

# **Integrating Facebook into a University cohort to enhance student sense of belonging**

## **A pilot program in Sport and Exercise Science**

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### **Abstract**

The dynamics of how students respond to each other during online discussions in a blended learning environment remains under-explored in the literature. How this technology shapes interaction when used in conjunction with traditional teaching methods and the practices of learners in these multi-site situations is a significant educational issue. Using mixed-methods, this study drew on social interaction constructs such as: exchange theory; reciprocity; and propinquity to explore practices within a discussion forum in a blended-learning setting. In addition to confirming these well-established constructs accounting for student-interaction, the issue of responding to others perceived as 'knowledgeable' was uncovered, and the mechanisms behind this particular response were examined further. The study reveals an assemblage of practices overlapping and inter-locking with the emergent learning experience, in both online and traditional spaces.

## Refereed Paper

### Introduction

University students are confronted with many challenges throughout their tenure at University. Such challenges can be broadly categorised as scholarly (academic achievement), logistical (expenses, work-study balance, accommodation, transport) and personal (social and sport/physical activity commitments, peer and family support and expectations, career aspirations, sense of belonging). University attrition may be associated with any one of or a combination of these challenges and for decades Universities have implemented strategies in an attempt to maximize student retention. It has been identified extensively in the literature that interventions for enhancing the students' feelings of inclusiveness and sense of belonging may help to improve University student satisfaction and retention (Elliott, 2002; Hoffman, Richmond, Morrow & Salomone, 2002; Napoli & Wortman, 1998).

A general definition of sense of belonging is "the experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment" (Hagerty, Lynch-Sauer, Patusky, Bouwseman & Collier, 1992). Within the University domain, sense of belonging can be further defined as the "subjective sense of affiliation and identification with the University community" (Hoffman et al, 2002). The available literature has highlighted a variety of characteristics or attributes that underpin a University students' sense of belonging, and these include having similar values to others and a feeling of being valued or important and having social support (Hegarty, Williams, Coyne & Early, 1996), and having integration into a social network (Cohen & Wills, 1985).

University initiatives that have successfully enhanced sense of belonging within the University sector include First Year Experience (Pitkethly & Prosser, 2001), Orientation programs (McInnes, James & Hartley, 2000), peer mentoring (Glass & Walter, 2000; Treston, 1999) and learning communities (Baker & Pomerantz, 2000; Zhao & Kuh, 2004). These initiatives have largely focused on face-to-face interaction between stakeholders, and this may itself be one of the key mechanisms associated with the success of those initiatives. In light of the ever increasing reliance upon technology for communication and upon online delivery of tertiary education however, one must consider whether technology-driven initiatives to enhance sense of belonging among University students would also be successful.

Social networking sites allow individuals to establish and maintain connections or relationships with others and to present themselves and their social network to others (Ellison, Steinfield & Lampe, 2007). In December of 2011 the social networking site "Facebook", which was founded in 2004, had 845 million people as active monthly users with 483 million of these people further classified as active daily users (Facebook Newsroom, 2012). The prominent use of Facebook and other social networking sites has intrigued educators (Selwyn, 2009) and the use of social networking in education is emerging as a major research theme within contemporary higher education, particularly with respect to student engagement. Social networking sites have been used within the University setting for formal online learning and content management via technologies such as Blackboard (Landry, Griffeth & Hartman, 2006), for informal online learning (Forkosh-Baruch & Hershkovitz, 2012), for maintaining and creating social

capital among students (Ellison et al., 2007) and in one recent instance, as a communication link between the University and the community following a natural disaster (Dabner, 2012).

The aim of this pilot study was to establish a Facebook account for a Sport and Exercise Science Regional University cohort with the aim of enhancing the student sense of belonging. For the purpose of this pilot study, sense of belonging included being an active member of the degree cohort, feeling connected to the Sport and Exercise Discipline (peers and staff) and feeling engaged with the Profession.

## **Methods**

A Facebook account was created for the Sport and Exercise Science student cohort at James Cook University, Australia. James Cook University is a multi-campus regional University that focuses on enhancing University participation for key equity groups including regional/remote (24%), low socio-economic status (20%) and indigenous (3.9%) backgrounds. For the purpose of this study, the Sport and Exercise Science student cohort consisted of students enrolled in one of five degrees across two campuses separated by approximately 400 km. The five degrees included the Bachelor of Sport and Exercise Science, the Bachelor of Sport and Exercise Science – Bachelor of Business, the Bachelor of Sport and Exercise Science – Bachelor of Education, the Bachelor of Exercise Physiology (Clinical) and the Postgraduate Diploma of Exercise Physiology (Clinical) courses. Approximately 350 students were enrolled across these five degrees and therefore were eligible to access the Facebook account and to participate in the project.

The Facebook account was established and monitored by an academic staff member within the Sport and Exercise Science department. The Facebook account provided general information about the University degrees and the overarching Sport and Exercise Science discipline and students enrolled in any of the five degrees were added as 'friends' by the staff member who moderated the account. Prior graduates of the degrees could also apply to be added as 'friends' as a mechanism to enhance industry links for students. Through the Facebook account the student and graduate 'friends' received information via their 'news feed'. Examples of information posted on the Facebook account included advertised employment opportunities, notification of advertised local or regional workshops or seminars that were relevant to the Sport and Exercise Science field, updates from the National professional accreditation body, and upcoming Discipline events such as student barbeques, student interdisciplinary competitions and research student presentations. The participating students were encouraged to showcase their achievements and exemplar University-related activities by uploading video clips to the account. Students were also encouraged to post comments about topics related to their degree, the profession/industry, or general University experience. The purpose of the Facebook account was to enhance student engagement and to provide an avenue for the Sport and Exercise Science department to advertise events and job opportunities. The purpose of the Facebook account was not to promote staff-student personal interaction and therefore the academic staff member who moderated the site refrained from any self-disclosure communication.

## Evaluation method

An online survey was created with 'Survey Monkey' to assess the use of and effectiveness of the Facebook account in regards to the students' University experience and sense of belonging. The survey consisted of the following questions, with answer options included in parentheses as appropriate: Do you currently use Facebook (yes or no)? How many times do you log-on to Facebook each day (once daily, twice daily, between three and five times daily, more than five times daily)? Are you currently a 'friend' of (the specific Facebook account) on Facebook (yes or no)? If the participant answered 'no' to this question, they would be directed to answer the following two questions before the survey was complete: If you are not currently a 'friend' of (the specific Facebook account) on Facebook, can you please tell us why (free form text)? If you are not currently a friend' of (the specific Facebook account) on Facebook, has this survey encouraged you to become a 'friend' of (the specific Facebook account) (yes or no)? If the participant answered 'yes' to "are you currently a 'friend' of (the specific Facebook account) on Facebook?" the participant would be directed to answer the following questions: please rate the extent to which you agree that the (specific Facebook account) has provided you with the opportunity to engage with peers and members of the Sport and Exercise Science community, with respect to the following items (rated as strongly disagree, disagree, agree, strongly agree, not applicable): awareness of upcoming events within the Discipline; awareness of upcoming events within the local community; awareness of currently advertised careers vacancies/opportunities; belonging to the Sport and Exercise Science Discipline/Industry community; belonging to your specific cohort(class mates); the (specific Facebook account) is useful for

obtaining information and networking; the (specific Facebook account) has contributed positively to my University experience. Participants were also given the opportunity to provide free-form, open-ended commentary on what they liked best about the Facebook account with respect to the opportunities provided by the account, and also of how the Facebook account may be improved for future use.

The survey was administered ten weeks after the creation of the Facebook account. The online survey link (via Survey Monkey) was emailed to all students enrolled in the five Sport and Exercise Science-based degrees in order to capture both the users and non-users of Facebook. Ethics for the current study was obtained from the James Cook University Human Ethics Committee and all participants were required to provide informed consent via the first question of the online survey prior to proceeding to the survey questions.

## Results and Discussion

'Friend' count: Within the first hour of creating the Facebook account 42 'friends' were acquired, after 24 hours the account had 134 'friends' and after one week the account had 182 'friends' who were all past or present Sport and Exercise Science students. Anecdotally, discipline staff reported to the researchers that immediately following the creation of the Facebook page, students were actively joining the Facebook account as a 'friend'; and were encouraging peers to do likewise. The creation of the Facebook account created a 'buzz' within the student cohort, accounting for the rapid increase in 'friend' count within the first week. Six months following the creation of the account, 312 students had become 'friends' of the account.

## Facebook use by the University students

Fifty-five University students who were enrolled in one of the five Sport and Exercise Science degrees participated in the online survey. First year students accounted for 35.2% of the participants, 24.1% were in second year, 29.6% in third year, 9.3% in fourth year and 1.9% in fifth year. Almost all (94.4%) of the students surveyed indicated that they use Facebook, which is a similar user percentage reported previously for university students (94% Ellison et al., 2007; over 95% Madge, Meek, Wellens & Hooley, 2009). Almost half of the current study's participants reported logging into Facebook more than five times daily (43.1%) with 25.5% of participants logging on between three and five times daily. Students also indicated that they tended to stay logged on to Facebook for more than 10 minutes each day. Interestingly, while Ellison et al., (2007) reported the average daily usage time of Facebook by University students to be 10 to 30 minutes, the current study found that 25.5% of students indicated that they spent between 10 minutes and 30 minutes on Facebook each day, with 29.4% reportedly spending between 31 minutes and 1 hour logged on and 27.5% spending greater than 1 hour logged onto Facebook each day. These findings indicate that most of the participants in the current study are regular, high demand users of Facebook. This provides support for the work of Wodzicki and colleagues (2012) who report that social networking and social media, particularly for young people, has become an inherent component of daily life (Wodzicki, Schwammlein & Moskaliuk, 2012). Forkosh-Baruch & Hershkovitz (2012) argue however that while many people are users of social networking sites, the majority of users can be classified as 'active to a minor degree' or 'content lurkers and consumers' with a small minority classified as

'contributors'. The current study did not attempt to map the specific activity patterns of users, however it has been recognized that even the less active users (eg. The content lurkers) may still benefit from being exposed to the information provided by the social media (Forkosh-Baruch & Hershkovitz, 2012). Future, larger-scale projects should consider whether the type and frequency of use and interaction with the social media directly impacts on the participants' sense of belonging and overall experience.

Of the 51 students surveyed, 74.5% indicated that they were 'friends' with the account on Facebook. When asked to comment on the extent to which they agree with specific statements about the Facebook accounts' impact on their awareness of events, sense of belonging, and the overall student experience, positive responses were reported from between 67.6 and 94.6% of participants across all statements. Specifically, Table 1 illustrates the breakdown of positive (strongly agree or agree) and negative (disagree, strongly disagree or not applicable) ratings received for each of the seven statements (see Table 1). The largely positive responses recorded for the awareness of upcoming events and career opportunities concurs with the previous findings that the key use of Facebook University accounts by students is to find out about or arrange social events (Madge et al., 2009). Furthermore, Madge and colleagues (2009) indicated that 56% of their University student participants agreed or strongly agreed that Facebook helped them to settle into University and 54% agreed or strongly agreed that Facebook helped them integrate into University life (Madge et al., 2009). The current study showed similar findings but with a far greater positive response with over 70% of respondents reporting that the Facebook account positively contributed to their University experience and to their sense of belonging to the cohort.

When participants who were not yet 'friends' of the Facebook account were asked why they were not currently 'friends', three respondents had not heard about the account, four respondents had forgotten or were "too lazy" to be added, one respondent was currently setting up a new account, one respondent had "not thought of it" and one respondent was switching degrees the next year and so decided not to join. Of the participants who were not yet 'friends', 76.9% indicated that participating in the survey had encouraged them to become a 'friend'.

**Table 1** *University student ratings of the extent to which they agree that the Facebook account provided them with awareness of events and with the opportunity to engage with peers and members of the Sport and Exercise Science community.*

Question	Strongly Disagree	Disagree	Agree	Strongly Agree	Not Applicable
Awareness of upcoming events within the discipline.	5.4%	0%	35.1%	59.5%	0%
Awareness of upcoming events within the local community.	5.4%	5.4%	64.9%	24.3%	0%
Awareness of currently advertised career vacancies/opportunities.	5.5%	2.8%	61.1%	30.6%	0%
Belonging to the sports science industry/community.	5.4%	2.7%	67.6%	21.6%	2.7%
Belonging to your specific cohort (class mates).	2.7%	24.3%	40.6%	27.0%	5.4%
The Facebook account is useful for obtaining information and networking.	5.4%	2.7%	54.1%	35.1%	2.7%
The account has contributed positively to my University experience.	2.7%	8.1%	64.9%	5.4%	18.9%

Thirteen students provided responses about what they liked most about the Facebook account. Six of these students commented that they liked being kept aware of job opportunities within the field. Other responses included "I like that it's a way of communicating with others from Sports Science, and that it's a way of knowing what events are upcoming", "the cohorts updates on what's been happening", "very easily accessed for those already on Facebook", "the page is good as it allows me to see what is happening with the degree and what is possibly available in the region", "what events are on" and "it'll keep me connected even when I leave Uni". These comments can be broadly categorized into the themes of peer networking, and both intra-discipline and intra-professional awareness and engagement. The comments are similar to those documented in earlier social networking at University studies (Ellison et al., 2007; Madge et al., 2009); and provide further evidence that University students use social networking as an alternative medium for existing offline relationships, that is, they already know their Facebook 'friends' and are using Facebook to keep in touch (Ellison et al., 2007; Madge et al., 2009).

As this study was a pilot program aimed at determining the potential viability of a larger-scale within-discipline social networking initiative, the participating students were also given the opportunity to suggest ways that the Facebook account could be improved. Seven responses for improvement were received and these included "encourage people to post questions relating to our degree for a lecturer to answer", "there were very few updates. Only once every week maybe? Doesn't always have to be information... small things like "good luck with exams" etc..", "it will be interesting if the accrediting body had some topic sessions, or we can listen to more people whom work within the industry

and listen from their experiences”, “ more videos”, “never seen job opportunities”, “not sure” and “nothing really, it's quite a useful tool as it is”. These responses indicate that the students wanted more frequent updates and more interactive content to be posted.

The notion of increasing the frequency of content updates has previously been identified as a potential determinant of user engagement with social media, whereby regular content updates are likely to elicit more frequent site visits by users (Forkosh-Baruch & Hershkovitz, 2012). Therefore University departments that use social media for online communication with students may enhance student engagement by committing increased time to the regular updating of online content.

## **Conclusion**

As this was a pilot study, the aims of the project were to evaluate the effectiveness of the Facebook account at enhancing student sense of belonging; and to identify ways to improve the project. The Facebook account was a convenient and effective way to communicate with University students on a regular basis and positively contributed to their university experience. Specifically, the Facebook account resulted in student perceptions of enhanced awareness of upcoming events and career opportunities and enhanced sense of belonging to the cohort and the profession.

Based on the student feedback and in contemplation of the available literature surrounding social networking as a medium for enhanced University student engagement, the current researchers have developed a list of ways to improve the effectiveness of the account for ongoing use. It is hoped that these suggestions may be useful for other University educators contemplating the

implementation of social networking into their Disciplines. The suggested improvements/alterations are as follows:

- Encourage students to post questions regarding specific topics covered in classes and other students or lecturers could respond or potentially lecturers could use the account to provide practice questions or study hints.
- The account moderator should commit time each day to update the ‘status’ and to provide a combination of specific information, reminders and general advice and encouragement.
- The educators should actively encourage students to interact/ contribute to the account and not just to view the information.

While the researchers do not yet advocate replacing face-to-face communication with social networking at University, the researchers recognise that social networks are an additional communication media that is recognized as an important component of the University students’ social life and that it can be used effectively for a variety of University-based initiatives such as enhancing student belonging.

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## **Biography**

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