

Enabling a Positive First Year Experience in Higher Education through Social Media and Mobile Technologies

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Abstract: The first year experience for students within Higher Education institutions has become increasingly important as these institutions strive to improve student retention rates. With many universities also focusing on transforming teaching and learning in an effort to attract and retain students, there is a growing demand to understand and respond to individual student requirements, such as the need to feel a sense of belonging. The literature identifies a sense of belonging as being paramount to a student's satisfaction with the institution and it is within this context that this paper reports on a three year study of how first year pre-service education students use social media and mobile technologies in their personal lives and their formal education. More specifically, the study identifies trends in the use of these technologies and the growing need for students to use digital media sharing tools to connect and engage with their peers. The paper contrasts the differences in use between these groups as it seeks to identify the role these technologies can play in their teaching and learning, as well as in promoting an overall positive first year experience.

Keywords: Social Media Technology, Mobile, First Year Experience, Connected Technologies, Pre-Service Education, Higher Education, Sense of Belonging

1. Introduction

The Higher Education landscape is currently in a state of change with many institutions focusing on transforming their teaching and learning and attracting students through new online initiatives and courses. While the notion of adopting online tools to support teaching and learning is not new, many academic staff still struggle with ways to use these tools effectively to connect and engage with students, especially with the ever-increasing adoption of new social and mobile technologies by students. Teaching and learning experiences for students are often quite mixed, with reports of dissatisfaction by students and a gap between how students perceive satisfaction and how instructors perceived satisfaction. Most recently, this was reported by Khalil and Ebner (2013), as they explored the experiences of students in online courses, with a particular focus of their research being MOOCs.

In recent years, there has also been a “significant decline in the amount of time first year students spend on campus” (James, Krause & Jennings, 2010, p.2) as more and more undergraduate students increase their working hours and rely on recorded lectures and online resources. Understanding the student and the challenges that face them as they enter into the higher education scene has become a necessity for educators. Consequently, many Higher Education institutions now have a focus on the first year experience of students with the aim of improving student success and retention. While the concept around retaining students is not new (Wilcox, Winn, Fyvie-Gauld, 2005) and there are many theories (see Jensen, 2011) aimed at retaining students, there is some consensus that inclusiveness and a sense of belonging may improve student satisfaction and retention (Hoffman, Richmond, Morrow & Salomone, 2002; Napoli & Wortman, 1998).

The literature concerning the First Year Experience in tertiary education highlights the need for students to feel a connection to their institution; students must “engage academically, socially and personally with their institution” (Nelson, Quinn, Marrington, & Clarke, 2012, p. 2). It is within this context that Menzies and Nelson (2012) identify peer development as being central to a student's personal and academic development. However, despite the importance of peer support, not all

students have equitable access to peers: impediments to such access can be work or family commitments, or differences in gender, age or cultural backgrounds (Menzies & Nelson, 2012).

The literature also discusses other first year experience concerns, such as feelings of intimidation experienced by academically weaker students when in group work settings. According to Wilkinson and Fung (2002), minority students often found group discussions to be dominated by majority group students, and many researchers have reported that in mixed gender groups, male students can be more active participants than female (e.g., Underwood, Underwood, & Wood, 2000). It is such social comparison concerns of first year students that have been shown to affect the academic outcomes of students (Micari & Drane, 2011). In identifying social comparisons and their impact, social comparison indices were derived from an instrument that asked students to agree or otherwise with statements concerning academic intimidation in a groupwork setting and self-efficacy. Bandura (1997) further defines self-efficacy as the beliefs the learner holds about his or her ability to perform well in a particular academic domain. Micari and Drane (2011) reported how initial self-efficacy was significantly related to social comparison concern and comfort in a cohort of undergraduate students in one institution, with students who dropped out reporting significantly higher levels of social comparison concern than those who remained. In their findings, social comparison concern was seen to be significantly higher for minority students at one measure, and generally higher for women than men. While this has been the case in face to face learning environments, online environments can provide different experiences for students, which will be discussed next.

Virtual environments allow all students to engage in peer to peer social and learning centred activities (Menzies & Nelson, 2012), and it is possible that the ambiguity of identity that social media affords might ameliorate the concerns raised above. McCarthy (2010) used the social media site Facebook to create connections between first year students and found that social media created links between the international and local students. The local students reported that although they were interested in engaging with students from different cultures: “sometimes it can be hard interacting with some of the international students because of the language barrier but with Facebook, because it was online, it was really easy and enjoyable - so many different perspectives and opinions coming together” (McCarthy, 2010, p. 5). It was also recognised that the “best thing about the Facebook galleries was that they got everyone talking from day one - all of sudden I had all these new friends on Facebook and from there had friends in class” (p. 5).

This study was interested in determining whether the extent of the literature reported student use of social media, was taking place in the researchers’ institution and how this contrasted with the patterns of usage from the academic staff teaching these first year students. Arteaga Sanchez, Cortijo and Javed (2014) assert that as academics “it is necessary to reach a full understanding of our students’ perceptions of Facebook for academic purposes” (p. 146). Their results reported that social influence was the dominant factor in predicting the adoption of Facebook, and maintaining social relations with people with whom they share interests was the most important purpose for using Facebook. Students believed that using Facebook would be “free of physical and mental efforts” (Arteaga Sánchez, et al., 2014, p. 146) and it would allow them to improve their communication, collaboration and information exchange. In addition to increasing collaboration with students and instructors, Facebook could create a more comfortable classroom climate and increase learners’ motivational levels (Goertler, 2009). Facebook can also expand learning beyond a traditional classroom into informal learning settings (Bull et al., 2008; Yang, Wang, Woo, & Quek, 2011).

In terms of social media platforms used in Higher Education, Facebook has been the focus of many studies (see McGuckin and Searly, 2013; Roblyer, McDaniel, Webb, Herman, Witty, 2010 and Nykvist, Daly and Ring, 2010), though many of these studies have had quite small sample sizes. A large number of these studies have focused on supporting students or enhancing learning (often through communication strategies), hence being used in a social manner. The study by Nykvist, Daly and Ring (2010) focused on education students supporting one another as they undertook their practicum experience in Malaysian schools and once again reinforced the supportive nature of this medium. There is little doubt that social media and mobile technologies can support students, however, there is a need to better understand how pre-service education students and academics can embrace these to cater for and respond to student needs.

In an attempt to better understand the strength of these technologies and how students use them in their studies and private life, this paper will describe a study conducted over a three year

period. Although this study is still underway, we are able to provide some initial recommendations for future teaching and learning practices to support students in their first year experience through the use of these technologies.

2. Methods

A mixed methods approach was adopted for this research. Using Creswell and Plano Clark's (2011) definition and core characteristics (p.7), the study combines 'methods, a philosophy and a research design orientation'. During the research, data was collected and analysed using both qualitative and quantitative methods. A qualitative case study methodology based on Yin's (2003) model for exploratory case study using multiple sources of evidence was applied in this study. The study was designed to understand how students entering a pre-service teacher education program used mobile devices and social media and the possible impact that these technologies had on student retention and student first year experiences. It also explored how academics, teaching first year students, used social media and mobile technologies in their academic and personal lives, while drawing upon the experiences of students and staff in an attempt to identify the role these technologies play in teaching and learning.

The data was collected over a course of three years from each new cohort of first year pre-service teachers (N=1472) from the teaching areas of Early Childhood, Primary and Secondary Education. The study employed a "wide range of interconnected interpretive practices" (Denzin & Lincoln, 2000, p.3) to identify the use of mobile devices and social media technologies by students and staff through a range of surveys, interviews and focus groups to elucidate rich and meaningful data for analysis. Students were asked to voluntarily complete an online survey at the beginning of the semester and a follow up online survey at the end of the semester. In the most recent year of data collection this survey was extended to academics teaching in first year units, and semi-structured interviews and focus groups were conducted with students and their teachers throughout the semester and at the end of the teaching period.

3. Findings and Discussion

The findings discussed here are based on data collected from each of the initial surveys that were conducted over the three years of the study (2012 – 2014). Each new cohort of students completed the survey at the beginning of their first semester in their first year with an adapted survey given to staff teaching into the first year units in 2014. Each of the surveys had a high response rate, with a response rate of over 80% for each of the years. Over 70% of respondents in each of the surveys were female, which is in line with the higher number of female students enrolled in pre-service teaching degrees. The age profile of first year Faculty of Education student respondents showed a majority were aged 15-22, with 62% in the 18 – 22 years age range and 22% in the 15 – 17 years age range.

The data from the student survey indicates that there was a strong use of social media tools by the students in each of the years with Facebook being the most popular social media technology with an increase from 84% usage by students in 2012 to a usage of 86% in 2014. Other social media technologies such as Instagram, Twitter and Tumblr also showed similar trends with minor growths in usage by the students with the respective usage of each platform in 2014 being 53%, 18% and 6% of students. While Twitter has remained quite low over the three year period the application Snapchat went from a 13% usage in 2013 to a 45% usage in 2014. Email still remained the most popular tool for students over the 3 year period with its usage moving from 88% in 2012 to 90% in 2014.

With Facebook clearly being the most popular social media technology with first year pre-service teachers, the results contradict contemporary media reports that suggest teenagers are deserting Facebook, in favour of sites such as Twitter, Instagram and WhatsApp (Kiss, 2013). The data also indicates that students primarily use mobile technologies for email or messaging with ownership of a laptop remaining at over 90% for each of the years. This trend was not the case for other mobile technologies with the strongest growth in ownership being with the iPhone and iPad. The data indicates that ownership of the iPhone rose by 33% from 2012 to 2014 with 79% of students owning the device while the iPad had an increase of 46% from 2012 to 2014 resulting in a 56% ownership.

Staff ownership of iPads and laptop computers was also high with ownership of both being 83% and iPhone usage at 67%. The data from the staff survey also indicated that their patterns of usage of social media and mobile technologies, were similar to that of the students with Facebook being used by all staff (N=6). While one staff member reported regular usage of Twitter, no staff reported using social media technologies such as Instagram, Flickr or Snapchat where digital images are shared and/or exchanged. Hence, the range of social media technologies used by staff, was more limited than the range used by students. The age range of the staff respondents was primarily in the 40 – 49 years age category and while they felt comfortable using the social media technologies and mobile devices in their personal lives the majority were hesitant in using them in their teaching and learning. When staff were asked to comment about their use of these technologies, Staff A (2014) commented that “I feel confident, but don't think I use them that well pedagogically for teaching.”

The survey data thus indicated that students found a need to use social media technologies (SMT) and mobile devices, and that they used them regularly in their personal lives. It was within this context that students were asked about why they use social media in the 2014 survey. The responses to this are indicated in Figure 1.

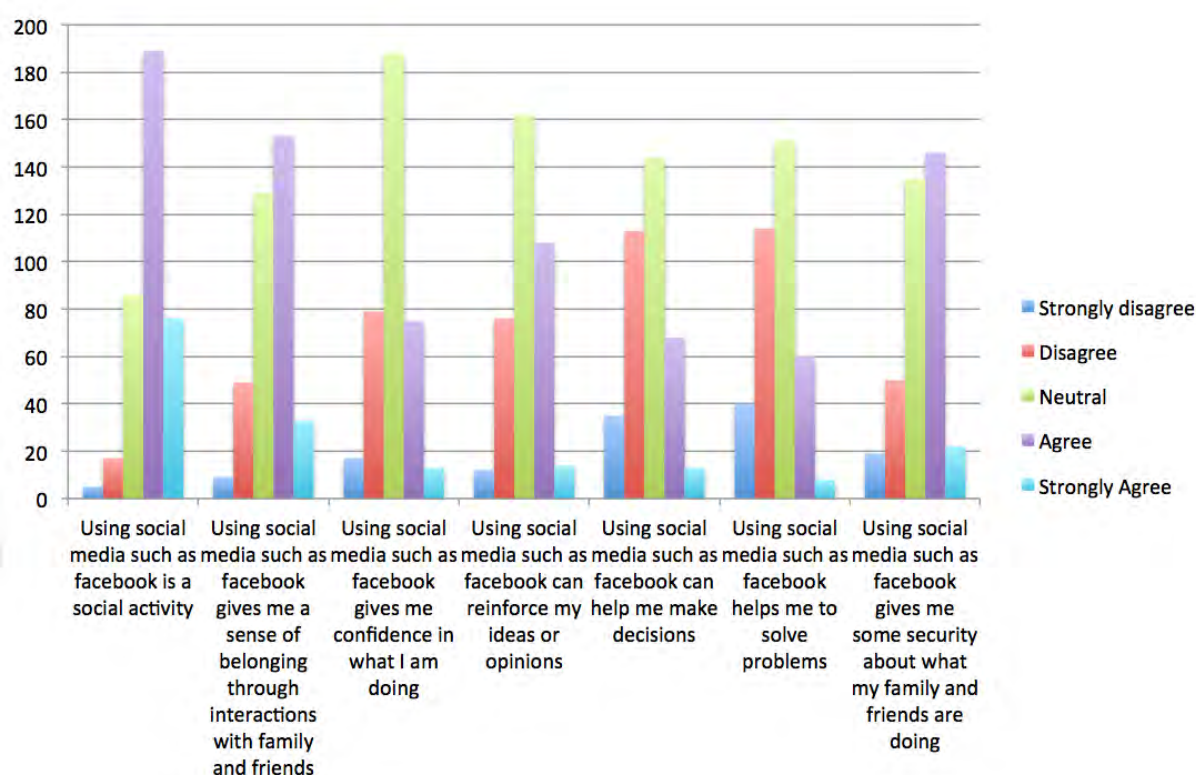


Figure 1. Student reports of the purpose of using social media in 2014

From Figure 1, it can be seen that students felt that social media gave them a sense of belonging, which has been identified in the literature as an essential component in creating a positive first year experience and consequently the retention of students. The data also indicated that social media technologies, such as Facebook, are used as a social activity, giving students security about the current state of wellbeing of friends and family. Very few students (n=68) perceived a use of social media would be suitable for problem solving, however 33% of students did indicate that social media technologies are able to reinforce ideas and opinions.

The familiarity with social media technologies felt by students and the sense of belonging that many students associate with using these technologies suggests social media technologies could be used more strategically by academics to create a sense of community and a safe place for students to express opinions and share experiences. These findings support earlier research where Facebook was identified as a means through which students could express opinion (McCarthy, 2010) and create a more comfortable classroom environment (Goertler, 2009). The research data indicates that staff are

not comfortable using social media and mobile technologies in teaching and learning and this presents problems when trying to respond to the needs of students and improve the first year experience.

4. Conclusion

While it can be argued that information and communications technologies are rapidly changing and that it is difficult for educators to keep up with these, the results of this study over a three year period indicate that there is some stability in the range of technologies adopted by pre-service education students. The results from this study indicate that students are comfortable using these technologies and that the use of social media technologies can be associated with a sense of belonging and acceptance by a large percentage of students. The most striking difference between the staff usage of the social media technologies and that of students, is in the wider sharing of digital images by students who use image sharing technologies such as Instagram, and more recently, Snapchat.

With the positive first year experience, and ultimately the retention of students, being of great importance to many Higher Education Institutions, it is critical that institutions respond to the needs of students by not just using these tools in their teaching and learning practices, but by transforming their approaches to teaching and learning to utilise these technologies in an authentic and meaningful way for students. There is a gap between how students use social media and mobile technologies and how academics use these technologies. The students feel a sense of belonging when they use these technologies and by closing this gap, there is an increased opportunity for students to feel secure and develop a sense of belonging. The mere creation of a Facebook page, or many Facebook pages, will not automatically create a sense of belonging for students, especially if it is just used for updates or the advertising of events. This paper reports on a study in progress and while early results do indicate that social media and mobile technologies can play a crucial role in the first year experience and can act as an enabler, there is a need for further research into how academics and institutions can embrace these technologies to create a sense of belonging and respond to student needs.

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