driving this research were:

- 1. To what extent have the learning outcomes of EDED14449 been achieved a) by student account, and b) by student performance?
- 2. How has the course impacted on participants' approaches to learning?

At the time in which this research was initiated there were four terms of quantitative data (student course results and Grade Point Average (GPA)) as well as qualitative data (student reflections and focus group discus-

sion) making it possible to test the value of the course both from the subjective perspective of students and the objective perspective of GPA movements in a triangulated research design.

Quantitative or numerical data in the form of student grades can provide an account of how large numbers of students are performing in their course work as measured by assessment criteria and teachers. This is important information by which students are deemed to progress or not in their programs of study and allows for a comparison between the PoUL sample and a randomly selected sample of the rest of the undergraduate (non-PoUL) student population. The Grade Point Average is calculated by adding together the grades for every course completed per term by each student and dividing this result by the total number of courses completed.

Quantitative data cannot, however, provide the rich, experiential data required to explore changes in approaches to learning. Written reflections were therefore reviewed for 136 students from the total of 144 PoUL graduates. These students were located at a range of campuses in Sydney, Melbourne and Gold Coast and were instructed by different teachers. Student reflections were coded for common themes and repeated comments and metaphors to build a picture of the most common experiences of changes in learning for the group of learners. In addition, these reflections were scanned for evidence of changes in academic writing techniques and strategies including use of quotation, paraphrase and reference as well as use of evidence and examples in written exposition.

Hence, this research involved analysis of pre-existing quantitative and qualitative data seeking evidence of improved learning outcomes and changes in approaches to learning. Such a design allowed a check for correlations between student perceptions of how their learning may have progressed and their teachers' perceptions of their learning competence reflected in formal grades.

#### **Results**

## Grade Point Average (GPA)

As a central objective of this course was to improve student learning strategies and outcomes across discipline, Grade Point Averages were reviewed for all 144 students who passed PoUL across consecutive terms of study for all the courses that they undertook, regardless of discipline. This represented a total of four courses per term for a typical fulltime student. As a result of attrition, only 144 students out of a total of 181 who passed PoUL over the period of the study were enrolled in courses across two or three consecutive terms included in the study and able to contribute data relevant to testing movements in GPA.

Only students who passed PoUL were included in the data counts. It was decided that students who did not pass PoUL (a very low percentile who failed to attend 50 per cent or more of the course) should be excluded from the study as they had not actually successfully completed the course and could not therefore be expected to demonstrate the knowledge and skills delivered by the course. All the grade results for all 144 students, including fail grades, were included in data counts for GPA.

Whilst PoUL was designed primarily for new students to assist them with transition to undergraduate university study, large numbers of continuing students who were underperforming in their programs were also enrolled. Hence, for continuing students, GPA was collected for the term completed prior to PoUL (four courses). For continuing and new students GPA was collected for the term in which students studied PoUL (four courses), and the term completed immediately after PoUL (four courses). Any student can achieve a maximum GPA of seven and a minimum of zero. The minimum GPA to Pass or Pass Conceded/Supplementary is between 3 and 3.5. Table 1 shows the GPA and standard deviations for PoUL students across three terms of study in 2007-08.

Cohort: All students with prior and/or post PoUL results included	Prior term		PoUL		Post PoUL	
	average	SD	average	SD	average	SD
PoUL student GPAs collated from 4 terms (total 144 students)	2.836	1.521	3.858	1.419	3.334	1.795
PoUL new students GPAs – 2 terms of study PoUL and Post PoUL (64 students)			3.413	1.495	3.116	1.84
PoUL continuing student GPAs – 3 terms of study prior PoUL, PoUL and post-PoUL (80 sts)	2.836	1.521	4.214	1.246	3.508	1.738

Table 1

Cobort: non-PoUL students with 3 terms of results	1st term		2nd		3rd	
	average	SD	average	SD	average	SD
Non-PoUL students (total 90)	3.829	1.397	3.844	1.567	3.793	1.585

Table 2

An obvious outcome from this data is the inflated GPA for students for the term in which they studied PoUL. This was dramatic for continuing students who moved from 2.836 GPA to 4.214 GPA. This marked improvement was not surprising, as the course was intended to guide the development of strategies and skills supporting learning across disciplines and assessment modes. For example, PoUL course work explicitly attempts to assist students with their other consecutive course work by including information literacy workshops and repeated opportunity for research of electronic databases as well as requiring each student construct a study plan and schedule for all their courses over the twelve weeks of term. It was expected that students might perform better across all their courses in the term that they study PoUL for such reasons.

As evident in the data table, the post-PoUL term results are lower than the grades achieved in the term of PoUL but these grades are an improvement on grades achieved prior to undertaking PoUL. This indicates that PoUL graduate students have developed more successful study skills and strategies for ongoing learning. In order to check that PoUL was indeed the source of improved learning outcomes evident in the data, a control group of undergraduate students who did not enrol in PoUL was randomly selected and also studied for GPA movements across the same three terms. The results of this study are in Table 2.

For students who do not undertake a course in developing learning, the GPA does not show a significant improvement and, in fact, can show a decline in

grade as reflected in Term 3 results. However, these students are clearly in a better position to start with as they are achieving a GPA which is at pass level or better without assistance.

PoUL Whilst designed for all new students, the tendency has been to enrol only new students who have problematic study records at point of entry to their undergraduate program as well as continuing students who are not achieving satisfactory academic

progress. The data indicates that PoUL can assist continuing students who are at 'academic risk' achieve significantly improved learning outcomes and can assist new students with a poor history of study prior to enrolling at university to achieve an overall pass in their first term of study. As international students commonly fail one or more courses in their first term of study (Levy, Osborn & Plunkett, 20003; Burch, 2008). this was considered a positive outcome.

A further encouraging data check performed for PoUL graduates was an audit against the University Misconduct Database where there were no records of misconduct (usually indicative of plagiarism) for the 144 PoUL graduates. The course appears to enhance student capacity to find and use information appropriately in the university assignments. This is a finding strongly supported by qualitative accounts from student reflections and focus group discussion.

#### Qualitative feedback

Whilst the impact of PoUL on GPA is a critical measure of the capacity for the course to successfully transition students into the Australian model of teaching and learning a more in depth understanding of how this happens and what this means is understood by reviewing the study experiences of PoUL students in their own words. This was achieved by reading student reflections and by a review of student comments in a focus group discussion. A summary of results for these data sources is provided below.

The course was organised around twelve weekly topics and student reflections were required to focus on any of these topics which related to learning and teaching at university. Students were required to submit six reflections of up to 500 words each. These reflections were meant to relate to the topics of the course and also include personal commentary on what they were learning and how this required a shift in approach compared to prior learning contexts. The following is a summary of key themes from reflections submitted by 144 students over three terms of study and a focus group discussion with nine PoUL graduate students.

## Reflection 1: week 2-3

The first reflection was focused on the differences between university learning and whatever study the student did last, often overseas in countries including Bangladesh, China, India, Nepal, Sri-Lanka, Thailand, Vietnam and so on. PoUL students undertook the Myers-Briggs learning style test along with other individual learning preferences tests in the first weeks of term so that they reflected both on encultured or group norms/ tendencies and discovered/reflected on their individual learning styles, strengths and preferences. Students enthusiastically related how they were having to adjust from teacher-centred, examination-driven learning contexts to the Australian context where they must study independently and in groups to demonstrate learning in changing assessment contexts:

In Australia the main objective of studying is to understand and to learn how to apply it in real life, but in Vietnam they are just being taught and forced to remember everything from text books to pass the exam (Vietnam, male).

In China, my teacher always tells me what should I do and how to do it. Western people consider such as education style will reduce students' creativity and independently. They laughed that Chinese teacher feeds knowledge to the student (China, female).

In Nepal, we had to face two major exams every half year to get through the course, but here we have to face exams, presentations, online test and group activities almost every day (Nepal, female).

There is a cathartic tone to these early reflections as students clearly relish the opportunity to explain their challenges and attempts at adjustment to their teacher. Few university assignments make room for writing about personal experience and it is evident in the volume of writing and the enthusiasm of these texts, that personal experience of adjustment needs to be expressed.

#### Reflection 2: week 4-5

In this set of reflections, student attempts at in-text as well as end-text referencing appear. This reflection is submitted after the Information Literacy class and the influence is evident. Many students have learned the meaning of common terms that they are assumed to understand. For example, they explain the purpose of a lecture as opposed to tutorial and can explain the concept of GPA as well as 'satisfactory progress'. Students also begin to point out limitations to memorisation and examination-only assessment regimes. Students are now able to identify a range of information sources including electronic journal databases, books, internet sites and lecture notes/course readings.

## Reflection 3: week 5-6

Plagiarism is now well defined and penalties are understood and justified. Although, a few students submit work that is inadequately referenced, it is, nevertheless, referenced. Paraphrase style when it is actually direct quote is the most common type of error. All students attempted to express ideas in their own words as well as 'blend' other sources into their writing. Plagiarism, it is explained, is to 'thieve someone's harvest' or 'treasure'. Some students are able to explain the difference between direct and indirect referencing.

There is a strong Learning Skills Unit (LSU) awareness and appreciation in these reflections which are written after the session on writing for university which includes LSU staff. Reflections now articulate the concept that students must read a range of texts (not just the set textbook) to develop their own position for strong, persuasive and credible argument. There are multiple uses of the term 'for example' as students practice clarifying meaning through the use of example and/ or evidence as taught in the mid-term sessions.

## Reflection 4: week 7-8

Students explain the rules of referencing and plagiarism as a priority and frequently give examples of their own error through prior ignorance based on culturally different teaching/learning environments.

This course should be compulsory for all new students, if only to understand plagiarism. I heard about it many times, 'don't plagiarise; be careful, don't do it'. I thought, 'what is plagiarism'? Then I did plagiarise and I found out what plagiarism is. Maybe this course should be free? (India, male).

Understandings of plagiarism are more sophisticated covering, impersonation, copying, resubmission and so on.

There are many recommendations that this course should be completed in first term by all students. Student disappointment at group member class-absences begins to be expressed in reflections as they work towards their group oral presentation.

Many students also acknowledge that they had not read rules and policies of the University - not even the terms and conditions of the student contract that they had all signed at start-up which lists their rights as well as their responsibilities.

## Reflection 5: week 9-10

Student reflections reveal a clear sense of the importance of the pre-class, in class and post class study pattern required to get the most out of lectures and tutorials. The time management class in PoUL has a profoundly positive effect for many students who are

better able to manage their study load across courses.

This course makes student life more enjoyable because of better time management, we can relax more, we are less stressed because we are doing a bit all the time (Nepal, male).

This course provides the ability to handle four courses in one semester (new students especially),(China, female).

Appreciation for the support services of LSU becomes even stronger: 'LSU is a wonderful gift from our university to international students' (India, male).

Blackboard course management system and online resources are frequently praised: 'I will not lose my way of learning, (Thailand, female). Students appreciate the time taken in the course to guide them through the study materials conventionally included in all course sites:

Learning how to use Blackboard and to download and use discussion board with lecturer feedback is very helpful (China male).

In this course we learned how to read the Course Profile and the course website. I started here one year ago and had my sister here who showed me how to use course material and website. If I didn't have her I don't know how I would have found the information I need. In this class they teach you how to find and use all course material and I wonder why I didn't do it before (China, female).

Most students are now able to articulate their learning strategies and are eloquent in explaining the importance of critical thinking and questioning:

We learn to challenge an idea or ask questions about a topic. In work we have to find ways to give our management good ideas. We must be able to interact with confidence with them. This helps with social life also. We have to be prepared to challenge and this course helps us get confidence in giving opinion or disagreeing. It comes from knowing there is evidence and what is the process to identify evidence (India, male).

## Reflection 6: week 11-12

Students display confidence to go forward in their continuing studies.

Just like a cowboy to have all different guns in the belt (India, male).

Team work was generally popular and meaningful to students but also allowed for the development of friendships and social interaction so important to students far from home. Students are now able to list the multiple forms of assessment and distinguish/justify formative and summative, formal, informal and non formal. They are able to distinguish purpose/context and features of different assessment tasks (e.g. report, essay, presentation) in their own words.

Universities not only aim at providing specialist education to their students but also in their overall development. The courses are designed in such a manner that they not only provide academic and theoretic knowledge to the students but also help them develop practically. Let's try to explain this with an example. Take the example of our renowned university and our presentation. Like the presentation we are giving today, it will help us in better conceptual clarity. I have to work with other students so it will help me in working in a team thus developing team attributes. The presentation I am giving will help my communication skills, bring in confidence and overcome my fear of speaking in public. The research I have to do for making this presentation brings to my knowledge various other aspects like the pace with which globalisation is going on ... (India, male).

## Conclusion

The learning outcomes of students who have successfully completed PoUL have improved significantly as a result of undertaking a course focused on transitioning learners from various prior learning contexts. The course has assisted learners adapt to the critical model of university learning in Australian institutions where learners must work independently and collaboratively across a range of assessment genres and contexts. The subjective commentary of students in their reflections demonstrates the key phases and adjustments made in the guided journey and also provides an outlet for the personal and often emotional experience of adjustment to a new learning context and frequently a new social context. Information literacy instruction and quizzing assists students overcome the high risk involved in learning to properly cite and reference material in support of learning. Collaborative group work assists them adjust to the new social context as well as engage in the team based discussion, debate and learning that characterises so much of the activity undertaken in the Australian university and workforce. Including a 'learning how to learn' course within the formal curriculum rather than as an optional add-on has been welcomed by students and teachers involved in this study and can establish improved study skills and learning outcomes for new students from diverse backgrounds.

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#### References

ABS (Australian Bureau of Statistics). (1995). Participation in education: Homebased higher education. Australian Social Trends, 1995, Retrieved 23 March 2008, from http://www.abs.gov.au/ausstats/abs

ABS (Australian Bureau of Statistics). (2007a). Education and work, Australia. May 2007, Retrieved 23 March 2008, from http://www.abs.gov.au/AUSSTATS/

ABS (Australian Bureau of Statistics). (2007b). Survey of education and work, Australia, May 2007, Retrieved 23 March 2008, from http://www.abs.gov.au/ AUSSTATS/

AEI (Australian Education International). (2007). Pathways, preparation and selection. National Symposium: English Language Competence of International Students, August 2007, Sydney, Australia, Retrieved 28 March 2008, from: http:// aei.dest.gov.au/AEI/Shop/Products/Publications/Publication623

Anyanwu, R. (2004). Lessons on plagiarism: issues for teachers and learners. International Education Journal, 4 (4), 178-187, Retrieved 24 May 2005 from http://iej.cjb.net

Ballard, B. & Clanchy, J. (1991). Assessment by misconception: Cultural influences and intellectual tradition. In L. Hamp-Lyons (ed.), Assessing Second Language Writing in Academic Contexts (pp. 19-35). Norwood, New Jersey: Ablex Publishing Corporation.

Burch, T. (2008). Teaching and learning accounting with overseas students, People and Place, 16 (1) 2008; 12-20. Retrieved 12 July 2009 at: http://search. informit.com.au/documentSummary;dn=157274631413497;res=IELHSS ISSN:

Clarke, M.K.A. (2005). Mentoring reflection and learning portfolios: an investigation into practices that contribute to professional learning. Doctoral thesis, University Western Sydney, available [online] Australian Digital Theses

Chickering, A.W. & Gamson, Z.R. (1994). Seven principles for good practices in undergraduate education. In K.E. Feldman & M.B. Paulsen (eds.), Teaching and learning in the college classroom, pp. 255-262, ASHE Reader Series, Needham Heights.

Jaworski, B. (1993), Constructivism and Teaching – the socio-cultural context, Retrieved 9 January 2008 from: http://www.grout.demon.co.uk/Barbara/ chreods.htm

Krause, K. (2006). On Being Strategic about First Year. Paper presented at Queensland University of Technology First Year Forum Conference, October,

Levy, S., Osborn, M. & Plunkett, M. (2003). An investigation of international students' academic and social transition requirements. Paper presented at ACM International Conference, Newcastle, New South Wales, Retrieved 7 July 2009 from Informit database

Malloch Brown, M. (2006). Success Characterized by Ability to Learn, Unlearn. Relearn when Necessary, United Nations Deputy Secretary-General Commencement Address, New York University, May 8, 2006, Retrieved 27 March 2008 from: http://www.unis.unvienna.org/unis/pressrels/2006/dsgsm285.html

Ross, J. (2008), Transnational Threat to Higher Education's Gravy Train. Campus Review 18 (10), 6-7.

Sawir, E. (2008). International Students and the English Language: how can we move forward? Campus Review, 18 (4), 9-14.

Thanasoulas, D (n.d.) 'Constructivist Learning' Teaching Learning, Retrieved 4 January 2008 from http://www3.telus.net/linguisticsissues/constructivist.html