Facebook: a basis for forming a peer learning community for nursing students in a bioscience unit

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Abstract

First year nursing students commonly find bioscience to be challenging. A Facebook community site was established to support and engage these students. The site was facilitated by virtual peer mentors and the unit coordinator. The high participation rate and the strong recommendation to future students indicated that the site successfully enabled student interaction and engagement with their learning. The students found it to be a readily accessible network and valued the useful resources and learning strategies provided by their peers. The sharing of both learning challenges and successful learning practices can help students build a sense of belonging and an understanding of academic practices and behaviours that can contribute to their learning success at university.

Introduction

Learning communities are commonly viewed as groups of people engaged in collaborative scholarly learning. They are utilised as a strategy to increase student engagement and improve learning outcomes (Tinto, 2003). By enabling students to share knowledge and work collaboratively, participation in learning communities is considered to enhance student engagement, persistence and learning, in addition to encouraging students to take greater responsibility for their own learning (Tinto, 2003). The learning theory underpinning learning communities stems from cognitive learning theorists, such as Vygotsky and Piaget, who affirm that learning is a social act and that through dialogic and dialectical interactions knowledge deepens and develops. In universities, interactions between lecturer and students, and also between peers are acknowledged as being central for student learning success (ACER, 2010). Peer-to-peer learning is recognised as contributing to learning success as peers can assist in developing students’ self-efficacy or belief in their ability to succeed (Bandura, 1997).

In reviewing the multifaceted concept of student engagement, Kuh (2009) defines it as the nature of the effort and participation that students allocate to productive learning activities, as well as the contribution institutions make to facilitate student’s participation in such activities. Engagement involves both student behaviour and teaching practices (Kahu, 2013) and encompasses behavioural, emotional and cognitive constructs that influence the learning process (Trowler & Trowler, 2010). Trowler and Trowler (2010), noted a positive correlation between student involvement in educational activities and student satisfaction, persistence and academic achievement. Additionally a “sense of belonging” in academic settings is recognised as being central to student success (Thomas, 2012, p. 4).

The current generation of students, having grown up with new modes of virtual technology, are habituated to accessing information online and engaging with peers online (Mills, 2011). Social networking sites such as Facebook have enabled the establishment of independent and autonomous learning groups extending learning beyond the classroom, available 24/7. Consequently, participation in online learning communities has become integral to
meaningful learning experiences for iGeners (Mills, 2011). Online learning communities enable students to establish learning networks and develop academic practices and behaviours, such as the evaluation and sharing of resources, integral to succeeding at university (Drexler, 2010). Additionally, it is now recognised that accessible, student-centred e-learning technologies may enhance student learning when used effectively (Drexler, 2010).

Virtual mentors are experienced and academically successful students, who provide online support for their peers and can play a pivotal role in facilitating online learning communities. Being familiar with the processes and challenges of student life, virtual mentors can hold a significant position within a social network establishing trust relationships with peers (Dawson, Lockyer & Ferry, 2007). As a mentor, their role is to guide conversation and interaction, assisting and encouraging students to collaborate, share knowledge and understanding of discipline content and effective learning strategies. Virtual mentors can perform a key advisory role in providing discipline-based, learning-centred support, evaluating students’ needs and linking them to appropriate resources or support services (Dawson, Lockyer & Ferry, 2007).

Background

Since the transfer of nursing education into the higher education arena in the 1970s it has been noted that the bioscience subjects, which focus on anatomy, physiology and microbiology, cause great difficulty for nursing students who report a lack of confidence in their knowledge of biosciences (McVicar, Clancy & Mayes, 2010).

At QUT, nursing students complete a bioscience unit in their first semester of study. High failure rates during the 2000s suggest that nursing students have struggled with the biosciences at this university. From 2010 to 2013 a number of support initiatives were trialled to improve opportunities for first year nursing students to interact with their peers and staff. Subsequently, a blended model (face-to-face and online) of lecturer to students and peer-to-peer support was developed focusing on establishing a collaborative peer learning community and practices. A key initiative was the establishment of a Facebook “learning community” site to facilitate support for, and engagement of, nursing students in this particular unit.

The central objective of the online community was to facilitate student learning opportunities through collaborative student learning, peer-to-peer sharing of information and to allow for convenient, ongoing and faceless access to peers, virtual peer mentors and the unit coordinator. Furthermore, through information sharing, less experienced students could be exposed to some of the academic practices, such as time management, appropriate learning strategies and study practices, that can contribute to success at university.

Methods

A Facebook community site (Ana’s BioscienceOne) was established for the bioscience unit. Only students enrolled in the unit were accepted as “friends”. The site was facilitated by the unit coordinator and three virtual mentors. The mentors were academically successful nursing students who were in the second year of their nursing degree and had completed training in online computer-mediated communication. Students were encouraged to communicate with their peers, ask and answer questions, share study tips, provide links to relevant material e.g. YouTube clips and to form collaborative study groups. The students were reminded of the protocols pertaining to respectful posting and were advised to refer to the university’s Manual of Policies and Procedures for guidelines relating to ethical student behaviour.

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A survey was conducted during the final end-of-semester practical class, to obtain an indication of students’ perceptions of the Facebook community site. Students were asked to indicate their level of participation and to respond to statements regarding their experiences and perceptions using a 5 point Likert scale (from strongly agree to strongly disagree). Additionally, they could comment on what they liked most or least about the community site. The feedback data were analysed and categorised into key thematic categories such as accessibility, sense of belonging and usefulness of content.

**Results**

Two hundred and seventy five students responded to the survey and 53% stated that they had participated in the Facebook site either once a day or once a week or on one or a few occasions; this included a small group of less than 10 students who were observers only and did not actively participate. Eighty five % of respondents either agreed or strongly agreed that participation in the Facebook community provided them with some useful learning strategies while 73% felt that the resources and advice provided by the virtual peer mentors were helpful. Seventy eight percent considered that participation helped them to realise that other students shared the same difficulties. Finally, 85% of participants agreed or strongly agreed with the statement “I would recommend students to participate in Facebook”.

Whilst 63% (n=173) of respondents chose to respond to the question about what they liked most about Facebook (Figure 1), only 23% (n=63) responded to the question about what they liked least. While concerns with the group were limited, key criticisms included: insufficient content or notifications, content not useful and that the site was established as an ‘individual’ rather than as a Facebook “group”. Conversely, key perceived benefits included: connection with staff and peers, realisation that other students shared the same content challenges, and information about learning strategies and practices.

![Figure 1. What students liked most about Facebook.](image)

Student feedback regarding the Facebook community site included:

* It was helpful when I needed to understand areas of bioscience
* Tangible proof that you are not alone in freaking out about an exam. Being able to form and discuss learning content with other nursing students
* Made finding other people for study easier. Some pretty cool videos
* Were able to ask questions and get an answer straight away. Also could see other peoples study tips which were helpful

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Discussion

High participation rate and strong support for future student participation in the Facebook community, revealed students had a keen willingness to connect and interact with their peers and to engage with their learning. Even those that participated very infrequently or were observers to the group had the opportunity to access information and learning posted by others. A large number of students stated that the connections formed or the easy accessibility to peers and unit coordinator or the “sense of belonging” to the group were the major advantages of the community. Access to useful resources was also highly valued by participants. This social and academic engagement is therefore important to the students and will hopefully breed further success.

Stephenson (2005) claims that (social) networks allow for a flow of information and exchange that depends not only on the authority of the network of relationships, but also on the trust established within the relationships. Exploring learning methods and the nature of relationships in social networking communities, Mills (2011) highlights that unlike previous generations which typically acquired knowledge from authority figures, this generation trusts and seeks information online and from peers. In online networks individuals can hold key positions sharing knowledge and influencing “friends” due to the trust-based relationship formed with other members in the network (Stephenson, 2005). It appears that the virtual peer mentors held a significant guiding role within this Facebook community network. They encouraged the students to take responsibility for their learning by forming collaborative learning groups to interact and share resources with their peers. The majority of students appreciated the useful resources and learning strategies provided by the peer mentors.

Students’ self-efficacy impacts on their capacity to perform academically and has been identified as being significantly related to social-comparison and their in-group identity (Macari & Drane, 2011; Thomas, 2002). Normalising the fact that other students face similar challenges in understanding bioscience is important in terms of students’ belief in their capacity to succeed at university. Succeeding in bioscience is not only about mastering the content but also about adopting effective learning and study practices and also recognising that it is not uncommon to find the content area challenging. As peers share their learning challenges, habits and practices, students build an understanding of the academic practices and behaviours which can contribute to their success at university.

Schwier (2009) warns that while appropriate structures and support conditions may be provided in the creation of virtual learning communities, the onus is on the learners to develop the learning community. Further evaluation of student participation in this Facebook group is needed to gauge the quality and productivity of student learning activities facilitated by this online network. In addition, if the community site is to be inclusive of the whole cohort there is a need to investigate non-participants and their reasons for not participating. However, it appears that the community site served its purpose as a readily accessible, support network to facilitate collaborative learning by allowing students to connect with their peers and the unit coordinator to acquire some useful learning resources and strategies.

Questions

What other platforms can facilitate supportive learning communities that are inclusive and accessible for the majority of students?
References


