

Exploring the use of Facebook in the Classroom: A Malaysia Case Study

Cheng Ean (Catherine) Lee^{1,2}, Sangaran Kutty Vijaya Sooria¹ and Shin Pyng Wong¹

¹Department of Communication and Liberal Arts, Faculty of Arts, Sunway University, Selangor D.E., Malaysia

²Department of Sociology, Faculty of Arts and Social Sciences, Lancaster University, UK

catherinelee@sunway.edu.my

c.lee18@lancaster.ac.uk

vijayask@sunway.edu.my

shinpyngw@sunway.edu.my

Abstract: With the evolution of social media, including major social networking sites that came into existence in the 21st century, social media has burgeoned into one of the most used channels of communication in the society. As it becomes well recognised for its potential as a social communication channel, recent years have witnessed an increased interest of using social media in higher education. The Social Media Survey 2013 by Pearson shows that 41% of higher education faculty in the U.S. population has use social media in teaching in 2013 compared to 34% of them using it in 2012. The survey results also show the increase use of social media for teaching by educators and faculty professionals because they see the potential in applying and integrating social media technology to their teaching. Many higher education institutions and educators are now finding themselves expected to catch up with the world of social media applications and social media users. This creates a growing phenomenon for the educational use of social media to create, engage, and share existing or newly produced information between lecturers and students and among students. However, the use of social media technologies in higher education is not an easy and straightforward process. Some educators perceived social media tool as an effective educational platform, some perceived that it was not useful at all. Some claimed that it allows them to make the classes more interactive, and some stated that the use of social media can help or hinder the achievement of student learning outcomes. Although there is a growing body of empirical research on the use of social media in higher education in the developed countries, there is not abundance in literature in Malaysia context. This study aims to examine the educational use of Facebook by lecturers and students in a private university in the Klang Valley, Malaysia, and to gauge their attitude towards adopting Facebook in the classroom. The research objectives include 1) investigating the use of Facebook for teaching and learning as well as a communication tool between lecturers and students, and 2) exploring the perception of lecturers and students on the usefulness and ease of use of Facebook in the classroom. Using both qualitative and quantitative research methods, this study will achieve two objectives set and the outcome will provides useful insights for academics interested in using social networking sites for teaching and learning and for researchers interested in pursuing social media in higher education research.

Keywords: social media, Facebook, higher education, private university, Malaysia

1. Introduction

With the evolution of social media, including major social networking sites that came into existence in the 21st century, social media has burgeoned into one of the most used channels of communication in the society. As social media becomes well recognised for its potential as a social communication channel, recent years have witnessed an increased interest of using social media in higher education (Blankenship 2011; Bonzo and Parchoma 2010; Cao, Ajjan and Hung 2013; Chen and Bryer 2012; Friesen and Lowe 2012; Liu 2010; Poellhuber and Anderson 2011; Selwyn 2010; Selwyn 2012; Silius, Kailanto and Meri 2011; Tess 2013; Vaičiūnienė and Mazeikiene 2012; Wang, Tchernew and Solloway 2012; Allen et al, 2012; Almadhoun, Dominic and Woon 2011; Al-rahmi, Othman and Musa 2014; DeWitt, Naimie and Siraj 2013; Al-rahmi and Othman 2013).

The Social Media Survey 2013 by Pearson shows that 41% of higher education faculty in the U.S. population has use social media in teaching in 2013 compared to 34% of them using it in 2012. The survey results also show the increase use of social media for teaching by educators and faculty professionals because they see the potential in applying and integrating social media technology to their teaching. Many higher education institutions and educators are now finding themselves expected to catch up with the world of social media applications and social media users. This creates a growing phenomenon for the educational use of social media to create, engage, and share existing or newly produced information between lecturers and students and among students.

However, the use of social media technologies in higher education is not an easy and straightforward process because the reactions of using social media for educational purposes are mixed. Some researchers perceived social media tool as an effective educational platform, some claimed that it allows educators to make the classes more interactive, while some stated that the use of social media can help or hinder the achievement of student learning outcomes. Facebook has quickly become the social network site of choice by university students and it is an integral part of university experience due to its remarkable adoption rates of Facebook in universities (Muñoz and Towner 2009; Sánchez, Cortijo and Javed 2014) though Alhazmi and Abdul Rahman (2013)'s study revealed that students who are currently using Facebook for academic purposes have a negative perception of the use of Facebook for education. "This raises a series of questions regarding the nature of the current academic use and its relationship with lecturers and the learning environment, which needs to be investigated in further studies" (Alhazmi and Abdul Rahman 2013, p. 39). With this in mind, our study aims to examine the educational use of Facebook by lecturers and students in a private university in the Klang Valley, Malaysia as well as to gauge their attitude towards the effectiveness of using Facebook in the classroom.

2. Literature review

Although there is a growing body of empirical research on the use of social media and Facebook in higher education in countries such as United States of America (Mazer, Murphy and Simonds 2007; Buzzetto-More 2012; Hurt et al, 2012), United Kingdom (Selwyn 2009; Prescott 2014), South Africa (Bosch 2009; Cloete, de Villiers and Roodt 2009), Turkey (Kayri and Cakir 2010; Tiryakioglu and Erzurum 2011; Çam and Işman 2013; Akyildiz and Arğan 2011), Romania (Grossecq, Bran and Tiru 2011), Sweden (Rouis, Limayem and Salehi-Sangari 2011), Australia (Irwin et al. 2012; Kent 2013), Hong Kong (Lam 2012), Singapore (Mok 2012) and Spain (Sánchez, Cortijo and Javed 2014), to name a few, there is not abundance of literature in Malaysia context. The following section will briefly describe the use of Facebook in Malaysian higher education.

2.1 Facebook use in Malaysian higher education

Several researches have investigated the use of Facebook in Malaysian higher education institutions. Almadhoun, Lai and Dominic (2012) investigated students at four public universities and four private universities in Malaysia and revealed that the use and influence of social networking sites in students' daily lives are pervasive as they used it not only for social purposes but also for educational reasons. Results of past literatures show that Facebook has the potential to be used as a platform for online academic discussions (Lim 2010); is useful for learning environment (Kabilan, Ahmad and Abidin 2010) and informal learning (Hamat, Embi and Hassan 2012); able to enhance teaching and learning practices involving large classes (Rasiah 2014); as well as students' use of Facebook has positive impact on their academic performances (Helou and Abdul Rahim 2011; Helou, Abdul Rahim and Oye 2012; Din, Yahya and Haron 2012). In addition, Malaysian lecturers also begin to use Facebook to complement the current teaching and learning practices (Hamid et al, 2011). Although positive results of Facebook use in higher education were shown in prior literatures, Lim et al (2014) claimed that successful adoption of social media technologies especially Facebook in higher education institutions depend on many factors because students, academics and the institutions themselves have views and practices that are not necessarily align. Finally, Hamsan, Kumar and Shahrinin (2013) stated that an academically viable sense of direction on the future research on exploring Facebook is much needed.

2.2 Research questions

Drawing from the literature review, our study aims to examine the educational use of Facebook by lecturers and students in a private university in the Klang Valley, Malaysia and to gauge their attitude towards adopting Facebook in the classroom. The two research questions guiding this study are:

- What is the use of Facebook by lecturers and students of a private university in the Klang Valley, Malaysia?
- What is the perception of lecturers and students on the usefulness and ease of use of Facebook in the classroom?

3. Methodology

We utilised a mixed methods approach, consisting a self-administered questionnaire in hard copy with 72 students from 26 to 29 January 2015 and a face-to-face interview with three Language lecturers on 27 January 2015 with an average duration of 30 to 60 minutes. The survey respondents were selected through purposive random sampling and the interviewees were recruited through snowball sampling because our study requires

information from people who uses Facebook for educational purposes. The respondents and interviewees were to provide their use of Facebook for educational purposes, advantages and disadvantages of Facebook usage and perception on the effectiveness of using Facebook in the classroom.

The result of the questionnaire survey was manually analysed with descriptive statistics. A total of 72 questionnaires were collected and 71 of them were usable (98.6%). There were 37 male and 34 female students participated in the survey with majority of the respondents aged 18 to 24 years old (87.3%), Chinese (70.4%) and studying a Degree in Communication (54.9%). The respondents' demographic information is shown in Table 1. On the other hand, two females and one male lecturer participated in the interview. The interviews were recorded using an audio recorder and were transcribed for analysis using constant comparative method.

Table 1: Respondents' demographic information

Demographic information (n=71)		
	Frequency	Percentage (%)
Age Group		
Below 18	8	11.3
18-24	62	87.3
25-44	1	1.4
Race		
Malay	6	8.5
Chinese	50	70.4
Indian	4	5.6
Others	11	15.5
Discipline of study		
Foundation (MUFY, AUSMAT)	11	15.5
Degree in Communication	39	54.9
Degree in Business	4	5.6
Degree in Arts	6	8.5
Degree in Psychology	2	2.8
Degree in Science	5	7.0
Degree in Engineering	1	1.4
Degree in Computer Technology	1	1.4

4. Results and discussion

4.1 Students' use of Facebook for educational purposes

In answering the first research question, results show that students preferred to use smartphone (70%) for accessing Facebook and 66.2% of them will log onto Facebook more than three times a day. The channel used for communication with peers and lecturers was Facebook (95.8%; 85.9%) and the respondents claimed that they used Facebook mainly for joining groups (66.2%), search for friends (31.4%) and answer messages (34.8%). The three top sections of Facebook frequently visited by the respondents were news feed (77.9%), profile pages (54.4%) and private messaging (50%). Majority of the respondents have only one Facebook account (52 respondents) while 19 respondents have more than one account which range from two to four accounts. Lastly, when asked about the level of satisfaction and the level of competency of using Facebook for educational purposes, only 39.5% of them were moderately and highly satisfied, while 44.2% of them claimed to be competent and highly competent when using Facebook for educational purposes.

Our results corroborate with Almadhoun, Lai and Dominic (2012), and Alhazmi and Abdul Rahman (2013) that university students use Facebook for social and educational purposes. The respondents in our study stated that they are happy with the current use of Facebook for educational purposes and it is a form of communication that brings students and teachers together much easier. Finally, our study is also consistent with Buzzetto-More (2012)'s because our respondents positively perceive the use of Facebook as a tool to enhance communication and engagement with the lecturers and peers. The results of respondents' use of Facebook are shown in Table 2.

Table 2: Students' use of Facebook for educational purposes

Students' use of Facebook for educational purposes		
	Frequency	Percentage (%)
Preferred mode of access (n=70)		
Smartphone	49	70.0
Laptop	13	18.6
PC / Desktop	5	7.1
Frequency of visit (n=71)		
More than three times daily	47	66.2
1-3 times a day	15	21.1
Once every few days	7	9.9
Once a week	1	1.4
Less than once a month	1	1.4
Social media channel use for communication with peers		
Facebook (n=71)	68	95.8
Twitter (n=70)	41	58.6
Instagram (n=62)	18	29.0
Google+ (n=62)	18	29.0
Social media channel use for communication with lecturers		
Facebook (n=71)	61	85.9
Twitter (n=55)	26	47.3
Others (n=41)	20	48.8
Reasons to use Facebook for educational purposes		
Join group (n=71)	47	66.2
Search for friends (n=70)	22	31.4
Answer messages (n=69)	24	34.8
Section most frequently visited		
News feed (n=68)	53	77.9
Profile page (n=57)	31	54.4
Messages (n=66)	33	50.0
Level of satisfaction of using Facebook (n=71, M=3.24)		
Highly dissatisfied	5	7.0
Moderately Dissatisfied	8	11.3
Neutral	30	42.2
Moderately satisfied	21	29.6
Highly satisfied	7	9.9
Level of competency when using Facebook (n=70, M=3.3)		
Not competent	2	2.9
Somewhat competent	17	24.3
Uncertain	20	28.6
Competent	20	28.6
Highly competent	11	15.6

4.2 Lecturers' use of Facebook for educational purposes

From the lecturers' perspective, all three lecturers interviewed have use Facebook in their teaching and as a communication tool with their students. When asked about why they use Facebook for educational purposes, Lecturer A says "students are all mostly already on Facebook so it's very convenient. I mean they don't need to take an extra step to go and uh, like eLearn right, if you ask them to log into eLearn it's like something they have to do extra then it feels like such a burden like that. But for Facebook they are already doing it anyway so it's like very easy...And they're familiar with it..."; while Lecturer B says "accessibility, availability...Facebook seems to be the most popular among students as well as people my peers, so I found that to be the most effective one to use". Lecturer C on the other hand is experimenting using Facebook with the students and this is his first time using it. Next, the main section of Facebook frequently use by the lecturers are group pages, news feed and wall posts. Lecturer B and C log onto Facebook two to three times a day while Lecturer A only visits Facebook once every few days. The main activities on Facebook are to look through news feed, update status, private messaging with students and upload lecture notes and material onto the group page. Lecturer A and B claimed that Facebook is a tool for educational purpose and is supplementary while Lecturer C did not think that Facebook is the major element for teaching. The use of Facebook by the lecturers are similar with Hamid et al (2011) because

lecturers are now being encouraged to use social technologies in their teaching but the activities were only used to complement the current teaching and learning practices.

4.3 Lecturers' and students' perception on the effective use of Facebook in the classroom

The second research question addressed the perceptions of lecturers and students on the uses and implications of Facebook in the classroom. During the interviews, the interviewees discussed the pros and cons of using Facebook in the classrooms and the questionnaire survey also disclosed the main advantages and disadvantages of students using Facebook for educational purposes.

The lecturers using Facebook in education were aware of the advantageous and disadvantageous aspects of Facebook. They claimed that Facebook is convenient, user-friendly, and free (Lecturer A); it is also empowering, able to reach mass students who are far and wide, keeping in contact and in partnership with students (Lecture B); an efficient way to contact students and sharing information and to create some other networks for students to get help and ask questions (Lecturer C). The interviewees also highlighted the disadvantages of using Facebook. When using Facebook for educational purposes, it is lack of control as Facebook is owned by a third-party (Lecturer A), students can be lazy (Lecturer B), and it is one more thing for lecturer to deal with such as to set up and manage the group (Lecturer C).

From the survey, the respondents identified three main advantages of using Facebook such as easy communication with peers and lecturers, convenient and accessibility, and fast in searching for information and friends. The disadvantages on the other hand are distractions caused by entertainment and games, information overloaded, and privacy issues. Besides, the respondents were also asked to provide their level of agreement on the perceived usefulness and perceived ease of use of Facebook for educational purposes. Overall, the respondents agreed (40.8%) that Facebook is useful as an educational tool and they also agreed (60.6%) and strongly agree (25.4%) that Facebook is easy to use. The students' level of agreement on the twelve statements is shown in Table 3.

Lastly, the interviewees agreed that Facebook does bring advantages for education however, Lecturer B stated that *"Facebook is just a tool. Its usefulness last only with its corresponding life-span. In a few years or even months, it will be replaced by another new fad. Teachers or educators need to keep abreast with these developments and not be mastered by them. We need to probably be more relaxed in our approach"*. Lecturer A further stated that *"Because Facebook was not developed for education, it's actually like we all know social media may not be the most...Um, how to say, well designed for that, yeah. But it so happens that we take it and we adapt it. On the other hand, if we were to create something specifically then it will be just like eLearn where you would have to force students to go and look at the thing. So it's sort of like you have, it's a balance of the lesser of two evils sort of thing"*. Lecturer C finally commented, *"...what got me more motivated was talking to my colleagues about it, so those probably...if you think it's a good idea, probably the way to do is to have opportunity for people who are using effectively to share that"*. Our results are consistent with those researched by Bosch (2009); Kayri and Cakir (2010); Tiryakioglu and Erzurum (2011); Hurt et al (2012); and DeWitt, Naimie and Siraj (2013) that Facebook is becoming more prevalent as an educational tool embraced by students and lecturers of our study because the use of Facebook is seen to be a positive learning tool for teaching and learning.

Table 3: Students' perception of adopting Facebook for educational purposes

Students' perception of Facebook adoption for educational purposes (n=71)						
	1 Strongly Disagree	2 Disagree	3 Neutral	4 Agree	5 Strongly Agree	M
Using Facebook enables me to complete the tasks more quickly.	1 (1.4%)	8 (11.3%)	30 (42.2%)	26 (36.6%)	6 (8.5%)	3.39
Using Facebook improves my academic performance.	3 (4.2%)	11 (15.5%)	44 (62%)	11 (15.5%)	2 (2.8%)	2.97
Using Facebook increases my academic productivity. (n=70)	3 (4.3%)	11 (15.7%)	30 (42.9%)	21 (30%)	5 (7.1%)	3.20
Using Facebook enhances my learning effectiveness.	0 (0%)	13 (18.3%)	35 (49.3%)	18 (25.4%)	5 (7%)	3.21
Using Facebook makes it easier to learn.	2 (2.8%)	10 (14.1%)	33 (46.5%)	23 (32.4%)	3 (4.2%)	3.21

Students' perception of Facebook adoption for educational purposes (n=71)						
Overall, I find Facebook useful as an educational tool.	4 (5.6%)	7 (9.9%)	27 (38.1%)	29 (40.8%)	4 (5.6%)	3.31
Learning to operate Facebook is easy for me.	1 (1.4%)	1 (1.4%)	16 (22.5%)	32 (45.1%)	21 (29.6%)	4.00
I find it easy to get Facebook to do what I want it to do.	0 (0%)	5 (7%)	22 (31%)	31 (43.7%)	13 (18.3%)	3.73
I find Facebook flexible to interact with.	1 (1.4%)	2 (2.8%)	15 (21.1%)	41 (57.8%)	12 (16.9%)	3.86
My interaction/activity on Facebook is clear and understandable.	1 (1.4%)	2 (2.8%)	25 (35.2%)	30 (42.3%)	13 (18.3%)	3.73
It is easy for me to become skilful when using Facebook.	3 (4.2%)	6 (8.5%)	24 (33.7%)	30 (42.3%)	8 (11.3%)	3.48
Overall, I find Facebook easy to use.	1 (1.4%)	0 (0%)	9 (12.6%)	43 (60.6%)	18 (25.4%)	4.08

5. Conclusion

Our study presents two main findings of a study that explored the use of Facebook by lecturers and students of a private university and their perception on the effectiveness of using Facebook in the classroom. Firstly, both lecturers and students in this university have used Facebook for educational purposes due to its popularity, convenience and ease of use; and secondly they also acknowledged that Facebook is not designed for education thus, should not be made compulsory or mandate for formal educational curriculum. To conclude, in view with the above, it is clear that Facebook is perceived to be useful as a supplementary tool for teaching and learning; but for effective use of Facebook in the classroom, positive attitude of the lecturers and students are crucial.

References

- Akyildiz, M. and Argan, M. (2011) "Using Online Social Networking : Students' Purposes of Facebook Usage at the University of Turkey", Paper presented at *Academic and Business Research Institute International Conference International Conference-Las Vegas 2011*.
- Alhazmi, A.K. and Abdul Rahman, A. (2013) "Facebook in Higher Education: Students' Use and Perceptions", *Advances in Information Sciences and Service Sciences (AISS)*, Vol. 5, No. 15, pp 32–41.
- Allen, B., Caple, H., Coleman, K. and Nguyen, T. (2012) "Creativity in Practice: Social media in Higher Education", Paper presented at *Ascillite Wellington 2012*.
- Almadhoun, N.M., Dominic, P.D.D. and Woon, L.F. (2011) "Social Media as a Promotional Tool in Higher Education in Malaysia", Paper presented at *2011 National Postgraduate Conference*, <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=6136267>.
- Almadhoun, N.M., Lai, F.W. and Dominic, P.D.D. (2012) "An Examination of Social Networking Sites Usage Among the Students in the Malaysian Universities", Paper presented at *International Conference on Management, Economics and Finance (ICMEF 2012)*.
- Al-rahmi, W.M. and Othman, M.S. (2013) "Evaluating Student's Satisfaction of Using Social Media Through Collaborative Learning in Higher Education", *International Journal of Advances in Engineering and Technology*, Vol. 6, No. 4, pp 1541–1551.
- Al rahmi, W.M., Othman, M.S. and Musa, M.A. (2014) "The Improvement of Students' Academic Performance by Using Social Media through Collaborative Learning in Malaysian Higher Education", *Asian Social Science*, Vol. 10, No. 8, pp 210–221, <http://www.ccsenet.org/journal/index.php/ass/article/view/35490>.
- Blankenship, M. (2011) "How Social Media Can and Should Impact Higher Education", *Outlook*, Vol. 21, pp 11–12, http://findarticles.com/p/articles/mi_hb3184/is_20101129/ai_n56465985/pg_2/?tag=mantle_skin;content.
- Bonzo, J. and Parchoma, G. (2010) "The Paradox of Social Media and Higher Education Institutions", Paper presented at *The 7th International Conference on Networked Learning*.
- Bosch, T.E. (2009) "Using Online Social Networking for Teaching and Learning: Facebook Use at the University of Cape Town", *Communicatio*, Vol. 35, No. 2, pp 185–200, <http://www.tandfonline.com/doi/abs/10.1080/02500160903250648>.
- Buzzetto-More, N. (2012) "Social Networking in Undergraduate Education", *Interdisciplinary Journal of Information, Knowledge, and Management*, Vol. 7, pp 63–90, <http://www.ijikm.org/Volume7/IJIKMv7p063-090Buzzetto611.pdf>.
- Çam, E. and Işman, A. (2013) "Teacher Candidates' Use of Facebook for Educational Purposes", Paper presented at the *4th International Conference on New Horizons in Education*.
- Cao, Y., Ajjan, H. and Hong, P. (2013) "Using Social Media Applications for Educational Outcomes in College Teaching: A Structural Equation Analysis", *British Journal of Educational Technology*, Vol. 44, pp 581–593.
- Chen, B. and Bryer, T. (2012) "Investigating Instructional Strategies for Using Social Media in Formal and Informal Learning", *The International Review of Research in Open and Distance Learning*, Vol. 13, No. 1, <http://www.irrodl.org/index.php/irrodl/article/view/1027/2073>.

- Cloete, S., de Villiers, C. and Roodt, S. (2009) "Facebook as an Academic Tool for ICT Lecturers", Paper presented at *the 2009 Annual Conference of the Southern African Computer Lecturers' Association (SACLA)*.
- DeWitt, D., Naimie, Z. and Siraj, S. (2013) "Technology Applications Used by First Year Undergraduates in a Malaysian Public University", Paper presented at *The 13th International Educational Technology Conference*.
- Din, N., Yahya, S. and Haron, S. (2012) "Information Retrieval and Academic Performance among Facebook Users", Paper presented at *AicE-Bs 2012 Cairo ASIA Pacific International Conference on Environment-Behaviour Studies*.
- Friesen, N. and Lowe, S. (2012) "The Questionable Promise of Social Media for Education: Connective Learning and the Commercial Imperative", *Journal of Computer Assisted Learning*, Vol. 28, pp 183–194, <http://proxygsu-sgwi.galileo.usg.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eric&AN=EJ966046&site=ehost-live>.
- Grosbeck, G., Bran, R. and Tiru, L. (2011) "Dear Teacher, What Should I Write on My Wall? A Case Study on Academic Uses of Facebook", Paper presented at *WCES 2011*.
- Hamat, A., Embi, M.A. and Hassan, H.A. (2012) "The Use of Social Networking Sites among Malaysian University Students", *International Education Studies*, Vol. 5, No. 3, pp 56–66, <http://www.ccsenet.org/journal/index.php/ies/article/view/14340>.
- Hamid, S., Waycott, J., Chang, S. and Kurnia, S. (2011) "Appropriating Online Social Networking (OSN) Activities for Higher Education: Two Malaysian Cases", Paper presented at *Ascilite 2011*.
- Hamsan, H.H., Kumar, M.N. and Shahrimin, M.I. (2013) "Social Capital and Its Relationship with Universiti Putra Malaysia Undergraduates' Facebook Usages", *Pertanika Journal of Social Science & Humanities*, Vol. 21, No. 2, pp 421–434.
- Helou, A.M. and Abdul Rahim, N.Z. (2011) "The Influence of Social Networking Sites on Students' Academic Performance in Malaysia", Paper presented at *International Conference on Internet Studies, Kuala Lumpur, Malaysia*.
- Helou, A.M., Abdul Rahim, Z.Z. and Oye, N.D. (2012) "Students' Perceptions on Social Networking Sites Influence on Academic Performance", *International Journal of Social Networking and Virtual Communities*, Vol. 1, No. 1, pp 7–15.
- Hurt, N.E., Moss, G.S., Bradley, C.L., Larson, L.R. and Lovelace, M. (2012) "The 'Facebook' Effect: College Students' Perceptions of Online Discussions in the Age of Social Networking", *International Journal for the Scholarship of Teaching and Learning*, Vol. 6, No. 2, pp 1–24.
- Irwin, C., Ball, L., Desbrow, B. and Leveritt, M. (2012) "Students' Perceptions of Using Facebook as an Interactive Learning Resource at University", *Australasian Journal of Educational Technology*, Vol. 28, No. 7, pp 1221–1232.
- Kabilan, M.K., Ahmad, N. and Abidin, M.J.Z. (2010) "Facebook: An Online Environment for Learning of English in Institutions of Higher Education?" *The Internet and Higher Education*, Vol. 13, No. 4, pp 179–187, <http://linkinghub.elsevier.com/retrieve/pii/S1096751610000588>.
- Kayri, M. and Cakir, O. (2010) "An Applied Study on Educational Use of Facebook as a Web 2.0 Tool: The Sample Lesson of Computer Networks and Communication", *International Journal of Computer Science and Information*, Vol. 2, No. 4, pp 48–58.
- Kent, M. (2013) "Changing the Conversation : Facebook as a Venue for Online Class Discussion in Higher Education", *MERLOT Journal of Online Learning and Teaching*, Vol. 9, No. 4, pp 546–565.
- Lam, L. (2012) "An Innovative Research on the Usage of Facebook in the Higher Education Context of Hong Kong", *The Electronic Journal of e-Learning*, Vol. 10, No. 4, pp 378–386.
- Lim, J.S.Y., Agostinho, S., Harper, B. and Chicharo, J.F. (2014) "The Engagement of Social Media Technologies by Undergraduate Informatics Students for Academic Purpose in Malaysia", *Journal of Information, Communication and Ethics in Society*, Vol. 12, No. 3, pp 177–194, <http://www.emeraldinsight.com/doi/abs/10.1108/JICES-03-2014-0016>.
- Lim, T. (2010) "The Use of Facebook for Online Discussions Among Distance Learners", *Turkish Online Journal of Distance Education*, Vol. 11, pp 72–81.
- Liu, Y. (2010) "Social Media Tools as A Learning Resource", *Journal of Educational Technology Development and Exchange*, Vol. 3, No. 1, pp 101–114, <http://www.sicet.org/journals/jetde/jetde10/8-Liu.pdf>.
- Mazer, J.P., Murphy, R.E. and Simonds, C.J. (2007) "I'll See You On "Facebook": The Effects of Computer-Mediated Teacher Self-Disclosure on Student Motivation, Affective Learning, and Classroom Climate", *Communication Education*, Vol. 56, No. 1, pp 1–17, <http://www.tandfonline.com/doi/abs/10.1080/03634520601009710>.
- Mok, J.C.H. (2012) "Facebook and Learning : Student's Perspective on a Course", *Journal of the NUS Teaching Academy*, Vol. 2, No. 3, pp 131–143.
- Muñoz, C.L. and Towner, T.L. (2009) "Opening Facebook: How to Use Facebook in the College Classroom", Paper presented at *2009 Society for Information Technology and Teacher Education, Charleston, South Carolina*.
- Poellhuber, B. and Anderson, T. (2011) "Distance Students' Readiness for Social Media and Collaboration", *International Review of Research in Open and Distance Learning*, Vol. 12, pp 102–125.
- Prescott, J. (2014) "Teaching Style and Attitudes Towards Facebook as an Educational Tool", *Active Learning in Higher Education*, Vol. 15, No. 2, pp 117–128, <http://alh.sagepub.com/cgi/doi/10.1177/1469787414527392>.
- Rasiah, R.R. V. (2014) "Transformative Higher Education Teaching and Learning: Using Social Media in a Team-based Learning Environment", <http://linkinghub.elsevier.com/retrieve/pii/S1877042814014736>.
- Rouis, S., Limayem, M. and Salehi-sangari, E. (2011) "Impact of Facebook Usage on Students' Academic Achievement: Roles of Self-Regulation and Trust", *Electronic Journal of Research in Educational Psychology*, Vol. 9, No. 3, pp 961–994.
- Sánchez, R., Cortijo, V. and Javed, U. (2014) "Students' Perceptions of Facebook for Academic Purposes", *Computers & Education*, Vol. 70, pp 138–149, <http://linkinghub.elsevier.com/retrieve/pii/S0360131513002340>.

Cheng Ean (Catherine) Lee, Sangaran Kutty Vijaya Sooria and Shin Pyng Wong

- Selwyn, N. (2009) "Faceworking: Exploring Students' Educationa-related Use of Facebook", *Learning, Media and Technology*, Vol. 34, No. 2, pp 157–174, <http://www.tandfonline.com/doi/abs/10.1080/17439880902923622>.
- Selwyn, N. (2010) "The Educational Significance of Social Media - A Critical Perspective", Paper presented at *EDMEDIA 2010*.
- Selwyn, N. (2012) "Social Media in Higher Education", *The Europa World of Learning*, pp 1–10.
- Silius, K., Kailanto, M. and Tervakari, A.M. (2011) "Evaluating the Quality of Social Media in an Educational Context", Paper presented at *2011 IEEE Global Engineering Education Conference (EDUCON)*, <http://ieeexplore.ieee.org/lpdocs/epic03/wrapper.htm?arnumber=5773183>.
- Tess, P.A. (2013) "The Role of Social Media in Higher Education Classes (Real and Virtual) – A Literature Review", *Computers in Human Behavior*, Vol. 29, No. 5, pp A60–A68, <http://linkinghub.elsevier.com/retrieve/pii/S0747563212003743>.
- Tiryakioglu, F. and Erzurum, F. (2011) "Use of Social Networks as an Education Tool", *Contemporary Education Technology*, Vol. 2, No. 2, pp 135–150.
- Vaičiūnienė, V. and Mazeikiene, V. (2012) "Social Media in Adult Education: Insights Gained from GrundTVIG Learning Partnership Project Institutional Strategies Targeting the Uptake of Social Networking in Adult Education (ISTUS)", *Social Technologies*, Vol. 2, No. 2, pp 473–482.
- Wang, Z., Tchernev, J.M. and Solloway, T. (2012) "A Dynamic Longitudinal Examination of Social Media Use, Needs and Gratifications among College Students", *Computers in Human Behavior*, Vol. 28, No. 5, pp 1829–1839, <http://linkinghub.elsevier.com/retrieve/pii/S074756321200129X>.