Designing pedagogical experiences to facilitate first year students' learning progression: a case study

Jill Lawrence and Regina Ryan

School of Arts and Communication, University of Southern Queensland

Realising the potential for commencing students to succeed at university depends on designing a pedagogy that not only engages students in learning but also encourages them to actively reflect on that learning. This guiding philosophy underpins a first year undergraduate nursing course conducted at the University of Southern Queensland; a course characterised by a very diverse student cohort, an online teaching mode and an inter-disciplinary program emphasis. This paper documents a research study evaluating the course. The findings reveal that the course's pedagogical design enables students to reflect on and progress their learning, particularly the learning thresholds related to their digital learning, time management and organisational capabilities as well as their capacities to seek support and learn independently. For a minority of students, however, the course's online engagement was troublesome and although this can be tracked it remains a concern that needs to be explicitly confronted at the beginning of each course offering.

Introduction

This paper will explore the progression in learning of students completing a first year undergraduate nursing subject (course) conducted by the School of Nursing and Midwifery at the University of Southern Queensland (USQ). The course has been conducted since 2006 and is one of two courses designed to assist students to develop the literacies and capabilities they need to succeed as learners in their higher education (HE) studies and as nursing professionals: *Building Professional Nursing Attributes A* (CMS) and *Building Professional Nursing Attributes B* (MAT). The aim of CMS is to develop students' academic and information literacies and their research, communication, interpersonal and team work skills as well as assisting them to begin their professional e-portfolios. The companion course, MAT, is charged with the responsibility of developing students' numeracy and computing competencies directly linked to their degree and later professional practice.

The paper describes the course's underlying theoretical perspectives. The paper also outlines the research study's evaluation methodology before analysing the effectiveness of the course's learning practices and whether they facilitated, if at all, students' progression in learning.

Perspectives underlying course design

The rationale for the pedagogical decisions underpinning CMS course design included its diverse nursing cohort, inter-disciplinary collaborations and embedded and scaffolded practices. Furthermore, CMS was delivered online and integrated learning thresholds and research-informed learning. Its diverse cohort embraced school leavers, mature age, international, refugee, low-socio economic, indigenous and rural and isolated students as well Designing pedagogical experiences to facilitate first year students' learning progression: a case study Refereed paper

as Assistants in Nursing (AIN) and Technical and Further Education (TAFE) students completing an accelerated two-year program. In 2014, the student cohort (n=493) included 418 females, and 75 males, 96 of whom were school leavers, 165 aged 18-20, 153 aged 25-40 and 68 aged 40-60. Nearly all students were located in the medium and low socio-economic brackets (based on postcode) and included 56 international and 6 refugee students.

CMS's interdisciplinary collaborations included nursing colleagues (to provide a whole-ofprogram approach), the Science Faculty (mathematics and computing skills), the Faculty of Arts (academic literacy and communication skills), Learning and Teaching Support (LTS) (pedagogical reinforcement), the Australian Digital Futures Institute (ADFI) (online pedagogical advice) and the library (information literacies). The collaborations helped address diverse students' needs by providing an integrated and holistic approach to student support. As Woods (2007) suggests, an inter-disciplinary curriculum is also able to respond more effectively to modern working patterns which call for multi-disciplinary team work and interdisciplinary solutions. The collaborations also role model the holistic focus essential to students' transition to university and effective professional practice by replacing decontextualised, 'bolt-on' skills courses and disparate, 'piecemeal' efforts to support new students where engagement and retention are left to chance (Krause et al., 2005).

Student diversity also precipitated the focus on embedding and scaffolding key university literacies (Pea, 2004). This design impetus stemmed from Keimig's (1983) model of learning improvements which argued that generalized approaches to skills courses were less likely to be effective than those targeted at specific aspects of learning within academic courses where the need for knowledge or skills become apparent. Keimig also proposed hierarchical levels of support to provide for the total learning requirements of students including their needs and attitudes. This embedded approach is supported by critical literacy (Kirkpatrick & Mulligan, 2002). Lawrence (2005) for example theorises that university is a culture made up of a range of literacies, discourses and cultural practices. Students' transition can then be perceived as a process of gaining familiarity with and demonstrating these literacies or practices. Commencing students, for example, need to rapidly master and demonstrate faculty, school and subject discourses, including academic, library, numeracy, research, information, administrative and technological literacies as well as the more personal cultural practices also crucial for success, including communication, interpersonal, stress and time management and organisational literacies. There are also new teaching and learning styles and a plethora of unfamiliar cultural practices. In addition, nursing students are required to demonstrate a range of discipline literacies: biological, chemical, computing, nursing, communication, research (both quantitative and qualitative methodologies) and information literacies amongst others.

While embedding key literacies prioritises them in students' minds, the practice can also be used to assist students to gauge familiarity about and awareness of their own skills and knowledge as well as their understanding of the academic, linguistic and socio-cultural capitals with which they enter university (Bourdieu, 2001). Devlin (2011) uses the notion of socio cultural incongruence to conceptualise the differences in cultural and social capital of diverse students, for example from low SES backgrounds, and the high SES institutions in which they study. Devlin (2011) suggests that an intentional design of learning, teaching and assessment acknowledges the reality of the contemporary student context and seeks to mediate student diversity in relation to the preparedness and cultural capitals of commencing students. Devlin (2011) argues that it is important that students accept their own responsibility in this process by not only reflecting their own skill base but also building their capacities to develop these literacies throughout their studies. The institution and staff also have responsibilities in this Designing pedagogical experiences to facilitate first year students' learning progression: a case study Refereed paper

process. Kift (2009, p.1), from the First Year in HE (FYHE) suggests a 'transition pedagogy' within which the curriculum should be designed to be consistent and explicit in assisting "students' transition *from* their previous educational experience *to* the nature of learning in HE and learning in their discipline as part of their lifelong learning". Thus the first year curriculum should be designed to mediate and support transition as a process that occurs over time. Thus students' assessment of the capabilities, literacies and capitals they bring with them assists them to approach and unpack the often tacit expectations inherent in university practices.

Embedding and scaffolding key literacies also aligns with the findings of an Office of Learning and Teaching (OLT) Report, "Student and Staff Experiences and Expectations". The report found that many students experience an early 'reality shock' during their first semester and that the resulting mismatch between students' expectations and experiences has ramifications for their learning, satisfaction, retention and ultimately, their wellbeing. The report suggests that learning to achieve represents not just a substantial academic adjustment, but often a massive personal, emotional, geographical, and financial transition. While providing support for struggling students is critical, embedding key literacies helps students transition to an independent learning style as well as other not so explicit expectations and requirements.

A final impetus for CMS pedagogy was the notion of learning thresholds or capabilities. Threshold concepts are the fundamental ways of thinking that are specific to a particular discipline and need to be mastered by students if they are to work effectively in that discipline (Cousin, 2009). A focus on threshold concepts enables teachers to make refined decisions about what is fundamental to a grasp of the subject they are teaching. This view is embraced by the discipline Threshold Learning Outcomes (TLOs). A parallel research strand relates to learning capabilities or the capabilities that characterise effective learners (Lorano et al., 2012). Walker (2010) from a critical stance, perceives capabilities as the learning literacies that students demonstrate if they are to become ethical and involved students and professionals. This paper explores the concept of whether learning thresholds can be widened from their discipline connotations to encompass the learning capabilities (or practices or literacies) that students need to demonstrate if they are to make a successful transition to university study.

Pedagogical design

CMS, guided by these perspectives, replaced more traditional curriculum choices – on-campus classes, study modules, textbooks and selected readings – with weekly video-lectures and e-tivities (see Figure 1). The e-tivities were explicitly linked to the assessment through the use of activity tasks and accompanying forum posts. Each student was allocated to a forum group (n=25), variously named the Resuscitators, the I V Leaguers, etc, with an accompanying online tutor who provided feedback for each of their posts (thus constituting formative assessment).

Methodology

CMS has incorporated a research study since its inception (2006). The methodology included continuous evaluative processes which were applied throughout the design, delivery and evaluation of the program. A standard method of evaluation and program development (Taylor & Galligan, 2002, developed from Guba & Stufflebeam, 1970) was used and includes both quantitative and qualitative data collection techniques in each cycle (see Table 1). These evaluation cycles began in 2006 with evaluations of the online components from 2012.

Item	Evaluation Strategy	Pre-program Design Stage	Program Design Stage	Program Delivery Stage	Program Conclusion Stage	
------	---------------------	-----------------------------	-------------------------	---------------------------	-----------------------------	--

	The student perspective						
1.	Feedback from previous student surveys	\checkmark	\checkmark	\checkmark	\checkmark		
2.	Reflections in assignments and the portfolio			\checkmark	\checkmark		
3.	Official Student Evaluations of Teaching				✓		
4.	Online discussion and forum groups			✓	✓		
5.	Second and third year student cohort surveys	✓	✓				
	(yet to be undertaken for the 2014 cohort)						
6.	One-on-one sessions with students		\checkmark	\checkmark	\checkmark		

Table 1: Relationships between the evaluation strategies and stages in the course design

Within the study, a phenomenological approach (Jeffers, 1998) is taken to understand the lived experiences of students as they become more academically prepared. Data includes forum feedback and individual interviews that collect students' past experiences; their present feelings and experiences and how these present feelings and experiences are transformed. This evaluation methodology is reiterated during each course offering. In the pre-program stage, use was made of the extensive amount of feedback that had been collected from students in previous research studies (Item 1). During the delivery stage, continuous evaluation included unsolicited feedback presented in emails, forum discussions (Item 4) and intensive one-on-one sessions (Item 6). Two independent formal student evaluations are also conducted at the conclusion of each cycle: one designed to address program specific issues (Item 5); and the other, the standard university course quality survey (Item 3). Continuous feedback is obtained, principally from the e-portfolio assignment (Item 2). Students are asked to reflect about their learning and academic literacies as they bridge the divide between their pre-university, school and employment (both nursing and casual work) contexts and their HE and nursing contexts. E-tivity 1 includes an online personality, learning approach and learning style questionnaire that produces individual feedback that students are asked to reflect about (see Figure 1) both at the start and end of the course in their assignments.

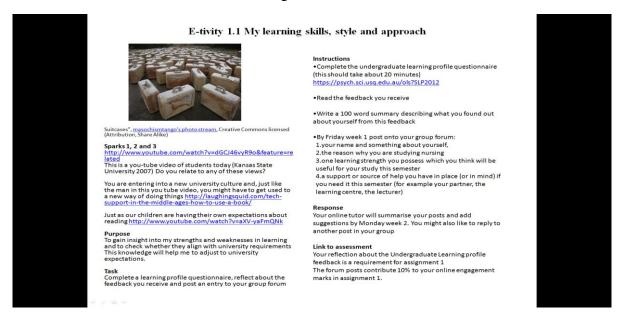


Figure 1: Sample of an e-tivity

Previous papers have documented the design, delivery and evaluation of CMS (see Lawrence, Loch & Galligan, 2008; Lawrence, Loch, & Galligan, 2010) including the interdisciplinary collaborations and embedded practices. In the cycles conducted in 2014 (semesters 1 and 2) the data was interrogated in particular to assess whether the pedagogical design facilitated

students' progression in learning and if so, how. The data was also probed to understand the learning thresholds, or capabilities, that students considered to be critical to their learning.

Findings and discussion

Students were required to reflect about their learning in the forums and in both Assignments 1 and 2. Their evidence was analysed to assess whether there were learning thresholds (or capabilities or literacies) that they considered to be crucial to their study effectiveness. The themes that emerged included digital learning thresholds, time management and organisation, the capacity seek support and help, independent learning and reading. The data were also evaluated to explore whether CMS pedagogy assisted students to progress their learning.

Digital literacies

One of the most prevalent learning concerns emerging from the data, a consequence of the diversity of students' background knowledge, was their lack of digital experience and proficiency. The evidence pointed to its negative impact on their learning, an impact affecting their transition and progression. A majority of international and mature age students, for example, felt particularly disadvantaged by the new and unfamiliar literacies. The following comments were typical of the concerns expressed by students.

Having just completed 12 years of schooling, learning face-to-face, I initially found it hard to transition into studying so much online. I think I found it so hard initially because I had to find the time at home to study, instead of turning up to set classes. (forum reflection)

I was really shocked when I saw so many computers (portfolio reflection).

Mature age students similarly found the online environment troublesome and unfamiliar:

I've worked as a public servant for the past 8 years so my experience as a mature student was what I thought an advantage. Not only did I not know how to use the study desk, forums, databases and the library something as simple has the Umail had me in a spin! I had 400 emails in my inbox. Yikes! Sometimes you underestimate your learning ability when using a new program and it does help to go in with an open mind. After I did the survey I realised how much more I'm online and using the study desk. (portfolio)

I have been to university before about 10 years ago and I have to say it is a little different this time around. There is not as much on campus time, and a lot more online learning as a result. I am new to forums and working out what is happening in the course through a computer. I had the preconception about the amount of in-campus time which I was wrong about. (portfolio)

An issue of concern was students' lack of understanding that the online environment was the only means of accessing all material and most communication. Moodle's inconsistency exacerbated this confusion, further hindering their confidence and engagement.

Functionally: there were so many different "levels" to the Moodle system, I initially found it hard to navigate. Then keeping track of the forums took me hours (which I didn't have). With everything else going on I just put it in the too hard basket and focused on the tasks I found easier (forum).

However the data also revealed that CMS practices – the online delivery, e-tivities and forum feedback – increased students' engagement and mastery of the online literacies, facilitating their learning. On line learning improved their flexibility as these forum posts demonstrate.

Online learning is new to me. Initially I was confused but now I have felt that online learning is actually beneficial. It provides team learning and there are no geographic barriers for the students. We are able to access the course from anywhere and it provides every student to contribute by posting their opinions.

A benefit of CMS online delivery is that I enjoy the option to study in the comfort of my home as well as having the online support from the lecturers (portfolio)

I have developed alternate ways to learning throughout the duration of this first semester. I now use computers more with a specific example being endnote, and as a result my digital literacy has improved.

Distance students reported that the forums reduced their feelings of isolation which had a positive impact on their learning, facilitating their transition and retention.

For me the forums have also been an excellent way to interact with fellow students through the sharing of opinions and feedback. It made me feel like I was learning collectively with other students (portfolio).

The online forums have taken the 'distance' out of distance learning and I felt in touch with other students, tutors and the university faculty. I was able to navigate my way through technological problems by way of these forums as well as solve any queries on assignments. This has helped to improve my communication and problem solving skills. Overall, I feel I have gained invaluable new digital literacy skills, and the confidence these have given me, has been personally very rewarding (portfolio)

While data revealed students' initial reservations about CMS being online and about forum participation, in many cases these fears dissipated. One student expressed her fears about online learning and how she had not only overcame them but also recognised how she has progressed her learning by participating in CMS's learning activities:

I was a little apprehensive about committing to online learning, having always been in face-to-face classes. By completing the weekly e-tivities and tasks, I have learned how to participate in an online conference, I have highly tuned my academic writing skills, learned to use databases for research and experienced computer marked assessments. On reflection, I believe that online learning is the best way for me to complete my education, as it offers extreme flexibility in respect to 'class time'. The personal aspect of learning is not lost as there is quite a bit of engagement with others in the forums. After completing the survey, I can safely say that my digital literacy skills have definitely improved. I am uncertain about research but I will participate in library online courses to address this. Overall, I am much more confident with online learning (portfolio).

A large number of reflections demonstrated that forum participation was uncomfortable and troublesome but that the feedback facilitated effective learning.

At first forums took me out of my comfort zone. Since it was a requirement I was eased into making regular contributions as well as reading those of others. I soon became used to it and also found a lot of information that was very helpful and still do (portfolio).

I wouldn't have written on the online forums if it weren't for CMS to prod me along. I would probably have felt a little bit worried I'd write something incorrect or silly, but CMS has given me the confidence to write on the appropriate forums. Using the online forums have answered a lot of my questions (forum).

The evidence suggests that pedagogical design incorporating forums, e-tivities and online videos increased student engagement and progressed their learning:

Since starting in July I have participated in a WIMBA session, produced a PowerPoint presentation with voice over, started a fabulous E-portfolio, got valuable feedback from forum postings and submitted assignments via EASE. Imagine what I am going to achieve in the next two and half years if I have done all this in just 8 weeks!(forum).

These forums have allowed me to be to see how other people tackle problems and view situations, and have taught me to value others' opinions (portfolio).

The fact we were expected each week to contribute to online engagement was fantastic, not only did we get to chat with other students but we also got the chance to see what other students were thinking and know we weren't alone if we were struggling with anything. The feedback given by the tutor at the end of each week was a massive help in knowing we were on the right track (forum).

CMS has improved my digital literacy skills immensely. It taught me about the library, referencing, thesis statements, communication and I also learnt about myself and how I study. All in all, CMS1008 was a good experience and put me in good stead for the rest of my studies (forum).

CMS's activities assisted students to gauge their learning progress. A digital literacy survey, part of a larger online digital survey, comprised an e-tivity in Week 9. It surprised students to discover how much their online learning had progressed as these posts attest.

The digital survey helped me to reflect on my confidence with technologies and showed that I am now much more confident with forums and searching databases when previously I hardly had any confidence.

I found that participating in online forums was very helpful in learning due to giving and receiving advice to other students. After finishing the survey I have realised I am gaining a lot of confidence and more digital literacy skills.

After completing the survey I know that I am a lot less apprehensive about the digital literacy skills. The course has strengthened my skills and helped me conquer my other courses so far.

Seeking support and asking for help

Seeking support and asking for help were nominated as key learning practices by students,

One way that I have developed my learning skills this semester is using by university resources such as the learning centre and library staff. These resources have helped me with finding information in a database, referencing, organisation skills and much more. I have found this to be a great help so far in all of my subjects and plan to access them throughout the rest of my degree (portfolio).

When reflecting on another student's post from the Spare Ribs forum, I found it interesting that they were making use of the university support services to her advantage (forum).

I conquered that weakness by asking for help from my co-students and my student relationship officer.

I am not very good at asking for help and am still very unfamiliar with the learning centre however online forum posts have been a huge success in helping me through assignments and questions I may have, I have found others need answers to also. Since completing the online survey I need to review certain areas like Wimba and the Learning Centre. All in all it had been a great semester I have developed study strategies which have helped me within my chosen subjects and with these believe I will achieve in my future study at USQ.

The testimony shows that some students acknowledged they needed to work more on their development of this threshold.

I do need to work on my confidence for seeking support from the university (forum)

Next semester my major learning strategy will be possibly looking at getting a tutor or seeking more help from teachers upon assignments and definitely sticking to the structure of my assignment marking criteria a little more carefully to achieve greater results (portfolio).

The main learning strategy I plan to implement next semester will be joining a study group. So far this semester I have still been getting used to university and have not yet joined a set study group and I believe that by doing so next semester, I will increase my learning (portfolio).

Recently I asked for help from one of my lecturers and was really nervous to see them as I may appear stupid for just not getting it. They were very supportive and informative and gave pointers to progress through the course. Overall the course has brought myself out of my comfort zone at times but I have grown from the experience (portfolio).

Time management and organisation

Students' portfolio reflections in both Assignments overwhelmingly demonstrated that they considered time management and organisation to be learning thresholds. If students were not able to balance their study/life/work demands they would not succeed at their studies.

One way I have developed learning skills this semester is via my time management which has extremely improved since starting university as I focussed on it more (forum).

Life and house work got neglected, I spent little one on one time with my son and felt like I was a failing mother. I felt like a failure of a friend. Appropriate time management, planning ahead and knowing what expected each week and being organised are not only important key skills to graduating university successfully but also later in my nursing career (portfolio).

One expectation I had about learning at university was that I would be told what needs to be completed and reminded when assessment is due, which was not the case. University is very different from school and with a lot of learning being online it is important to be organised and in charge of my own learning.

I would have to say I had never thought of myself as an unorganised person, however this semester has proven my management, planning and organisational skills are quite poor (portfolio).

Management of my time is important, not only is it important to dedicate time to my studies to do what is required, but to my personal and social life. This semester I feel I had so poorly managed my time that nothing seemed right; I fell behind in my studies and felt I was a failing student (portfolio).

Independent learning

Data demonstrated that many students reflected that acquiring independent, or personal, learning capabilities was unexpected but very important for their success.

I expected teachers to help us more without asking upon assignment assistance, unlike school assignments they aren't handed into us we have to seek them ourselves. Also, we have to seek assignment 'due dates' and 'exam' dates ourselves so it's basically personal learning (portfolio).

One expectation I had was that I would have time to not only keep on top of things but to be way ahead of schedule. I had no idea how much work was involved and how many assignments there were (portfolio).

When I first started University I was overwhelmed by it all and looked at how much I needed to do overall but I've learnt to focus on one thing at a time and finish that before moving on to the next. It seems more achievable that way taking it one step at a time (portfolio).

This included changing one's expectations and strategies to meet university requirements.

My learning has changed this semester as in the beginning of this semester I was unsure of how to access all of the course materials and lectures and really struggled on my first couple of days to find my way around the study desk, now I log-on and go exactly where I need to go to find information and do what I need to efficiently and without having to think about it or stress if I have gone to the right place, if it wasn't for this course I think I would have been lost for a lot longer that I was, especially when it comes to referencing and finding information from the library.

Portfolio reflection data showed how students had taken advantage of the CMS activities to refine their learning thresholds and as a consequence this practice reduced their stress.

I have worked so hard on my academic writing skills, my referencing skills and learnt how to juggle the heavy workload. In regards to my referencing skills, it took a bit to learn how to reference properly. I got some great advice and pointers from my forum tutor and this really helped to rectify and further develop my referencing style. I took the learning profile questionnaire at the beginning of my semester, where I discovered my personality to be a very shy, nervous and insecure. I feel if I took this questionnaire again now that I have learnt to manage my stress, the result would be much more divergent. The interview¹ I conducted for my first assignment in CMS was to speak to a graduate about their university experience. Speaking to someone who had been through what I was going through and came out the other end a talented nurse, really helped me settle into my role at university. It helped to reiterate that what I am doing is going to give me such an achievement at the conclusion of my studies.

A minority of students in both semesters did not participate in any of the e-tivities and forum posts, despite the allocation of marks and assessment links: in semester 1, n=42 or 9% with a grade average of 59.8% and in semester 2, n=23 or 13% with a grade average of 52.75%. When questioned, because they had failed, students explained that they felt that they could pass the assessment without participating in the course activities or did not prioritise it at all.

¹ Students developed their own interview questions after watching some you tubes from the University of South Australia

Designing pedagogical experiences to facilitate first year students' learning progression: a case study Refereed paper

When the assignment came I thought I would be fine. I did not think that missing a few postings would be a big deal. I was very wrong. For the tasks I had done forum postings for, I did not have an issue but as I got deeper into the assignment I found it harder and harder. I regretted not doing the tasks (email).

For assignment one I overestimated the amount of required to complete it to a satisfactory level. I had actually underestimated the entire subject, I thought I could do work required in the break we had midterm and I allowed my other studies to become more important over this class, as a result left it till I had a week before assignment one was due before starting. So for assignment two I knew I had to do something differently, I went and asked for helped and found out exactly what was required for me to pass this assignment and this class. There are many things I have learnt from this, firstly post to forums, they contain helpful information that is linked to assessment. The most important thing I learnt was to ask for help, I should have done it with assignment one but I was too embarrassed and as a result I failed. This time I admitted I was unclear what was expected of me and what I had to do. I hope in gaining these valuable insights they will not only help me in this subject but in my time at university.

This evidence confirms Morris' (2005) findings that in terms of online engagement, unsuccessful students were far less active in participation than successful students. This suggests that online engagement is a particular problem for some students. That such non participation could be tracked and positively correlated with assignment failure and/or lower grades is a positive step forward however, enabling discussions with the students concerned.

Conclusion

I felt that this course would be of little use to me as I was confident with my existing abilities, regarding computing, communication and academic writing. Very soon into the program I realised just how wrong I was, as I began to learn and apply a variety of new and beneficial skills that I believe paved the way for my smooth introduction into my first year of University. This course has formed the foundations for my learning, teaching me the important fundamental skills needed to do well in my studies. The Undergraduate Learning Profile gave me a deeper understanding of my personality traits and learning approaches, helping me to create strategies to improve my learning. The student interview also improved my results this semester as I received valuable advice from an experienced student. Throughout the weekly tasks I have learnt how to locate accurate and valuable sources for my assignments, and have learnt a completely new referencing system. My academic writing has been developed further, as I now feel more confident establishing an academic argument with a strong thesis and effective paragraphs. I now further understand the importance of great communication skills and cultural awareness, both in daily life and as a nurse. Due to my forum group, "The Pulse Rates", I feel more confident speaking to other students. I can confidently engage in online chat sessions with tutors and students. Lastly, I have learnt to create a portfolio to display my achievements throughout my study and career. Overall, I have enjoyed this subject and feel that it has been extremely useful to me this semester. I feel positive about my future studies thanks to CMS (portfolio).

The detailed reflection demonstrates that CMS's pedagogical design does enable its diverse student cohort to progress their learning. Learning thresholds students nominated as being critical to their transition included digital learning, time management and organisation, the capacity seek support and help, independent learning and reading. For a minority of students, however, CMS's online engagement was troublesome and although CMS design enables this to be tracked and confronted it remains a concern that needs to be explicitly confronted at the start of each offering.

References

Bourdieu, P. (2001). Masculine Domination. Stanford: Stanford University Press
Cousin, G. (2009). Researching learning in Higher Education. New York: Routledge
Devlin, M. (2011). Bridging socio-cultural incongruity: conceptualising the success of students from low socio-economic status backgrounds in Australian higher education. Studies in Higher Education, Retrieved from http://dx.doi.org/10.1080/03075079.2011.613991

- Guba, E., & Stufflebeam, D. (1970). Evaluation: The process of stimulating, aiding and abetting insightful action. *Measurement and Evaluation Centre in Reading Education*, Bloomington, Indiana University
- Jeffers, B. R. (1998). Research for practice: The surrogates experience during treatment decision making. *Medsurg Nursing*, 7(6), 357
- Keimig, R. T. (1983). Raising academic standards: A guide to learning improvement: *ASHE*-*ERIC Higher Education Research Report No. 4*. Washington D.C., Association for the Study of Higher Education.
- Kift, S. (2009). A transition pedagogy for first year curriculum design and renewal. In *FYE Curriculum Design Symposium 2009*, Brisbane. Retrieved from http://www.fyecd2009.qut.edu.au/resource
- Kirkpatrick, A., & Mulligan, D. (2002). Cultures of learning: Critical reading in the social and applied sciences. *Australian Review of Applied Linguistics*, 25(2), 73–100
- Krause, K-L., Hartley, R., James, R., & McInnis, C. (2005). *The First Year Experience in Australian Universities: Findings from a Decade of National Studies*. Canberra: Australian Department of Education, Science and Training. Retrieved from http://www.griffith.edu.au/__data
- Lawrence, J (2005). Reconceptualising attrition and retention: integrating theoretical, research and student perspectives, *Studies in Learning, Evaluation and Development, 2(3),* 16-33. Retrieved from http://sleid.cqu.edu.au.
- Lawrence, J., Loch, B., Galligan, L. (2008). Reframing e-assessment: building professional nursing and academic attributes in a first year nursing course. *Learning, Media and Technology, 33(3),* 69-89
- Lawrence, J., Loch, B. & Galligan, L. (2010). Employing interdisciplinary collaborations to redefine academic practices in a university nursing program. In M. Devlin, J. Nagy and A. Lichtenberg (Eds.) *Research and Development in Higher Education: Reshaping Higher Education*, 33, 441–451.
- Lozano, J. F., Boni, A., Peris, J. & Hueso, A. (2012). Competencies in Higher Education: a critical analysis from the capabilities approach. *Journal of the Philosophy of Education Society of Great Britain.* 46(1), 132-147. DOI: 10.1111/j.1467-9752.2011.00839.x
- Morris, L., & Wu, S. (2005). 'Tracking student behavior, persistence, and achievement in online courses', *Internet and Higher Education*, 8(3), 221–231.
- Office of Learning and Teaching Report (2010). Student and staff experiences and expectations. A collaborative multi-faceted approach to address the gaps between student expectation and experience at university
- Pea, R. D. (2004). The social and technological dimensions of scaffolding and related theoretical concepts for learning, education, and human activity. *Journal of the Learning Sciences*, 13(3), 423-451
- Taylor, J. & Galligan, L. (2002). Relationship between evaluation and program development: case studies from mathematics support, in J. Webb & P. McLean (Ed), Academic Skills Advising: evaluating for program improvement and accountability. Melbourne, Victoria: Victorian Language and Learning Network
- Walker, M. (2010). Critical Capability Pedagogies and University Education. *Educational Philosophy and Theory*, 42(8), 898-917
- Woods, C. (2007). Researching and developing interdisciplinary teaching: towards a conceptual framework for Class room communication. *Higher Education*, 54, 853-866