

Available online at [www.sciencedirect.com](http://www.sciencedirect.com)**SciVerse ScienceDirect**

Procedia - Social and Behavioral Sciences 73 (2013) 22 – 29

---

---

**Procedia**  
Social and Behavioral Sciences

---

---

The 2nd International Conference on Integrated Information

## Facebook: More than social networking for at-risk students

Eugenia M. W. Ng<sup>a\*</sup> and Hugo C. H. Wong<sup>b</sup><sup>a</sup>*The Hong Kong Institute of Education, Department of Mathematics and Information Technology, 10 Lo Ping Road, New Territories, Hong Kong SAR.*<sup>b</sup>*The Vocational Training Council, Youth College (Kwai Fong), Business Administration Section, 85 Hing Shing Road, Kwai Chung, New Territories, Hong Kong SAR.*

---

### Abstract

Facebook is one of the most popular online social network sites. Almost every young person now has a Facebook account. One of the authors is the class tutor for a cohort of Year 2 students at a youth college in Hong Kong. The students were not only low academic achievers but also had problems with emotional and behavioral disorders (EDB). One of the challenges in teaching EDB students is to motivate them to attend school. This study explored whether using Facebook to create a learning community can help motivate EDB students to attend and, in particular, to participate in different school activities. A total of 27 students, aged 16-18, participated voluntarily in the study. Although communication mainly focused on daily routines, the Facebook group provided an invaluable avenue for students to ask questions, encourage each other, and maintain friendships. The teacher posted a total of 74 messages, which students “Liked” 212 times and posted 348 replies. Eight private messages were also received across the semester. At the end of the semester, most of the students agreed Facebook was one of the best ways to enhance communication. The positive interaction not only kept all the students in class, but also encouraged them to attend more seriously to their tasks. They continued to use Facebook to interact even after the semester had ended, further demonstrating its value.

© 2013 The Authors. Published by Elsevier Ltd. Open access under [CC BY-NC-ND license](https://creativecommons.org/licenses/by-nc-nd/4.0/).

Selection and peer-review under responsibility of The 2nd International Conference on Integrated Information

*Keywords:* Facebook; at-risk students; learning community.

---

### 1. Introduction

The National Institute of Mental Health of the US Department of Health and Human Services consistently estimates that about 10% of the school-age population experiences some form of mental disorder [1]. Some surveys even estimate the proportion of students and young people with emotional and behavioral disorders

---

\* Corresponding author. Tel.: +852 29487645; fax: +852 29487726.

E-mail address: [eugenia@ied.edu.hk](mailto:eugenia@ied.edu.hk)

(EBD) as 20% or more [2]. Definitions of EBD vary, with some being subjective and others restricted to medical or psychological terms. In general, the behavior of children with EBD is regarded as deviating from the cultural or sociological standards of his/her background [3, 4, 5].

Students with EDB tend to demonstrate common school-related behaviors, with problems such as the following:

- A high rate of absenteeism and tardiness;
- Failing in most subjects;
- Being two or more years behind academically;
- Not completing assignments;
- Returning assignments late, soiled, or messy, sometimes with comments directed toward the teacher;
- Experiencing difficulty in following directions;
- Experiencing difficulty maintaining attention to tasks [6, 7, 8, 9].

Kortering [10] suggests that EDB students drop out of school because they consistently experience frustration, failure, and social alienation from peers and teachers. Students who consistently perform below expected academic standards are regarded as at risk [11]. Indeed, some EDB students lack the social skills to communicate with their peers and teachers. With the popularity and easy accessibility of the Internet, it is timely to explore whether using information technology, in particular Web 2.0, can promote communication and provide an avenue to connect EDB students with each other. The term Web 2.0 was coined by O'Reilly [12]. Users of Web 2.0 not only can create and own their data but also mix, amend, and recombine content without needing to learn any technical skills.

Nowadays, social networking sites are a part of college students' daily lives [13, 14]. Many students find online social networking an attractive platform because the Internet has provided anonymous, cost-free, and unfettered access to the relevant sites [15]. Green and Hannon [16] define online social networking as an aspect of Web 2.0 that allows users to create links to their online presence such as a webpage or a collection of photos. They also identify benefits for young people in engaging in social networking online, such as enhanced creativity; ideas generation; presentation skills; leadership; team building; confidence; communication; innovation; using initiative; developing critical awareness in information gathering; and developing the ability to evaluate, question and prioritize information. All are essential skills required to cope with the demands of life in the 21st century.

Any adult can register him/herself with any online social networking site. After a person has registered, he/she can then search for anyone else who has registered with the site and invite them to link up as a friend. They can also join or create groups, such as those intended for fans of particular celebrities. Depending on the service used, a user's pages may include other Web 2.0 technologies such as blogs and image or video sharing. MySpace and Facebook are both extremely popular, but Facebook is the top social networking site among students [17, 18].

There are various ways for users to communicate with each other on Facebook. They can make use of the Wall function to broadcast their thoughts, photos, and status. Users can not only comment on each other's postings but also exchange private messages. It has been found that students spend an average of 10 to 60 minutes per day on Facebook in order to maintain existing relationships [17] rather than seeking new ones. Some students also use Facebook for learning purposes [19, 20] but only 4% of Wall messages are related to educational use [21]. Most students do not experience any negative effects from using Facebook. In fact, students in one study rated a teacher more highly in terms of caring and trustworthiness when she provided more information about herself on the site [22].

Given the popularity of Facebook, this paper explores whether using it to communicate with EBD students can motivate them to be more responsible for their own studies and to reduce the dropout rate. The following section discusses the research setting and findings. Finally, it proposes some conclusions.

## 2. Methods

### 2.1. Participants

The participants in the study were Year 2 students studying for the Diploma in Vocational Education (Business) in a Youth College in the Hong Kong Special Administrative Region. The Youth College is a member of the Vocational Training Council Group and was established in 2004. It provides professional vocational training to post-Secondary 3 students with the aim of helping them to acquire knowledge and skills. This study included 27 students aged 16-18, of whom 16 were male and 11 female. Most had come to the Youth College because they had been unable to join senior secondary grammar schools due to various problems such as poor academic results and conduct issues.

### 2.2. Activities

Facebook was chosen as the platform to establish better communication channels between students and teachers because of its popularity. In the second semester of 2011, all students were asked to join a Facebook group on a voluntary basis. The class monitor was invited to be the group administrator so that students would not feel that the purpose of the exercise was for the class tutor to monitor their behavior online. The role of the group administrator included accepting requests to join or leave the group. He could also review any member's messages. After the group had been set up, all students were added and hence became members (see Figure 1).



Fig. 1. The Facebook Group.

## 3. Findings and Discussion

Table 1 shows that a total of 483 postings were made during the second semester. It is encouraging to know that there were 210 replies and 154 "Likes." There was about one new thread posted every day, averaging three replies. Liking a post on Facebook is done for two reasons, either to express one's feelings after reading the message or to ensure that it will appear at the top of the group's Wall and hence draw attention. About 5.5 Like messages were posted by each student.

Table 1. Exchanges between 22 March to 20 May 2011.

	Students	Teacher	Total
Postings	26	66	92
Likes	154	0	154
Replies	210	27	237

Total	390	93	483
-------	-----	----	-----

Table 2 shows that students continued using the Facebook group to communicate after the semester had ended, but their behavior was significantly different. It was encouraging to see that a total of 245 postings were made over the summer, and in particular that a lot more came from students than the class tutor. In total, there were 138 replies and 58 Likes.

Table 2. Exchanges between 21 May to 31 August 2011.

	Students	Teacher	Total
Postings	7	8	15
Likes	58	0	58
Replies	138	34	172
Total	203	42	245

In order to have a better understanding of the dialogue on the group, the contents of the messages posted during Semester 2 and the summer break were analyzed as shown in Table 3. It was found that out of the 107 messages, most were posted by the class tutor to pass on information (61 messages) and give encouragement (13). The tutor normally posted important information such as test schedules or lesson changes on the group's Wall to remind students. For example, Figure 2 shows that the class tutor reminded students to attend a physical class at 9:00 a.m. and his class at 12:30.

Table 3. Types of Messages Exchanged.

Messages	Students	Teacher	Total
Informative	3	61	64
Asking question	22	0	22
Encouraging message	0	13	13
Updating group status	8	0	8
Total	33	74	107



Fig. 2. Reminder from Class Tutor.

Students were also very active in asking questions (22 messages). This was in contrast to their classroom behavior, as they did not pay much attention in class. Sometimes the teacher answered their question and sometimes one of the other students did so. For example, Figure 3 shows that a student asked for clarification of the venue for a class and another student replied. Sometimes, students even reminded each other to attend lessons on time. Through such interactive online communication, the relationship between the class tutor and students and among students became closer. In fact, the amount of conflict or arguments between the class tutor and among students themselves during lessons also declined. One possible reason for this is that students had come to understand each other more as they connected outside class.



Fig. 3. A question posted by a student is replied to by another.

Sometimes, the class tutor posted encouraging or supportive messages to students, as one of the characteristics of EBD students is that they tend to give up easily. The tutor also praised students who had performed well or improved their behavior, as a means of positive reinforcement. Figure 4 gives an example. The tutor praised the class performance at 11:03 and one student answered almost immediately, at 11:04, to ask if there would be any blessing. The tutor replied that any good student would receive a blessing. Another student asked if she would get a blessing, too.



Fig. 4. Encouragement from class tutor.

Figure 5 shows the class tutor posting a newspaper clipping concerning one of the students. It reported that a street dance team had volunteered to serve other students. That particular student had very poor attitude to learning and yet he was very good at dancing. He had joined the street dance team to perform in public. There were 9 "Likes" by other students to show their support, and the student also expressed his appreciation for the tutor's encouragement by stating that he would continue with his passion for dancing as well as studying harder. After this incident, the student improved his attitude to learning, and maintained a close and trusting relationship with the class tutor. It seems that support and care are the best treatment for EBD students.



Fig. 5. Newspaper clipping posted by the class tutor.

Apart from the open messages, eight students also used Facebook to send private messages to the class tutor asking questions. These mostly related to informing the tutor that they would be absent or asking questions about school administration. Sometimes, students preferred to ask the class tutor to send them the electronic learning materials even though they had been uploaded to the learning management platform (WebCT).

Figure 6 shows a student asking when she could receive her report card as she needed to attend an interview on next Wednesday; the tutor replied that he would talk to her about this the following day.

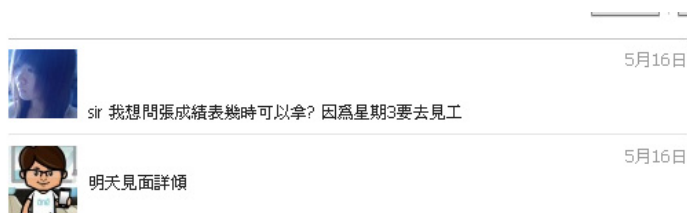


Fig. 6. Private message to class tutor.

At the end of Semester 2, the tutor asked for comments on using Facebook to communicate outside class time. Figure 7 shows that 11 students responded, of whom 10 were positive about using Facebook and 1 suggested Weibo. Some students also suggested using other online social networking sites such as Google+ and Twitter, but others disagreed because it would be too troublesome to check different platforms. Furthermore, they believed that Facebook was one of the best ways to enhance communication because they already had a Facebook account and it was the most popular social networking site. Moreover, most students were connected to Facebook via their mobile phones so could receive and reply to messages almost instantly and in any location.

為了改善學校與同學的通訊，請選出閣下最常用系統

<input checked="" type="checkbox"/>	facebook	10 票
<input type="checkbox"/>	微博	1 票
<input type="checkbox"/>	Google Plus	
<input type="checkbox"/>	Twitter	
<input type="checkbox"/>	QQ	
<input type="checkbox"/>	MSN Messenger	
<input type="button" value="+ 回答....."/>		

發問者: 11 票

Fig. 7. User poll.

#### 4. Conclusions

Online social networking, particularly Facebook, is the most popular platform for young people to use to connect with friends. It is not yet clear if it can be used as an avenue to support learning especially for EDB students. The tutor in this example mainly used Facebook to communicate about routine matters and to encourage his EDB students. It is encouraging to note the reduction in many common school-related negative behaviors for these students. None dropped out of the course, which was exceptional. One possible explanation for this is that they felt less frustrated with their studies. It was also observed that students displayed fewer behavioral problems and argued less when they came to class. It may be that students felt the tutor's care and respect for them via the Facebook group.

The findings also show that these EDB students were very active in communicating with the tutor and each other using Facebook. They took the initiative to remind their classmates and took their tasks seriously. They continued using Facebook even after the semester had ended, which shows they enjoyed using the platform to communicate and to maintain friendships. In summary, the findings of this study suggest that Facebook can be more than a social networking site. It can help at-risk students to communicate informally, build a good team spirit, and take more personal responsibility for their studies. However, we are mindful that some students might have online behavioral problems such as Internet addiction and cyber bullying. Therefore, it is also important to educate them about online ethics and the values of the online community.

#### References

- [1] Haring, N.G., L. McCormick and T.G. Haring, *Exceptional Children and Youth: An Introduction to Special Education*, 6th ed., Merrill/Prentice Hall, Upper Saddle River, NJ (1994).
- [2] Meyen, E.L., G.A. Veragson and R.J. Whelan, *Strategies for Teaching Exceptional Children in Inclusive Settings*, Love, Denver, CO (1996).
- [3] American Psychiatric Association, *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-TR)*, 4th ed., American Psychiatric Association, Washington, DC (2000).
- [4] Hardman, M.L., C.J. Drew and M.W. Egan, *Human Exceptionality: Society, School, and Family*, 8th ed., Allyn & Bacon, Needham, MA (2005).

- [5] Heward, W.L. (2006). *Exceptional children: An introduction to special education* (8th ed.) Upper Saddle River, NJ: Merrill/Prentice Hall.
- [6] Anderson, J.A., K. Kutash and A.J. Duchniwski, "A comparison of the academic progress of students with EBD and students with LD," *Journal of Behavioral Disorders*, 9, 106-115 (2001).
- [7] Bradley, R., K. Henderson and D.A. Monfore, "A national perspective on children with emotional disorders," *Behavioral Disorders*, 29(3), 211-223 (2004).
- [8] Lane, K.L., J. Wehby and S.M. Barton-Arwood, "Students with and at risk for emotional and behavioral disorders: Meeting their social and academic needs," *Preventing School Failure*, 49(2), 6-9 (2005).
- [9] Wagner, M., C. Marder, J. Blackorby, R. Cameto, L. Newman, P. Levine, et al., *The Achievements of Youth with Disabilities During Secondary School*, SRI International, Menlo Park, CA (2003).
- [10] Kortering, L., *School Dropout Among Youth with Learning Disabilities or Behavior Disorders: A Look at Potential Factors and Outcomes*, Appalachian State University, Boone, NC (1993).
- [11] Tay, L.Y. and C.P. Lim, "Blending classroom activities with multi-user virtual environment for at-risk primary school students in an after-school program: A case study," In *Comparative Blended Learning Practices and Environments*, edited by E. M. W. Ng, Information Science Reference, Hershey, PA (2010).
- [12] O'Reilly, T., *What Is Web 2.0 – Design Patterns and Business Models for the Next Generation of Software* 2005 [cited April 28 2008]. Available from <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html> (2008).
- [13] Bugeja, M.J., "Facing the Facebook," *Chronicle of Higher Education*, 52(21), C1-C4 (2006).
- [14] Jones, S. and M. Madden, *The Internet Goes to College: How Students Are Living in the Future with Today's Technology*, Pew Internet and American Life Project, Washington, DC (2002).
- [15] Fisher, W.A. and A. Barak, "Internet pornography: A social psychological perspective on Internet sexuality," *Journal of Sex Research*, 38, 1-11 (2001).
- [16] Green, H. and C. Hannon, "Their space: Education for a digital generation". Available from <http://www.demos.co.uk/files/Their%20space%20-%20web.pdf?1240939425> (2007).
- [17] Hew, K.F., "Students' and teachers' use of Facebook," *Computers in Human Behavior*, 27(2), 662-676 (2011).
- [18] Cheung, C.M.K., P-Y. Chiu and M.K.O. Lee, "Online social networks: Why do students use Facebook?", *Computers in Human Behavior*, 27(4), 1337-1343 (2010).
- [19] Bosch, T.E., "Using online social networking for teaching and learning: Facebook use at the University of Cape Town," *Communication: South African Journal for Communication Theory and Research*, 35(2), 185-200 (2009).
- [20] Permppek, T.A., Y.A. Yermolayeva and S. Calvert, "College students' social networking experiences on facebook," *Journal of Applied Developmental Psychology*, 30(3), 227-238 (2009).
- [21] Selwyn, N., "Faceworking: Exploring students' education-related use of Facebook," *Learning, Media and Technology*, 34(2), 157-174 (2009).
- [22] Mazer, J.P., R.E. Murphy and C.J. Simonds, "The effects of teacher self-disclosure via Facebook on teacher credibility," *Learning, Media and Technology*, 34(2), 175-183 (2009).