

The Gateway to a learning community within the Bachelor of Nursing – Using Blackboard Course Management System

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Abstract

The Bachelor of Nursing (BN) program at Central Queensland University requires students to complete industry based clinical practicum in each of the 3 years of their program. Students spend 40–60% of their week off campus in clinical practicum. The Bachelor of Nursing Program Gateway (BNPG) is the application of the traditional Blackboard course management system from a single course to a whole program. It has pushed the boundaries of online course management creating an online learning community that consists of students, lecturers, clinical laboratory managers, administration staff, program advisors and industry clinical staff from three Central Queensland University campuses (Rockhampton, Mackay and Bundaberg), one hub (Noosa) and Flexible delivery. This paper will adopt Wenger, McDermott, and Synder's (2002) seven principles of communities of practice to discuss development strategies that have proved successful, as well as some of the pitfalls experienced and lessons learned that will save valuable time for program coordinators hoping to adopt this technique.

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Introduction

The concept of a learning community evolved in education as a response to two critical elements: the disparate and diverse needs of contemporary learners and a pedagogical shift in the philosophy of adult learning from teacher to student centred approaches (Kilpatrick, Barrett, & Jones, 2003; Nosek, 2003). Early use of the term “learning communities” can be found in European literature where it describes geographically bound communities such as learning towns, cities or regions (Kilpatrick et al.). While more recent references to learning communities recognise that there need not be a geographical connection if the learners are joined by a common interest. This is particularly evident in Australian literature where it is recognised that common interests can transcend the “tyranny of distance” familiar to much of Australia (Kilpatrick et al.). Learning communities are social networks where individuals learn through participation, identifying problems that affect them and pose solutions. It is the application of this aspect of social learning that new knowledge and skills are gained (Tu & Corry, 2002). Using the previously defined constructs of learning communities the next logical step in their evolution was the application of technology such as the Internet to create effective online

learning communities (Buckingham, 2003; Honey, Gunn, & North, 2004; Tu & Corry, 2002). A single unifying definition of an “online learning community” is elusive (Tu & Corry). This is to be expected when we consider that multiple disciplines are now grappling with the social phenomenon of online communities, while emerging technologies are recreating the boundaries. Thus a definitive definition is unlikely (Tu & Corry). Although a single unifying definition remains out of reach, the fundamental elements of an online learning community are evident in the literature. This paper will identify some that have been applied to the development of the BNPG such as promoting social interaction (Garrison, Cleveland-Innes, & Fung, 2004; Tu & Corry), developing identity and culture (Billings & Kowalski, 2005; Kilpatrick et al., 2003), collaboration for participants in geographically disparate locations (Stacey, Smith, & Barty, 2004), and developing interdependence and exchanging ideas (Buckingham, 2003; Geer & Wing, 2002; McAllister & Moyle, 2005).

Design for evolution

When developing a community of practice that encourages learning, Wenger et al. (2002) recommend that designers acknowledge what knowledge-based social structures already exist. Thus the new BNPG became a catalyst of the Bachelor of Nursing’s (BN) natural evolution, building on ‘preexisting personal networks’ (Wenger et al., p. 51). One considerable unifying structure of the BN’s communication and knowledge-based social structure was the existence of clinical practicum. All students in the BN would undertake clinical practicum following second semester in first year. All students were required to provide critical information related to pre-clinical requirements (e.g., Hepatitis B vaccination status, Blue Card, Fist Aid certification etc.) to a central office on the largest campus Rockhampton. These were pre requisites that our clinical partners (hospitals and community health organisations) required of our students before they presented to undertake clinical practicum. Collecting this information in the past was a tedious and haphazard process, with students unaware of what requirements were outstanding. Changes to program policies, clinical and campus timetables, practicum plans, room movements, uniform sales, collection of pre-clinical requirements were all performed in an adhoc manner. With students forever complaining that “I was never told that I had to do that, or attend this.” The pin boards outside the faculty office and clinical laboratories had had their day. There had to be a better way. Thus in March 2005, the BNPG applying traditional Blackboard course management system to the whole program went live. The traditional Gradebook evolved in to a secure mechanism to post the students preclinical requirements and details about practicum completed.

Figure 1: An example of a student’s Gradebook view of “My Clinical History”

COURSES > THE NURSING GATEWAY 2007 > TOOLS > MY GRADES

 **View Grades**

Item Name	Date	Grade
Campus	2/14/07 11:22 AM	BBG
Scholarship Holder	2/14/07 11:29 AM	aged
Enrolled Nurse Status	2/14/07 11:29 AM	no
First Aid Certificate	2/14/07 11:29 AM	23
CPR Update	2/14/07 11:29 AM	23
Qld Health Orientation Web Site Accessed	2/14/07 11:29 AM	yes
Blue Card	2/14/07 11:29 AM	yes
Hep B Titre Level Result	2/14/07 11:29 AM	>1000
TB Mantoux Mackay Only	2/14/07 11:29 AM	NA
Student Acknowledgement and Agreement	2/14/07 11:29 AM	yes
Year 1 Term 2 Placement Site	2/14/07 11:29 AM	Tricare
Year 1 Term 2 Placement Hours	2/14/07 11:29 AM	192
Year 2 Term 1 Placement Site	2/14/07 11:29 AM	BBG Base
Year 2 Term 1 Placement Hours***	2/14/07 11:29 AM	186
Year 2 Term 2 Placement Site	2/14/07 11:29 AM	GP Sugarland
Year 2 Term 2 Placement Hours**	2/14/07 11:29 AM	192
Year 3 Term 1 Placement Site*	2/14/07 11:29 AM	FSPH
Year 3 Term 1 Placement Hours*	2/14/07 11:29 AM	186

Open Dialogue between inside and outside perspectives

Prior to the BNPG one considerable limitation of the traditional BN community was the exclusion of our clinical partners and the casual staff (Associate Lecturer Clinical ALC) appointed to supervise students while on clinical practicum. Although teleconference meetings were held on a regular basis with Course Coordinators and casual ALCs, many voiced concern that they felt excluded from decisions related to the student’s progress or overall grade. Frustrations centred around ALCs not being aware of what the students had covered on campus, and what measures were taken when students were deemed incompetent or poorly performing. Staff both inside the university and in the clinical environments expressed exasperation with the current communication measures and lack of consultation. The development of the BNPG has provided an effective up-to-date source of information related to program specific policies for both internal and external staff. Discussion forums and file sharing capacity have ensured that new policies and tools relating to assessment of student performance are developed including the casual ALC staff.

Figure 2: An example of a ALC Discussion

COURSES > THE NURSING GATEWAY 2007 > COMMUNICATIONS > GROUP PAGES > > GROUP DISCUSSION BOARD > MESSAGE VIEW

◀◀ Previous Message Next Message ▶▶

Forum: ALC Discussion Board
Date: Tue Apr 03 2007 15:50
Author:
Subject: Re: student portfolios

Times Read: 19

Remove

I think doing away with the CLR and having the student do an initial self-assessment as part of the formative and summative assessment process is a good idea. I find that ensuring that the student can relate to the performance levels grading (criteria) sheet for the assessments is important. I utilised the electronic format last year when I did the assessments and found that useful to be able to easily review (and revise) my comments etc. I thought it might be less timeconsuming but I don't think that it really was due to saving, printing etc. This year I have had a rethink about how I will approach the assessment as I like to have my grading etc very to be very transparent and ensure that I follow the gradings levels consistently and can discuss / justify with the student why I have rated them as such etc. I find in the current layout of the performance tool that I was constantly flicking back to the grading tool. Last year I reformatted it (smaller font) to enable it to fit on one page for easy reference. I had a copy available for students to look at as well when assessments were being discussed. This week I have been 'playing' around with the tools and figure that it would be easier to highlight directly on to the criteria sheet the level at which the student is performing. For each domain I have adapted a copy of the grading levels pertinent to the ANMC competencies (using only those PLI's for that domain) with the competency statements and PLI nos in the header at the top of the sheet. For Management of Care Provision and Coordination of Care I am using 2 pages (identical) and marking competencies 5/6 on one page and 7/8 on the next so that it is not so confusing. (could have just put the separate statements but thought I could follow this as it is really just for my personal use for grading each performance level) I am planning to highlight (colour coded) down the appropriate column. Then I can clearly see how I have graded the student instead of constantly referring back and forth. I will email a copy of my adaptations to [redacted] and if OK will post them to the list. I was thinking that I would find this format easier to mark and have the cues statements for each competency listed at beginning of each domain.

([redacted] Rockhampton) (PS can I suggest that when we post to this list that we include where we are based)

Reply

◀◀ Previous Message Next Message ▶▶

Thread Detail

student portfolios @

Tue Mar 27 2007 15:00

Wenger et al. (2002) explain that a quality community of practice includes dialogue from outside the community. Application of this into the Blackboard course management system proved to be a challenge. Many of the casual staff did not have signed contracts until very close to the start of semester. Thus they did not appear on the university profile to enable manual enrolment into the BNPG. It is then imperative that designers monitor this closely to ensure that profiles are set up via specific helpdesk requests. Another obstacle grappled with was ensuring all staff including casual staff accessed the BNPG. Mechanisms adopted here included performing “performance dashboard” or “course statistics” at the beginning of the semester. This function quickly identified which staff and students had not ever logged onto the site and number of days since log on. Once this information was gathered, targeted support was offered to determine the difficulties of access. In the current semester it was found that one ALC could not access the BNPG because the hospital where she was based adopted an Internet policy that excluded access to the Internet, instead the internal intranet had only links to specific accepted sites. Negotiations are now underway to ensure Central Queensland University is included as one of their acceptable Internet sites. Thus it is critical that designers adopting program wide Blackboard course management systems do not assume all key users have access. Current performance dashboard shows only three students who have never accessed and six staff out of 944 participants enrolled in the BNPG.

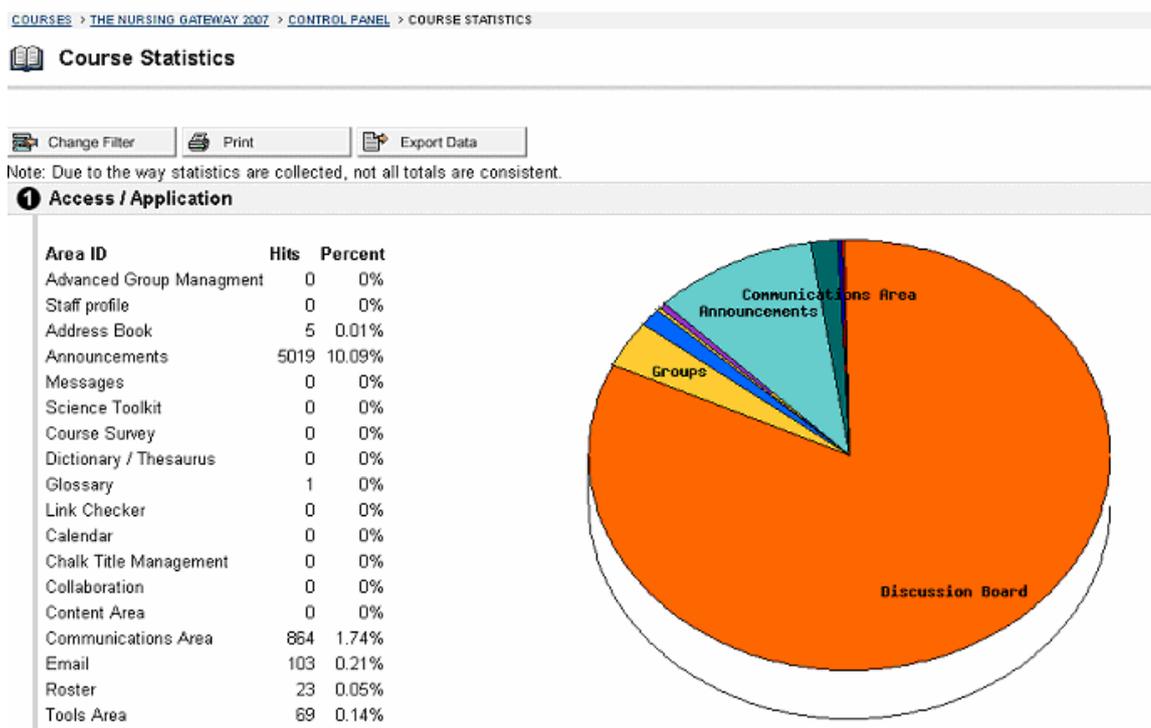
Invite different levels of participation

Appreciating that members in a learning community vary their participation and role is critical (Ryba, Selby, & Mentis, 2002; Tu & Corry, 2002; Wenger et al., 2002). In the early development phase of the BNPG, assumptions were made related to the level of knowledge and skill that staff members had about online

technologies. Early enthusiasm and desire to have all lecturers from the BN contribute as developers proved to be a very time consuming error. One lecturer unaware of how to develop an online course used the live BNPG as a shell for her own online course. Thus while a lecturer at the Noosa hub was showing the new first year students the BNPG, another in Rockhampton was deconstructing it to make a new online course. After much confusion, the costly mistake was discovered. Since this incident all lecturers, except the core development team, were given Grader rather than Lecturer status. Grader access prevents accidental changes to the structure and function of the BNPG.

Wenger et al. (2002) report that there are multiple levels of participation in a community. The BNPG community includes active members who regularly contribute to discussion forums, post new messages and contact developers when improvements are required, to passive peripheral members that rarely participate, but log on to watch interaction of the core active members (Wenger et al.). The course statistics demonstrate this phenomenon. From 6th March – 6th April 2007 there were 40884 hits to the discussion boards by 82.23% of participants. Whereas analysis of the discussion forums during this time shows 224 posts by 80 participants. This represents only 8.5% of the total student/staff participants. Overall access to the BNPG in the 30 days examined showed 87.6% of the 944 participants logged on.

Figure 3: Course statistics March-April 2007



Another level of participation described by Wenger et al. (2002) is that from intellectual neighbours, interested parties in the community who provide service. An example of this would be the Faculty Librarian who posts relevant information and interacts with students and staff involved in the program in a designated content area. Others include the clinical laboratory managers and administration staff from each campus who are key stakeholders in the program, but rarely participate except to post information in specific discussion forums. Each year the developers have included new intellectual neighbours with an interest in our

program, our newest edition is the new Professor of Nursing who has interests in generating a research culture within the program.

Student participation in the BNPG has highlighted to lecturing staff any areas in which the students are experiencing difficulties. Having to complete 16 hours of clinical practicum and attend on-campus lectures and tutorials is a demanding workload and a special learning need in itself. There is a predominance of mature aged students (72% over the age of 21 years, 57% over the age of 25 years) in the BN cohort, thus many of these students have posted messages sharing experiences and difficulties faced during their course. These problems include childcare, relationship and financial difficulties as well as solutions related to sharing accommodation and travel expenses. In a study performed in 2003 using the Bachelor of Nursing cohort at CQU, it was suggested that understanding how students themselves cope with their difficulties may provide the building block for future intervention strategies designed to minimise problems and increase retention rates (Cuthbertson, Lauder, Steele, Cleary, & Bradshaw, 2004). No research has been completed to date to determine the impact that the BNPG has had on attrition rates. Lecturers and support staff who monitor the discussion forums feedback to program meetings if specific difficulties arise. It is the intention of the developers to monitor this in the future.

Develop both public and private community spaces

The structural design of the Blackboard course management system facilitates the development of both public and private spaces. This critical feature enabled posting of confidential details about the student's immunisation status and clinical practicum hours completed on the BNPG. The adapted Gradebook feature securely performs this function. Students can monitor their own progress related to preclinical requirements, while staff monitoring and planning practicum placements can determine the eligibility of the student to progress. The staff area also provides a confidential discussion portal for development of clinical assessment tools and discussions related to student progress. Public spaces require a code of conduct related to information posted, with "access comes responsibility and accountability" (Central Queensland University, 2007). Authors of discussion forums must appreciate that comments posted can be considered libellous (Broad, Mathews, & Shephard, 2003). In the first versions of the BNPG all discussion forums allowed anonymous posts. Anonymous posts resulted in serious complaints and material that was offensive and likely to cause distress to individuals with access to the BNPG. Thus anonymous posts were disallowed. This did curb some concerning materials, but later it was determined that students and staff required reminding about their responsibilities. Thus prior to entering the discussion forums the "Use of Internet, E-mail and Computing Facilities Policy" is posted (Central Queensland University). This action was taken when a third year student offered course advice, encouraging students to avoid one particular course because of the input of the lecturer. Communication and reflection of its impact on others is a key feature in the BN program (Cadman & Brewer, 2001). It is also a feature recognised in role adjustment for students in online communities. Garrison et al. (2004, p. 65) recommend that students are made overtly aware of particular role requirements including "comparison of one's own behaviour to others." Upon graduation our students will enter a profession where written communication plays a critical role. Lessons learned in the undergraduate program about appropriate forms of electronic communication will lay the foundations of professional values.

Focus on value

One of the key elements valued by the developers of the BNPG is the potential for social interactions that assist in the construction of values and identity (Kilpatrick et al., 2003). It is hoped that the BNPG promotes social interactions that are explicit in the operational curriculum model developed for the program in 2003. These include reflective practice (Greenwood, 1998; Ruth-Sahd, 2003), critical thinking, (Scheffer & Rubinfeld, 2000; Twibell, Ryan, & Hermiz, 2005), emotional intelligence – therapeutic relationship (Cadman & Brewer, 2001; McQueen, 2004) and a commitment to self directed, life-long learning (Barnard, Nash, & O'Brien, 2005). However, according to Wenger et al. (2002), developers of communities of practice should not attempt to determine the expected values in advance; instead the participants in the community need to create events and interaction allowing values to emerge. Informal review of the interactions between students, staff and intellectual neighbours has been encouraging, offering students opportunities to collaboratively solve difficulties faced, develop new supportive networks and participate in the “real world” local communities. Campus and year specific discussion forums have been mediums to set up study groups, transport and accommodation solutions, as well planning graduation balls and participation in community events such as the Qld Cancer Fund “Relay for Life” and International Nurses Week. Students post information technology problems that they face using computers from home, allowing other students to respond with real solutions. Information technology is a significant part of modern health service delivery and nursing practice, thus BNPG provides students with another avenue to prepare them to meet the challenges of real world clinical environments (Glasgow & Cornelius, 2005; Honey et al., 2004). The BNPG provides an important virtual community that supports real life networks and encourages all participants to share in social interactions that promote the values of the BN program.

Combine familiarity with excitement

A vibrant and successful community of practice combines both everyday and stimulating events that encourage networks and relationships (Wenger et al., 2002). Routine activities such as reviewing and organising practicum timetables and providing evidence of preclinical requirements are the familiar tasks in the BNPG. These begin to set up a web of relationships critical to the students. However, what has also evolved are exciting events originated by the student participants that increase the tempo and depth of interaction. Examples of these include Graduation balls, Qld Cancer Fund “Relay for Life” teams and International Nurses Day activities, all organised using the interaction and communication pathways available on the BNPG.

Figure 3: Example of participant initiated event

◀◀ Previous Message Next Message ▶▶

Forum: Bundaberg Campus list Times Read: 47
Date: Mon Apr 23 2007 09:35
Author:
Subject: Re: Relay for life Remove

I have to admit to being just a little tired upon heading home from this event. However, I was also very proud to be associated with such a fantastic group of students who have represented CQU nursing in the best possible fashion. Thank you all for coming along and making the event truly memorable - those who organised the event (mammoth effort and); those who walked during sociable hours, and especially those who did the grave yard shift; and to all who supported in other ways (collecting money, setting up tents without instructions etc).

I look forward to being once again involved in this event next year - let's make it bigger and better (and next time we will certainly be putting in tighter security measures for the funny money!).

Cheers Reply

◀◀ Previous Message Next Message ▶▶

Thread Detail

Relay for life	Tue Apr 17 2007 20:26
Re: Relay for life	Wed Apr 18 2007 11:50
Re: Relay for life	Thu Apr 19 2007 11:12
Re: Relay for life	Thu Apr 19 2007 15:02
Re: Relay for life	Thu Apr 19 2007 16:15
Re: Relay for life	Thu Apr 19 2007 16:43
Re: Relay for life	Fri Apr 20 2007 23:41
Re: Relay for life	Sun Apr 22 2007 16:24

Create a rhythm for the community

Wenger et al.(2002) assert that vital communities of practice have a rhythm of social interaction that are influenced by community events. This is true of the BNPG. While other Blackboard course applications end at the conclusion of the semester, the BNPG endures. It remains live throughout the year with specific high peak community events such as orientation and gathering clinical practicum information prior to the semester commencing. During orientation students and staff are informed of the essential role BNPG plays in their life as a participant in the BN program. The interdependence between the student, faculty and our clinical partners ensures BN program development and success in day-to-day function. The BNPG has grown out of this critical interdependence and provided the communication technology to support such a vibrant learning community.

Conclusion

The BNPG evolved out of a fundamental need to solve inherent program management and communication problems. Review of our project using the seven principles outlined by Wenger et al. (2002) has shown innovative planning and creative thinking can produce a successful learning community of practice. It is challenging to create online community, but one lesson learned by the developers of the BNPG is that the most effective approach is to allow the participants to redefine design itself, recognising that communities are organic and will evolve to meet their own needs. Designers then need to examine the technology base in this case the Blackboard content management system and utilise its potential.

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