

# Interprofessional Student Perspectives of Online Social Networks in Health and Business Education

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**Abstract.** The education sector is experiencing unprecedented change with the increasing use by students of mobile devices, social networks and e-portfolios as they prepare for future positions in the workforce. The purpose of this study was to examine student's preferences around these technologies. A mixed methods research strategy was used with an initial online survey using 29 Likert scale style questions to students from the School of Health Sciences and the School of Business at the British Columbia Institute of Technology (BCIT). Descriptive statistics and ANOVAs were performed to examine if there were any differences between groups regarding their overall responses to the survey questions. Content analysis was used for qualitative focus group data. Overall, students (n=260) were enthusiastic about technology but wary of cost, lack of choice, increased workload and faculty involvement in their online social networks. Of note, students see significant value in face-to-face classroom time.

**Keywords.** Social networks, Connectivism, nursing education, business education,

## 1. Introduction

Today's educator is faced with challenges that include defining learning, defining the process of learning in a digital age, aligning teaching and curriculum with learning, and determining the role that technology plays as a strategy to enhance learning, thinking and being<sup>[1]</sup>. Schools of learning are looking for ways to accommodate these challenges. Technological advances such as the use of mobile devices, online social networks, and e-portfolios may potentially be used to enhance ways of teaching and learning so as to strengthen and deepen interactions between instructors and students leading to more meaningful education experiences.

Traditional academic institutions have resisted the increasing integration of online social networks into the lives of their students, but recently these same institutions have needed to look anew at the consequences and characteristics of the latest modes of technological socialization that are pervading the younger generations who are the majority of students<sup>[2]</sup>. A growing number of educators are advocating that undergraduate schools should incorporate technology to the highest levels possible, so as to not only take advantage of the student's desire for stimulation and instantaneous access to information as integral to their learning<sup>[3]</sup>, but also as part of their responsibility to stay current with educational advances<sup>[4,5]</sup>.

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Siemens<sup>[1]</sup> suggests that knowledge and learning in this digital age are defined by connections and that learning is primarily a process of network formation. He describes the theory of *Connectivism* pertaining to student's desire for interaction with others online through social networking to improve their learning. Connectivism was chosen as the theoretical framework for this study to help understand the learning that occurs through connection with others in social networks in an age of technological advances.

The overall intent of this study was to determine how students are using various technologies in their learning, and if they see value in online social networks. This paper will specifically discuss findings with regard to student's impressions and use of social networks in nursing and business education.

## 2. Methods

A mixed methods research strategy was used with an initial online survey using 29 Likert scale style questions, followed by focus groups to students and faculty from the School of Health Sciences and the School of Business at the British Columbia Institute of Technology (BCIT). Ethics approval was obtained for the study through BCIT's Research Ethics Board.

The research team designed the survey questions after drawing on previous surveys conducted internally at BCIT in the School of Business and reviewing the literature. Subsequent focus groups with students and faculty from the School of Health Sciences and the School of Business were conducted to provide further insight into the data collected from the surveys. Questions for the focus groups were based on survey results and student and faculty responses were requested to clarify some of these results.

Eight of the 29 survey questions were related to student use of social networks (see Table 2). Following the online survey, focus groups were held with students from the School of Health Sciences and the School of Business, with questions asked specifically pertaining to social networks. Survey results were shared with students and their responses were discussed in the focus groups.

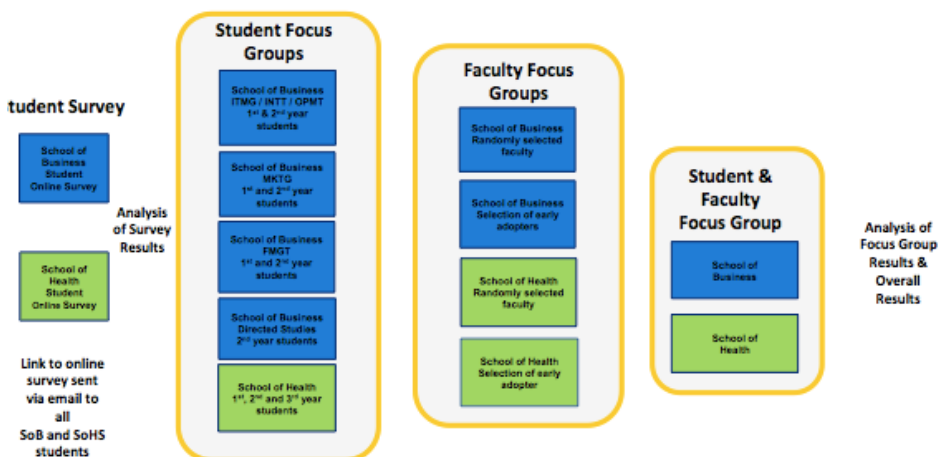


Figure 1. Data Collection Process

Descriptive statistics and ANOVAs were performed to examine if there were any differences between groups regarding their overall responses to the survey questions. Content analysis was used for qualitative focus group data.

3. Results

Two-hundred and sixty students responded to the online survey. Most students were in the School of Health Sciences Nursing Program compared to the School of Business programs, and most students were in the younger age group (20-25 years). The questions and the mean scores by schools and overall are shown in Table 2. Of note, the students preferred choice in their use of social network, and they favored internal school-based networks over public social networks pertaining to their learning. There was no significant difference between the students in the schools for the overall mean scores for the aggregate 8 questions ( $F= 1.63$ ;  $p = 0.197$ )

Table 1. Participant Demographics

Variable	Nursing (n=155)	Business (n=80)	Other (n=25)	All (n=260)
Age Group				
20 - 25	85 (54.8)	54 (67.5)	13 (52.0)	152 (58.0)
26 - 30	48 (30.9)	15 (18.8)	7 (28.0)	71 (27.1)
31 - 40	14 (9.0)	8 (10.0)	5 (20.0)	27 (10.3)
Over 40	8 (5.1)	3 (3.8)	0	11 (4.2)
Device				
Flip Phone	0	0	1 (4.0)	1 (.4)
iPhone	74 (50.0)	48 (64.0)	17 (68.0)	139 (53.1)
Android	67 (45.3)	25 (33.3)	5 (20.0)	98 (37.4)
Windows	1 (0.7)	1 (1.3)	1 (4.0)	3 (1.1)
Blackberry	6 (4.0)	1 (1.3)	0	7 (2.7)

During the focus groups, students indicated that they would value educational sessions where they learn to use social networks not only in a professional manner but also to enhance their professional online presence. An interesting paradox of wanting an internal social network but preference in not having teacher involvement was apparent. Students did however see value in networking opportunities with external stakeholders and alumni. Students stated that they prefer the use of public social networks, such as, Facebook, to include students but exclude faculty. Student’s valued time spent with faculty in face-to-face sessions despite appreciating the flexibility of online learning, and blended learning was voiced as the preferred educational delivery method.

Overall, students reported an appreciation for choice in technologies at school. Students did not report that access to devices is a method to better enabling their learning, but they do see value in educational technologies provided they are used thoughtfully. Students prefer to not have any additional workload related to use of technology (e.g. e-portfolios). Free online learning resources are seen by students to be less valuable than face to face programs at BCIT.

**Table 2.** Social Networking Questions and Mean Scores by School

Question	All Mean (SD)	Nursing Mean (SD)	Business Mean (SD)	Other Mean (SD)
I think BCIT should provide students with collaboration tools to help students work on team projects rather than have students pick their own external collaboration tools.	3.3 (1.0)	3.3 (1.0)	3.4 (0.9)	3.5 (1.0)
I think students should pick and use their own external collaboration tools instead of having to use tools provided by BCIT.	3.3 (0.9)	3.4 (0.8)	3.2 (0.9)	2.8 (0.9)
I think BCIT should provide collaboration tools but it should also let students pick their own external tools if they prefer.	4.2 (0.8)	4.1 (0.7)	4.2 (0.7)	4.2 (0.8)
I think BCIT should require all students in my program to use a social network based, collaboration tool for working on team projects and getting more frequent feedback from instructors.	3.1 (1.2)	3.0 (1.2)	3.3 (1.2)	3.1 (1.3)
If my instructors were on a school-based social network and collaboration system and willing to provide me with feedback outside of regularly scheduled class time, I would use the BCIT tool instead of external tools like Facebook for project collaboration.	3.5 (1.0)	3.5 (1.0)	3.5 (1.1)	3.6 (1.2)
I think my project work at BCIT would be improved if I had faculty more connected with my teams via social network tools.	3.3 (1.0)	3.2 (1.0)	3.4 (1.0)	3.2 (1.1)
I think my project work at BCIT would be improved if I had external industry people able to connect with my teams via social networks.	3.5 (1.0)	3.3 (1.0)	3.7 (1.0)	3.6 (0.9)
I think my project work at BCIT would be improved if I had alumni able to connect with my teams via social networks.	3.6 (0.9)	3.6 (0.9)	3.6 (1.0)	3.6 (0.9)
Overall means	3.5 (0.5)	3.4 (0.5)	3.6 (0.5)	3.5 (0.6)

#### 4. Discussion

This study indicates that although students see value in technology they do not want it to come with increased workload, faculty involvement in their social networks, or a loss in face-to-face time with their instructors. In conclusion, we determined that providing students with the choice to use their own technologies is appreciated, but post-secondary schools should offer students education around the professional and thoughtful use of technologies such as social networking sites.

There is a dearth of original research on the impact of social networks in education, but there are a number of reports of unprofessional conduct among healthcare students is increasing with the increased use of social media<sup>[6,7]</sup>. There is little evidence available in the literature about student's use of social networks, especially related to Health Sciences students<sup>[8]</sup>, but in support of this research study there is evidence that when social networks are used in a thoughtful structured pedagogically sound manner, they have the potential to enhance the quality of education<sup>[9]</sup>, increase student's sense of self-efficacy and to develop their learning to a deeper level<sup>[10]</sup>.

Further research studies should explore the impact of innovative educational technologies on student's learning and professional development, specific to the use of social networks.

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