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USING BLOGS TO SUPPORT INTERNSHIP FOR INFORMATION MANAGEMENT AND NURSING STUDENTS

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This paper sought to compare the effectiveness of blogging between two groups of internship students from different professional areas: nursing and information management. The findings show that both groups of students reported blogs as an effective and satisfactory tool in facilitating knowledge, information, emotional sharing and communication. However, differences were observed in the perceptions of the blogs' effectiveness in emotional support and learning from others' problem solving experience where nursing students reported more positive perceptions than the information management students. Differences were also noted in the commenting patterns between the two groups which show better feedback from the nursing students in general. The reported differences were observed to be related to the nature of the tasks inherent to their professional fields. Moreover, frequent users also have better perception of the use of blogs, regardless of their fields, which indicate the need of adequate support and training to maximize blogs' effectiveness in internship.

1. Introduction

The potential of advanced technologies for education has been highlighted by the interest in developing new teaching techniques (Ferdig & Tramell, 2004). Technology such as personal digital assistants (Churchill & Kennedy, 2008), web-based asynchronous discussion (Doering, Hughes & Huffman, 2003), e-mail (Graf & Stebnicki, 2002), and video-conferencing (Nasiopoulos & Ward, 2002) have been explored for education purposes. Blogging has been recognized in recent years as one of the most popular educational tools (Blood, 2002; Downes, 2004), especially in distance learning settings (Downes, 2004; Churchill, 2009; Buffington, 2007). The term "blog" is an abbreviated form of "web log" which is a web-based journal presented in reverse chronological order that presents someone's thoughts and ideas on the web for others to see (Flatley, 2005). The application of blogging can be seen in various fields, such as education, public relations, healthcare, and business with generally encouraging results (Chaney, 2005; Churchill, 2007; Magg, 2005; Williams & Jacobs, 2004).

The existing academic literature on blogging tends to focus on professionals who use reflective journals as a learning tool, and those whose tasks invlove information retrieval and search (Williams & Jacobs, 2004). It is apparent that there is a potential to attract interest in blogging from disciplines that put high value on information acquisition, response strengthening, and knowledge construction (Betts & Glosgoff, 2004). However, it has been argued that the way students understand and use blogging is linked with the tasks and outcomes that are associated with the professional field (Kerawalla, Minocha, Kirkup, & Conole, 2008). Students will appropriate any blogging software according to their needs (Kerawalla, et al., 2007). This paper examines whether the professional discipline of students affects their use of blogging as a learning tool during their internship period. The study involved student interns in the fields of information management and nursing.

2. Literature Review

Internships. Internship has long been recognized as an important method to prepare students for professional careers. Hands-on experience, informal apprenticeships with active professionals and exploration of learning through other institutions (e.g. business, community associations) are considered useful ways of refining students' skills and helping them attain new insights into their professions (Weinberg, 1986). A significant body of literature has focused on the theories of design and experience in implementing internships (Lloyd & Bristol, 2006; Ovens, 2004). For instance, students in information science assist employers in using technology for many routine business functions or to gain strategic advantages (Carpenter, 2003). The situation provides the students with the opportunities to become aware of professional responsibility and the importance of appropriate ethical behavior (Little et al., 1999). They also gain an awareness of the impact of information technology on society as a whole and on individuals. Murray-Harvey (2001) investigated sources of student support from teachers during a training program and the findings revealed that student placed a high value on emotional support from teachers, collaboration with and feedback from the associate teacher. In most cases, it is difficult to provide such support face-to-face due to time constraints and geographical distances involved. Thus, the use of information technology is potentially beneficial to students during their internship.

Nursing Practicum. Clinical learning in practicum is different from classroom learning, and is a major component of nursing education (Lee 1996). In order to develop the students' critical thinking and analysis skills, nursing educators incorporate educational support strategies such as clinical supervision and self-reflection (Grealish & Carroll, 1998; Öhrling & Hallberg, 2000). Wagner (2003) noted that self-reflection through learning logs may be extended through the use of blogs which presents a promising tool for clinical practicum purposes. In a study by Boulos, Maramba & Wheeler (2006), it was observed that the learning experiences of students, clinicians, and patients can be enhanced with deeper levels of engagement and collaboration through the use of digital tools.

Blogging in internship and practicum. Some studies revealed that blogging facilitates collaborative learning in terms of social interdependence (Johnson & Johnson, 1996, as cited in Curtis & Lawson, 2001) and encourages critical and analytical thinking (Ellison &

Wu, 2008). However, not much research has been done on blogging during internship or practicum. A study by England, Fatzinger-McShane, Scarpero and Stapley (2008) examined dietetic students who used blogs in internship and showed that blogging helped the internship students by facilitating reflection on experiences. The findings also suggested that acquisition of knowledge and skills of particular work fields were promoted and these helped interns in eventually finding jobs. Maag (2005) was among the first to explore the potential use of blog in clinical education and found that blogging enhances student's written communication skills, motivates student to read more and increases the knowledge transfer, encourage personal reflection and initiates public debate regarding simulations and clinical case scenarios. Keegan (2007) has reported on the use of blogs during ten weeks of clinical practicum in the UK. The findings indicated that mentor-student and student-student communications via blogs are effective in enhancing academic, practical, social and psychological support.

Research Gap: Blogging has been shown to be successful in a study in which students devised their individual ways to support their learning (Kerrawalla et al., 2008). However, whether students' professional discipline would affect their use of blogs for learning is yet unexplored. This study contributes to addressing this research gap, by examining the differences in the experience of blogging between information management interns and nursing student clinicians.

3. Research Method

Through this study we hope to examine whether the areas of professional discipline would affect the blogging behavior of students in training. Information management and nursing are the two professional fields being explored. The study also compared the perceived effectiveness of blogging in facilitating the information and knowledge exchange, as well as social support among the interns of the two fields. The research questions of this study include:

1. Are there any similarities and differences between the two groups of students in terms of their blogging behaviour?
2. Are there any differences in the perceptions on the effectiveness of blogging in facilitating learning process between the two student groups?
3. Are there any similarities and differences between the two groups of students in their perceptions on the usefulness of blogging for communication?
4. Are there any similarities and differences in perceptions of different types of students on the usefulness of tags in blog entries?

Participants: 53 information management students participated in the study. They were three cohorts of students from the Bachelor of Information Management (BScIM) programme enrolled in the year 2006 to 2008, who took part in a two-month internship programme in summer. Another group of participants were 28 nursing students who underwent their clinical practicum from June 2007 to August 2008 in three separate periods of time. All participants were second-year undergraduates when they wrote their blogposts.

Among the 53 BScIM students, 16 of them are from summer 2006, 16 are from summer 2007 and 21 are from summer 2008. For each year, an estimate of 80% students undertook their internship in local organizations while the remaining 20% did their internships in Mainland China or in overseas organizations. A faculty supervisor is assigned for each intern, given about six hours of supervision for each student. For the nursing students, they were divided into six groups of eight students, having clinical practicum in different clinical placements with 3 responsible clinical instructors.

Data Collection: Students were asked to create a web log (i.e. blog) to share their experiences and post their reflections during internships. All the students who used the blogs were invited to participate in a telephone interview. Telephone interviews were individualized, with a semi-structured nature. The questions included a 5-point ordinal rating scale to measure the blogging frequency of students where 1 stands for "once a month or less", 2 for "once every 2 weeks", 3 for "1-2 times per week", 4 for "3-6 times per week", and 5 for "once every day or more". A 4-point Likert scale (where 1 stands for "strongly agree" and 4 for "strongly disagree") was used to examine the students' perceptions of their learning using the blog. Open-ended questions were also used to probe into the opinions and perceptions of the students. All interviews were recorded and transcribed for data processing with participants' consent and students' blogs were downloaded to provide useful information to investigate the use of blogs during their internships.

BScIM students were asked to write blogs every one or two day(s) throughout the internship period. The blogs provided the venue for their reflections, which accounted for 30% of their final grade in the internship. All 53 students participated in the interview. Nursing students were encouraged by their clinical instructors to use the nursing blog throughout two years, particularly in the period of clinical practicum to support clinical teaching and learning; however the blog input had no weight in their clinical grade. On a daily basis, the clinical instructors reviewed, monitored and responded to the blogs, comments posted, and other related blogging activities (e.g, photos, information chart, and webpage URL upload). Among the 48 nursing students, 28 participated in the interview.

Data Analysis: The numerical data obtained in the questionnaire were processed in SPSS (Windows version 17.0). To identify the frequent and infrequent bloggers, ordinal rankings from the blogging frequencies were converted to interval data. The interquartile range (IQR) of the blogging frequency was then identified using the means of the interval equivalents. Using the IQR as a reference point, the infrequent users are those who belong to the group lower than the 25th percentile whereas the frequent users belong to the group higher than the 75th percentile. Statistical analysis used non-parametric tests, and comparisons of sample distribution were done using Mann-Whitney test. Alpha level was set at $p<0.05$ for all statistical tests. The qualitative data obtained from the open-ended questions were sorted and analyzed by NVivo version 8.0 to support the quantitative data.

4. Findings and Discussion

The results from the survey were generally positive, indicating that students perceived blogs to be effective in facilitating their learning and communication during internships. Nursing

students gave significantly higher ratings for blogs as useful for learning problem-solving, and experiencing an enhanced emotional support. Supervisors' participation was found crucial during the internship learning process. Both groups gave fairly similar ratings on the overall effectiveness of blogs with no significant differences between them. Statistically significant differences are found between both groups' perceptions in emotional support and learning from others' experiences. This section starts with a general overview of students' blogging behaviours, followed by comparisons of students' perceptions on blogging in facilitating learning and communication, and their overall rating on satisfaction with blogging system. The impact of blogging behaviour of peers and supervisors on students' blogging experiences and the usefulness of tags will also be discussed. This section will be ended by a conclusion on the similarities and differences of the blogging experiences of information management and nursing students who participated in this study.

Blogging Frequency: Users' blogging frequency is measured in terms of the frequency of their blog-writing, reading their own and others' blogs, and giving comments. A measure of the central tendency of the blogging frequency is identified by using the median of the frequencies of the 4 blogging behaviours as shown in Table 1. The students seemed to prefer writing their own blogs and reading their own and others' blogs rather than giving comments to others students. There are no statistically significant differences in the blogging frequency between BScIM students and nursing students. We may note that there is weight in grades given to the blog output of BScIM students, whereas, nursing students' blogs have no bearing on their clinical grade. Given this difference in their circumstances, this did not result in any significant differences in their blogging frequency. Effective communication skills, including the ability to write clearly, are essential skills of nurses and other healthcare professionals (Maag, 2005). The emphasis on this in the field of health professions education may be a consideration in understanding the frequency of blogging that was facilitated among the nursing students, even without the motivation of grades.

Table 1. Students' blogging behaviours.

Blogging Behaviours	BScIM (N=53) Median	Nursing (N=28) Median	Significance (Mann-Whitney) $p<0.05$
-Writing one's own blog	3	3	0.27
- Reading one's own blog	3	3	0.88
- Reading classmates' blogs	3	3	0.82
- Commenting on classmates' blogs	2	2	0.64
- Average blogging behaviours[1]	3	3	0.67

Notes: [1] Central tendency of the blogging behaviours represents the median of the 4 behaviours mentioned above with 2 for "once every 2 weeks", 3 for "1-2 times per week"

Table 2. Students' overall rating on the usefulness of blogs as a platform for learning.

Survey questions[1]	BScIM (N=53)		Nursing (N=28)		Significance Mann-Whitney $p<0.05$
	Mean (SD)	Median	Mean (SD)	Median	
- Blog is useful for self-reflection	3.15 (0.50)	3.00	2.95 (0.44)	3.00	0.06
- Blog is suitable for keeping self-reflections	3.04 (0.65)	3.00	2.88 (0.63)	3.00	0.25
- Reading others' blogs during internship is useful	2.91 (0.66)	3.00	3.11 (0.42)	3.00	0.18
- Classmates shared problem solving experience on blog	2.75 (0.67)	3.00	2.96 (0.51)	3.00	0.19
- Blog is useful for learning other's problem solving experiences	2.58 (0.69)	3.00	2.96 (0.51)	3.00	0.02*
- Blog is suitable for learning other's internship experience	2.94 (0.69)	3.00	2.88 (0.57)	3.00	0.35

Students' perceptions on learning through blogging: Both groups of students regarded blogging as suitable for keeping self-reflections and learning from others' internship experiences, which implies a positive impact for the use of blogs in facilitating students' learning process during internships. BScIM students rated blogs for self-reflection more positively than nursing students but the difference is not statistically significant ($p>0.05$). The data are illustrated in Table 2. Developing the habit of self-reflection fosters intellectual integrity and inquisitiveness, which facilitate critical thinking among students (Sedlak, Doheny, Panthofer & Anaya, 2003). When facilitated by blogging, the reflection process enables students to better understand what they have learnt and how these learnt skills can be applied in the future (Tan, 2006). In this study, the groups of students appear to perceive blogging as a suitable means of engaging in self-reflections.

The nursing students rated the blogs as useful for learning others' problem solving experiences, and this rating was found to be significantly higher than the ratings given by BScIM students. Nursing students who engaged in an online community have been seen to be able to collectively discover the best ways of overcoming obstacles in similar clinical encounters (Keegan, 2007). As such, the nursing students in this study may have been able to find the blogs of their classmates' experiences more useful. Furthermore, interviews showed that nursing students who worked in local clinics with similar job duties found it more likely to apply what they learnt from others' problem solving experience to their own work. On the other hand, BScIM students worked in organizations engaging in different business areas, which may even situate in different geographical regions, as such, they found less common problems in each others' reflections. Table 3 shows the feedback obtained from the students through the open-ended probes.

Table 3. Students' comments on the effectiveness of learning others' problem-solving experiences on blog.

	BScIM Students (N=53)	Nursing Students (N=28)
Positive comments	-Learn from others' problem solving experiences (29) -Know what others are doing (10) -Learn more about different jobs (17) - Know more information about the company (8) - Learn interpersonal skills (4)	-Learn from others' problem solving experiences (21) -Learn knowledge about the job (14) -Find academic resources (14) -Learn knowledge about medicines (10) -Learn others' working attitudes (6)
Negative comments	-Did not learn from others' problem solving experience due to inapplicability (22) -Blogs are not centralized (2) -Too formal, students write just for completing the assignment (2)	-Time consuming to blog (3) -Prefer other alternatives (3) -Too dependent on students' initiative (2)

Note: Number in brackets refers to the number of students who gave the comments.

Students' perceptions on communication through blogging: Both groups of participants reported that blogs serve the purpose of communication satisfactorily. The results are illustrated in Table 4. Compared to traditional means of communication, blogs are considered desirable tools for interns to make their thoughts, feelings and experiences accessible to a wider audience (Ellison & Wu, 2008). Unlike nursing students who worked in local clinics, 20% of BScIM students performed their work in Mainland China or overseas, and some of them mentioned that blogging was particularly useful for them as it was a good alternative to face-to-face interactions given the geographical distance.

Table 4. Students' overall rating on the usefulness of blogs as a platform for mutual support.

Survey questions[1]	BScIM (N = 53) Mean (SD) Median	Nursing (N = 28) Mean (SD) Median	Significance Mann- Whitney $p<0.05$
- Blog facilitated information sharing	3.09 (0.53) 3.00	2.93 (0.54) 3.00	0.19
- Blog facilitated knowledge sharing	2.86 (0.48) 3.00	2.89 (0.63) 3.00	0.83
- Blog facilitated emotional support	2.77 (0.70) 3.00	3.11 (0.69) 3.00	0.05*
- Overall, blog is useful for communication	3.06 (0.61) 3.00	3.00 (0.54) 3.00	0.57

The perceived effectiveness of blogging for communication is defined in terms of facilitation of knowledge sharing, information sharing, and emotional support among interns. Both student groups gave higher than average ratings for all the aspects, indicating that they acknowledged the effectiveness of blogging in facilitating information management and mutual support. This is consistent with Buffington's findings which suggest that blogs are a good supplement to face-to-face interactions (2007). Table 5 further shows the student comments in terms of blogs for information and knowledge sharing.

Table 5. Students' comments on blogs' effectiveness in facilitating information/knowledge sharing.

	BScIM Students	Nursing Students
Positive comments	-Know what others are doing (14) -Sharing information, including text, photos and videos for a common project/goal (9) -Know about others' fields (7) -Share and learn from others' experience (7) -Blogs can be freely accessed anywhere at any time (7) -Get to know more knowledge about one's own field (4) -Blog serves as a good platform for information sharing (4) -Blog serves as source for problem solving (4)	-Sharing information, including text, photos and videos for the common project (8) -Blog serves as a good platform for information sharing (5) -Saves time (2) -Learn from others' experience (6) -Get to know more knowledge about the field (3) -Get to know more knowledge about medicines (7)
Negative comments	-Blog content lacks quantity and depth (7) -Unimportant and routine content on blogs (4) -Most comments are personal rather than useful information (2) -Knowledge from another field is not applicable (2) -Did not read others' blogs or re-read entries (3)	-Blog should be more about emotional sharing than pure information or knowledge sharing (2) -Prefer other ways, i.e. Facebook (2) -Seldom uses blogs (1)

Note: Number in brackets refers to the number of students who gave the comments.

When the ratings were compared, a significant difference was noted only in blog's ability to facilitate emotional support. Nursing students gave higher ratings for this criterion. This is also supported by the comments from the students as 20 out of 28 (71.4%) nursing students gave positive feedback on emotional sharing on blogs comparing to only 25 out of 52 (47.1%) BScIM students. These comments are summarized in Table 6.

Table 6. Students' comments on blogs' effectiveness in facilitating emotional support.

	BScIM Students	Nursing Students
Positive comments	-Emotions sharing and encouragement through supportive comments (25) -Facilitate the sense of belongingness within a group (4) -Can know better what others are doing (2)	-Emotions sharing and encouragement through supportive comments (20) -Giving advices (2) -Classmates can gain better understanding of each other (2)
Negative comments	-No emotion sharing or encouragement shown (6) -Blog content is too job-oriented (3) -Blogs are treated as an assignment and emotional sharing is absent (3) -Supervisors did not engage in emotional sharing (1) -Other methods are preferred for emotional sharing (1)	-No emotion sharing or encouragement shown (4) -Other methods are preferred for emotional sharing (1)

Note: Number in brackets refers to the number of students who gave the comments.

Nursing students tended to share more about their thoughts and feelings on their blogs, as they dealt with patients where their daily performance may determine their patients' life and many of them witnessed the reality of death for the first time. On the contrary, BScIM students gave slightly more negative comments, with 7 students mentioning the lack of quantity and depth in blog entries. As their job duties were far from life and death matters, their responses also showed that most blog entries were superficial and routine. It may also be argued that this is related to the fact that their reflections are graded. These findings illustrate differences in the perceptions of the student groups on the use of blog, which may

be seen to be related to the nature of their tasks, and inherently, the professional field. It also implies that there may be a need to look into the intrinsic motivation of students for blogging and how these would affect learning.

Generally, both BScIM students and nursing students found blogs to be useful for learning and communication. Table 7 shows the students' overall rating for the blogging system. The majority of them felt satisfied with blogging system and recommended adopting blogs for next year's interns. No significant differences were noted between the two groups. These findings indicate a positive impact and perceived importance of using blogs to support students' internships.

Table 7. Students' overall rating on satisfaction with blogging system.

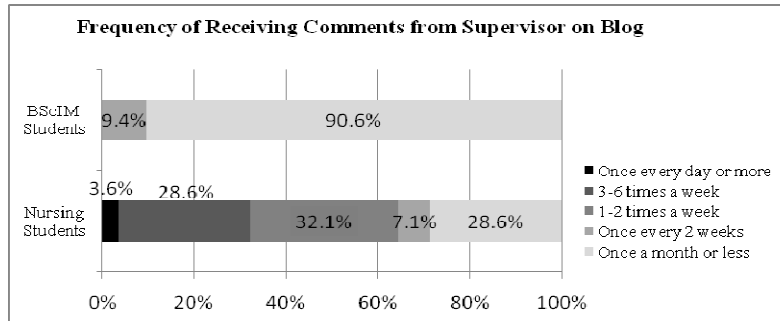| Survey questions	BScIM N = (53)		Nursing N = (28)		Significance Mann-Whitney $p<0.05$
	Mean (SD)	Median	Mean (SD)	Median	
- Satisfied with blogging system[1]	2.96 (0.55)	3.00	2.84 (0.55)	3.00	0.38
- Suggest adopting blogging for next year's interns	3.01 (0.53)	3.00	2.93 (0.66)	3.00	0.71

Note: [1]Among 28 nursing students, 25 of them used a blogging system in 2008 and the remaining 3 only used blog in 2007. As the blogging systems are different in 2007 and 2008, only the satisfaction ratings from the 25 students are analyzed.

Students' perception on comments from classmates and supervisors: Nursing students received comments from both classmates and supervisors more often than BScIM students (Fig 1 & 2). It was found that 13.2% (7 out of 53) of BScIM students and 7.1% (2 out of 28) nursing students have received no comments from peers. Moreover, 79.2% (42 out of 53) of BScIM students have never received comments from supervisors at all, compared with 7.1% (2 out of 28) of nursing students. The students' perceptions about the comments received on the blog are summarized in Table 8.
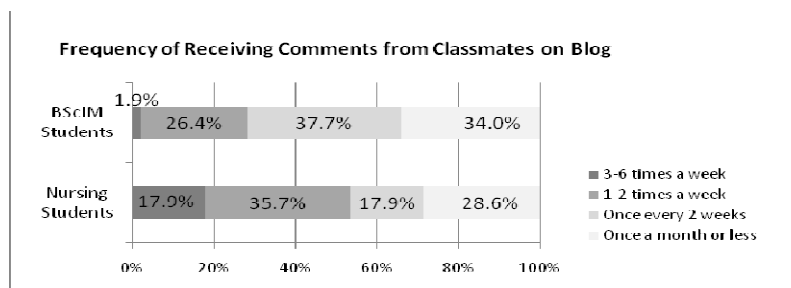
Note: 7 (or 13.2%) BScIM students and 2 (or 7.1%) nursing students never received comments from classmates.

Fig. 1. Frequencies of receiving comments from classmates.

Frequency of Receiving Comments from Supervisor on Blog

Note: 42 (or 79.2%) BScIM students and 2 (or 7.1%) nursing students never received comments from their supervisors.

Fig. 2. Frequencies of receiving comments from supervisor.

Table 8. Students' perception on comments from classmates and supervisors.

Survey questions	BScIM (N=53)		Nursing (N=28)		Significance Mann- Whitney
	Mean (SD)	Median	Mean (SD)	Median	$p<0.05$
- Classmates' comments are helpful[1]	2.47 (0.78)	3.00	2.71 (0.60)	3.00	0.35
- Supervisors' comments are helpful[2]	3.00 (0.45)	3.00	3.42 (0.50)	3.00	0.07
- Felt supported by classmates via blog	2.64 (0.68)	3.00	2.93 (0.60)	3.00	0.09
- Felt supported by supervisor via blog	1.93 (0.83)	2.00	3.29 (0.66)	2.00	0.00*

Note: [1]Data collected from 46 BScIM students and 26 nursing students who actually received comments from classmates, 7 BScIM students and 2 nursing students who haven't received comments from classmates skipped the question.
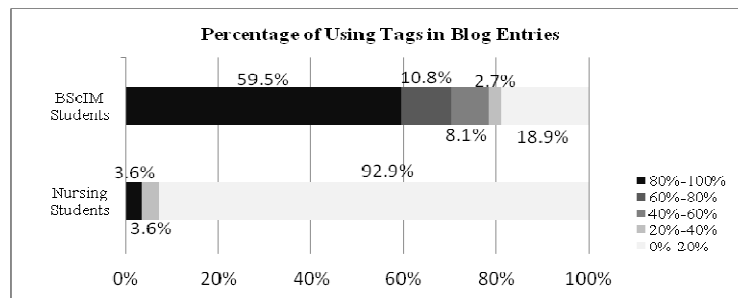[2]Data collected from 11 BScIM students and 26 nursing students who actually received comments from supervisors, 42 BScIM students and 2 nursing students who haven't received comments from supervisors skipped the question.

Based on data provided by students who actually received comments, BScIM students appeared not to regard comments from their classmates as useful. Among 53 participants, 14 of them think that comments from their peers are shallow and not useful while a few of them think that suggestions on one work field may not be applicable to another work field. Nursing students held more positive perceptions on the usefulness of classmates' comments as their job duty is similar and advice provided by classmates can be readily applied to their work. Supervisors' comments were generally perceived to be useful for problem solving and academic work by both groups of students, even though some BScIM students complained about the low frequency of receiving comments, which results in lower ratings received from BScIM students than nursing students.

The comment-giving behaviour of peers and supervisors also directly affect students' perception on being supported by others via blogging, and a significant difference was found between the two groups of students in views on feeling supported by supervisors. Many BScIM students complained about the frequent absence of supervisors' comments, which led to a feeling of inadequate support and guidance during the internship. Some studies suggested that students have to learn through self-exploration and directive learning

with their supervisor's feedback (Glogoff, 2005). As such, there is a need to improve the regularity of supervisors' feedback in order to make learning more effective. In this study, the main limitation that may be related to these findings would be the time allocated for the supervisors to give their students. In fact for each BScIM student, the corresponding supervisors were given six hours for supervision and assessment, which includes one to two on-site visits. This is much less than the resources given to the nursing clinical instructors.

Students' perception on using tags in blog entries: This study also examined if tags were perceived as useful in blog entries. The tag function was not available in the BScIM's 2006 blogging system, and from 2007 and on, the usage of tags was introduced to BScIM interns and counted as an element of internship assessment.

Note: The data is collected from 37 BScIM students and 28 nursing students on a percentage scale ranging from '0%-20%' to '80%-100%'. 8.1% of BScIM students and 82.1% of nursing students never used tags.

Fig. 3. Percentage of using tags in blog entries.

Among 37 BScIM students and 28 nursing students who took internship in 2007 and 2008, 8.1% (3 out of 37) of BScIM students and 82.1% (23 out of 28) nursing students have never used tags, either because they didn't know the function, or they didn't realize the usefulness of it (Fig 3). BScIM interns (32) and nursing interns (5) who had experience of using tags responded on the perceived usefulness of tags in blog entries, and the results are summarized in Table 9. Students reported convenience in searching, highlighting and reading relevant information with the use of tags. BScIM interns, who were introduced and required to use tags, rated the function more favourably than nursing interns. These findings indicate that support is needed to help students explore new functions and make good use of blogging system.

Table 9. Students' perceptions on using tags in blog entries.

Survey questions	BScIM (N=53)		Nursing (N=28)		Significance Mann-Whitney $p<0.05$
	Mean (SD)	Median	Mean (SD)	Median	
- Tags are helpful	2.69 (0.59)	3.00	2.10 (0.74)	2.00	0.10

Comparing perceptions of frequent and infrequent users: Frequent users generally have more positive ratings than infrequent users. Comparisons were made and the results are illustrated in Table 10.

Table 10. Comparing frequent and infrequent users' ratings on blogging's effectiveness.

BScIM Students[1] Survey questions	Frequent Users (N=13) Mean (SD) Median		Infrequent Users (N=13) Mean (SD) Median		Significance Mann- Whitney $p<0.05$
- Blog is useful for self-reflection	3.23 (0.44)	3.00	2.92 (0.28)	3.00	0.22
- Reading others' blogs is useful	3.00 (0.41)	3.00	2.85 (0.69)	3.00	0.55
- Blog is suitable for learning other's internship experience	3.23 (0.44)	3.00	3.08 (0.64)	3.00	0.61
- Blog facilitated information sharing	3.31 (0.48)	3.00	3.00 (0.58)	3.00	0.26
- Blog facilitated knowledge sharing	2.92 (0.49)	3.00	2.81 (0.38)	3.00	0.61
- Blog facilitated emotional support	3.00 (0.58)	3.00	2.62 (0.51)	3.00	0.17
- Blog is useful for communication	3.15 (0.38)	3.00	2.85 (0.38)	3.00	0.22
- Satisfied with blogging system	3.08 (0.76)	3.00	2.85 (0.38)	3.00	0.45
- Suggest adopting blogging for next year	3.12 (0.42)	3.00	2.96 (0.14)	3.00	0.55

Nursing Students[1] Survey questions	Frequent Users (N=7) Mean (SD) Median		Infrequent Users (N=7) Mean (SD) Median		Significance Mann- Whitney $p<0.05$
- Blog is useful for self-reflection	3.14 (0.69)	3.00	2.79 (0.39)	3.00	0.32
- Reading others' blogs is useful	3.14 (0.38)	3.00	3.14 (0.38)	3.00	1.00
- Blog is suitable for learning other's internship experience	3.00 (0.58)	3.00	2.64 (0.48)	3.00	0.32
- Blog facilitated information sharing	3.14 (0.38)	3.00	2.86 (0.69)	3.00	0.46
- Blog facilitated knowledge sharing	2.71 (0.76)	3.00	2.86 (0.69)	3.00	0.71
- Blog facilitated emotional support	3.43 (0.54)	3.00	2.86 (0.69)	3.00	0.17
- Blog is useful for communication	3.14 (0.38)	3.00	2.86 (0.69)	3.00	0.46
- Satisfied with blogging system	3.00 (0.00)	3.00	2.71 (0.49)	3.00	0.45
- Suggest adopting blogging for next year	3.14 (0.69)	3.00	2.71 (0.76)	3.00	0.32

Note: [1]53BscIM students and 28 nursing students are grouped into frequent and infrequent users according to their average blogging behaviours calculated in Table 1.

In general, the differences were not statistically significant. Interestingly the differences in the ratings on various aspects of the effectiveness of blogging between frequenct and infrequent users tend to be slightly larger for nursing students when compared to that of BScIM students. Further study is needed to explain the phenomenon.

5. Conclusion and Implications

Nursing students found blogging to be more useful for emotional support and for learning from others' problem solving experiences than the BScIM students. This appears to be related to the nature of the professional field which dictates the activities and situations in their work placements. The findings of this study support the proposition that the area of professional practice may affect the way students use and perceive blogging for learning. The study results imply that the use of blogs for education purposes must also be contingent to the practice area and sensitive to the tasks of the professional field. Nevertheless, the

general finding is that blogs are found to be effective in facilitating their learning and communication during internships regardless to their fields of study.

Differences are also noted in the commenting patterns between the clinical instructors of nursing students and the faculty supervisors of the BScIM students. In the qualitative data, it is apparent that the nursing students received greater support as far as feedback was concerned. Practically, the root of this difference is the time allocation assigned for the teaching faculty and clinical instructors. Nevertheless, it may also be argued that the nature of nursing work, which involves human life, indeed requires a greater amount of supervision.

The ratings given by frequent users are slightly higher than infrequent users on blogging, indicating that support and training are needed to help students explore new functions and make good use of blogging systems. It is also recommended that further studies should investigate the methods to improve students and supervisors' intrinsic motivation in using blogs during internships and practicum.

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