Homework on Social Media: Benefits and Outcomes of Facebook as a Pedagogic Tool

Viriya Taecharungroj

Abstract—**This research explores the benefits and outcomes of social media and education. The experiment, homework on Facebook, was conducted with students at the Faculty of Communication Arts, Siam University. Ease of use is the most prominent benefit perceived by students in the experiment followed by, in this order, media richness, constructive thinking and social bond. The survey also shows that homework on social media have positive impacts on students participation and favorability towards this method. Students participated in homework on social media more than actual class attendance. Ninety-four percent of them favor this method over traditional paper-based or email-based homework.**

Index Terms—**Social media, e-education, pedagogy, Facebook.**

I. INTRODUCTION

Facebook is the first social media in the history that can actively connect one billion people worldwide. To put it into perspective, the number of Facebook users in 2012 was approximately one sixth of the world population. If Facebook were to be a nation, it would have been the third most populated nation after China and India with, by far, the highest growth rate. Nevertheless, the phenomenon is not a stand-alone event; Facebook is the result of the dramatic change in today's people lives. The digital revolution has taken place since 80s but it has been accelerated at an exceptional speed in the previous decade. Computer games, email, the Internet, cell phones and instant messaging are integral parts of college grads in the beginning of the millennium [1]. It is obvious that after a decade, they are even more integrated especially with the emergence of social media and the smart phones.

The rise of social media and technologies led to numerous researches on how they can be applied to education [2]-[7]. The distinct relationship between social media and education lies in the overlapped pool of users, young people or more specifically students. Social media allows "students to be individually and collectively supported through the use of a suite of online tools that provide targeted information to complement the traditional communications from the institution of students" [8]. The important question is "could social media be a beneficial learning tool?" [9]. Many researchers try to answer the question but it is still inconclusive, many researches found evidences proving the benefits of using social media in pedagogy [3], [4], [9], [10], [11], however, there are researches which show that social media does not lead to obvious desirable outcomes [12].

Some even suggested that the popular social media has negative effects on pedagogy [13].

II. LITERATURE REVIEWS

A. Social Media and Education

There are four development stages of the Internet and education [14].
1) Web-based training: based on websites, began in the 90s in the form of "online training programmes" focusing on "training" which were implemented within business framework.
2) Elearning 1.0: based on Content Management Systems (CMS) platform that was effective in "supporting content delivery, designing training, registering, monitoring and certifying users".
3) Online education: based on technologies such as mailing lists and newsgroup, and later conferencing systems. Online education is normally found in academic settings and schools.
4) Elearning 2.0: based on "social software", the key characteristic is the user-generated content and the transformative way of communication and channeling information.

Social software is defined as "networked tools that support and encourage individuals to learn together while retaining individual control over their time, space, presence, activity, identity and relationship" [15]. And it allows students and instructors to become more "directly visible to and socially present with each other" [6]. Furthermore, social media can enhance learning by creating, manipulating and sharing content online, communicating and exchanging opinions, connecting with each other, establishing social networks and creating communities for different needs [3].

Nguyen and Trimarchi [4] discuss the model that shows the relationship between the three related parties, instructor, students and peers who are connected through the learning technology. The notable feature of the model is how the integrated online classroom benefits both the learning and teaching sides at the same time. Students, the learning side, benefit from the supplementary expositions of course materials, self-testing facility and the communication module that helps interact with peers and instructors. On the other hand, educators, the teaching side, benefit from the editing module, the assessment module and the communication module.

B. Facebook as a Pedagogic Tool

There are many scholars who believe Facebook's robust features can be an effective educational tool such as user-profile, timeline, news feed, photo-tagging, discussion

and applications that not many websites can rival [2], [16]. But features are not the only key characteristics that differentiate Facebook, Facebook can encourage the sense of community such as groups or pages which can put together (publicly or privately) members who can communicate with others of the same interest [17]. There is a research stating that as much as 48 percent of students "log on to Facebook at least once during class time", and even more so during spare periods or lunch breaks [18].

Some educational institutions see the use of Facebook and many have Facebook pages for students [6], [19]. A research found that Facebook could be beneficial in a classroom setting because it can sooth anxieties by providing an online support group, offer autonomy and reinforce self-regulated learning strategies [20]. In a broader sense, it can support collaboration, participation and communication. 73 percent of students in one study answered that they use Facebook for educational purposes and they are also willing to have Facebook or social media to be used more often for educational purposes [18].

C. Benefits – Ease of Use

Ease of use and ease of access often top the list of the benefits of social media and education. College students are now living their lives in the digital era with the digital communication and they are expecting communication in the educational purposes to mimic the communication in the rest of their lives [17]. According to a study, 73 percent of students considered ease of use to be the most important criterion [3]. Another research found that ease of use is the most important benefit of social media technologies; it is a part of their lives [9]. Students also have the higher rate of online homework completion because it is more convenient that print [10]. Social media allows freedom to students to learn at their pace. Paulsen [21] modeled six dimensions of freedom in the 'theory of cooperative freedom'; freedom of space, freedom of time, freedom of pace, freedom of media, freedom of access and freedom of content. Ease of access or ease of use is the prominent benefit of social media in education that resembles the communication pattern of today's students.

D. Benefits – Media Richness

The digital revolution of the past decade allows variety of media to flourish, the contents on the Internet has never been more diverse, abundant and high in quality. The entertainment-driven [22] online society pushed the development of several social media and websites and they are now the great sources of information, for example, YouTube, the largest video hosting website, blogs and news outlets that provided up-to-dated news, or photo sharing social media that paved way for millions of people with digital cameras or smart phones. Media richness on the Internet can have added learning benefits in the classroom. It is believed that students could exercise their creativity through the combination of images, audios and videos [9]. The abundant content on the Internet allows instructors to promote students' deep-level learning by integrating classroom with the reality of the society [2]. The wealth of information can also have the positive impact on the learning process of students [6].

E. Benefits – Constructive Thinking

There are many researches on how social media or digital technology can improve students' thinking and learning [2], [6], [9], [23]-[25]. Learning on social media is largely informal, open and self-regulated, while instructors can facilitate group interaction, it is up to the students to self-select and learn [9]. A research found that most students accepted and feel accepted in the social media circles [2]. This finding can only support the capability of social media to foster collaborative or cooperative learning. Cooperation and collaboration between students can be direct (through interaction, information sharing) or indirect (peer learning, observation) [6]. Promotion of peer interaction and collaborate increases the likelihood that students participate more actively and in turns, lead to better learning [11].

F. Benefits – Social Bond

Social media in education does not only improve oneself but also the relationship with others. Social media and Web 2.0 services allows students to interact with others, help them, facilitate group projects, discussions, networks, and promote courses [9]. They offer students connectedness to a community of peers, personal relevance and interaction with those with similar interest [8]. The community then fosters feeling of membership, influence, reinforcement of need or feelings of connection. The community on social media can also prolong after the class or semester is over, students can still get in touch with their peers through social media [2]. The enriched sense of community has the benefits because one of the reasons of students' motivation to study is belonging in to community of discipline [3].

G. Barriers and Drawbacks

Barriers and concerns of social media in education are also present such as privacy and security, which are the most significant concern [3], [9], ethical issues including cyberbullying, marginalizing students, and being unfair from "friending" [9], [26], technology acceptance by both students and the faculty members [9], [27], and lack of equipment availability, training, funds, technical support and appropriate materials [28].

There's an extensive article describing the drawbacks of social media and education [13]. Business students in the research do not support the use of social media such as Facebook as part of their formal academic relationship and that Facebook offers limit pedagogical benefits although the authors still believe in the utility of social networking as a concept.

III. CONCEPTUAL FRAMEWORK

This paper tries to find out the benefits of homework assignment on social media through the four categories and to answer whether students perceive these benefits or not and if they do, what is the most important one? The four categories are;

Ease of use: effortless usability, convenient access and freedom to learn.

Media richness: variety of media and media types, broad platform and the information connected to the real world.

Constructive thinking: creative and critical thinking,

classroom and social media integration.

Social bond: sense of community, improved relationship with peers and an instructor.

This paper also attempts to find out the outcomes of the homework on social media, participation and favorability.
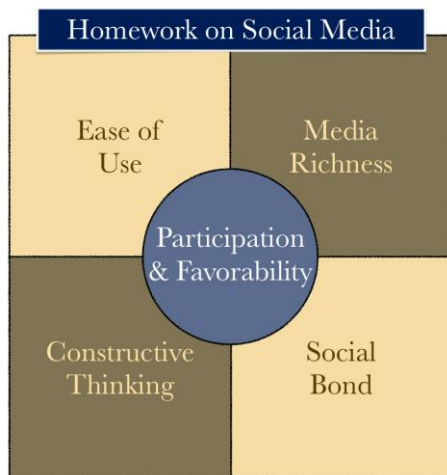

Fig. 1. Conceptual framework of homework on social media.

IV. METHODOLOGY

A. An Experiment

The author conducts a classroom experiment starting in October 2012 until February 2013 at Siam University, Bangkok, Thailand. The experimented class is "Digital Media and Society Seminar." Fifty-three students participated in eleven online questions on a private Facebook Group "DM and Society Seminar 2012-2013". The online questions were conducted eleven times with the in-class follow-up discussions.

The Facebook discussions are the ongoing homework that took place throughout the semester (Fig. 2), the steps are as followed;

1) The instructor posts the question or discussion topic together with the related media such as a video, a news report or an article.
2) Students have to study the question and gather information from other sources and, before the next class, answer the question.
3) During the next class, the instructor brings up the question and answers from students and facilitates discussions with each student.
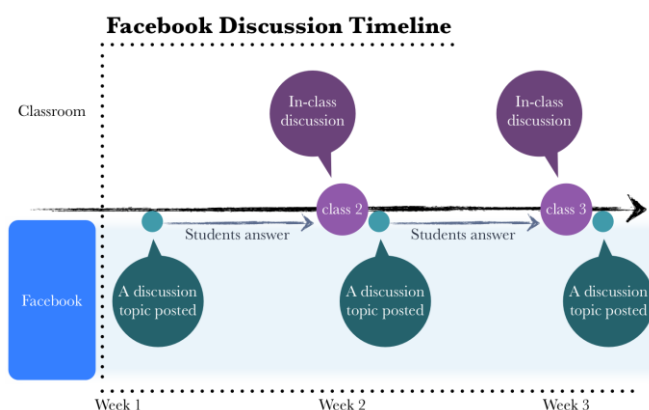

Fig. 2. Facebook discussion timeline.

This experiment can also be illustrated as Fig. 3 in order to understand the relationship between each element; the instructor, students, homework, social media and the Internet.
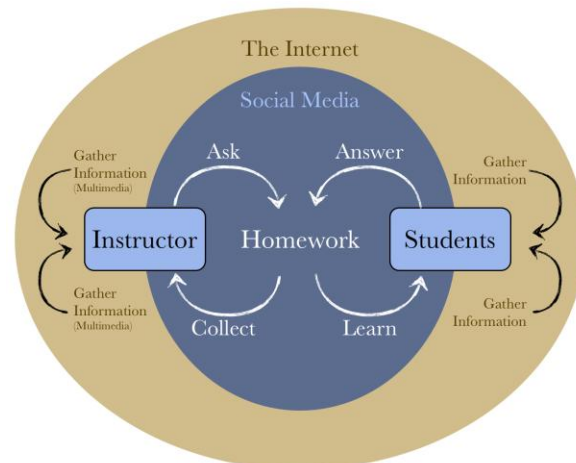

Fig. 3. Homework on social media.

The Internet: the Internet serves as the pool of information for the instructor and students to gather information. The instructor can acquire related media from the Internet in different forms and disciplines. Students can gather additional information from the Internet to come up with a better answer.

Social Media: or Facebook, acts as the platform that homework is located. Interactive features of Facebook such as status update, commenting, notifications, etc., facilitate the communication and information sharing of the instructor and students.

Homework: homework on Facebook can be in the text form together with a variety of media such as videos and links to other websites that broaden the scope of the homework.

The Instructor: has the role to channel information from the Internet to the homework on social media by asking relevant, analytical and creative questions. It is also the responsibility of the instructor to collect the answers and utilize them in both grading, and facilitating in-class discussions.

Students: to answer the question, students have to analyze the question and gather the information from the Internet, experience, or self-analysis. Homework on social media has an exciting benefit that it allows students to learn extensively from peers who answer the question. Therefore, student can learn not only from internal thinking but also from others.

B. A Survey

The survey is conducted though an online questionnaire with all fifty-three students in the class. The short questionnaire has thirteen Likert-scale items. There are four categories of benefits (Ease of Use, Media Richness, Constructive Thinking and Social Bond) with three questions each asking whether the student strongly disagree, disagree, neutral, agree or strongly agree that the student perceive the benefits stated. "Ease of Use" concentrates on ease of access from the freedom of media, time and space omitting the usability of Facebook because all students have used Facebook before the class and are specialized in its functions. "Media Richness" asks the benefits of the variety of media, the freshness of media and the benefit of the media platform

on the Internet. "Constructive Thinking" focuses on peer learning, follow-up in-class learning and continuity. "Social Bond" measures the benefits of relationship between students and peers, students and the instructor and the social mechanism on Facebook, alert and notification.

The other Likert-scale item is dedicated to ask the favorability of homework on social media, "Facebook Discussion" compared to the traditional homework (paper-based or email-based homework submission) with the option of strongly favor traditional homework, favor traditional homework, neutral, favor homework on social media or strongly favor homework on social media. There is an open-ended question about the "drawbacks" of homework on social media,

V. FINDINGS

A. General Information

The experiment was conducted during the months of October 2012 to February 2013. Fifty-three students participated at varying levels. At the highest end, 23 of them (43 percent) participated every time. On the other hand there are 5 students (9 percent) who participated less than 50 percent of the time (5 times or less). The mean score of participation is impressive at 9.5 times out of the total 11. Considering the gender of students, thirty-two are male (60 percent) and twenty-one (40 percent) are female. The survey has 100 percent return rate. Of all the students, eighty-nine percent of the students access the homework on Facebook through personal computers. A striking fifty-seven percent access homework on their mobile phones and six percent access from tablet PCs. There are six of them (11 percent) who do not access and answer the homework from their computers but they do solely from their mobile phones (or tablet PCs) instead.

B. Benefits

Of all twelve questions, more than fifty percent of students agree or strongly agree with the benefits. The answers are given scores from 1 (strongly disagree) to 5 (strongly agree) and then grouped into four benefit categories: ease of use, media richness, constructive thinking and social bond. Three is the minimum score and fifteen is the maximum. Ease of use has the highest mean score of 14.49 (Table I). Media richness comes second with 14.21 mean score. However, media richness is the category with highest minimum score of 12. Constructive thinking has mean score of 13.79 and social bond has the lowest mean score at 12.81 as well as lowest minimum score, 7. All four categories have the same highest maximum scores, 15.

TABLE I: BENEFITS PERCEPTION BY CATEGORY

	N	Mean	Std. Deviation	Min.	Max.
Ease of Use	53	14.49	1.103	10	15
Media Richness	53	14.21	1.007	12	15
Constructive Thinking	53	13.79	1.378	10	15
Social Bond	53	12.81	1.787	7	15

C. Drawbacks

The drawbacks of homework on social media can be classified into four different groups: plagiarism, procrastination, Facebook-related problem and others. Plagiarism tends to be the most obvious drawback of homework on social media that allows peer learning.

"There is the case that some students plagiarized from others resulting in not thinking at all."

"Some people do not think by themselves. They copied and mixed answers from others."

The other prominent problem is procrastination; many students tend to wait until the very last minutes before answering.

"The drawback is that some answers are late. There is no submission deadline."

"It is too convenient, being able to do anywhere and any time makes us feel relaxed and lazy."

It is unavoidable that homework on Facebook might also have Facebook-related problems that students pointed out.

"I am tired with Facebook and their advertisements."

"The answer can only be text-based; cannot answer differently."

There are other important drawbacks that are not in any three mentioned groups.

"It lacks the "charisma of writing"."

"It lessens the classroom intimacy."

D. Outcomes

This research studies two primary outcomes of homework on social media, participation and favorability. The author compares the participation on Facebook and actual classroom attendance. The mean score of participation in homework on social media is 9.5 (from possible 11) is statistically higher than the mean score of actual classroom attendance is 8.4 (Table II).

TABLE II: HOMEWORK ON SOCIAL MEDIA PARTICIPATION AND CLASS ATTENDANCE

	N	Mean	Std. Deviation	Min.	Max.
FB Participation	53	9.5	2.189	2	11
Class Attendance	53	8.4	2.545	1	11

The other key outcome of homework on Facebook is students' favorability. The questionnaire asks whether the student favors homework on Facebook or traditional (paper-based or email submission) homework. 77 percent of the students answered that they "strongly favor" homework on Facebook. 17 percent of students "favor" homework on Facebook and 6 percent said they are neutral. None of the student "favor" or "strongly favor" traditional homework over homework on Facebook. Those who are neutral, one said Facebook lessens intimacy between students and the instructor, another student pointed out the communication problem and would like a more detailed question on Facebook, the last one does not like Facebook and advertisements that come with it.

VI. DISCUSSION

The classroom experiment using Facebook as a pedagogical tool in assigning and doing homework reveals some information that might be beneficial to educators. The

results of the method are positive. The most obvious benefit is "Ease of Use," homework on Facebook grants student many types of freedom. Students can do their homework from anywhere, any time and on any device. There is also an interesting behavior by students that more than half of them (57 percent) accessed and did their homework from their mobile phones. It was the result of mobile technology advancement; all of the smart phones in the market nowadays have an unwritten rule that they need to be able to access Facebook and Twitter. This experiment capitalizes on that feature without any platform investment. Students can gain access to homework the same way they communicate with friends. Digital revolution in the past decade brings about many new innovations and technologies that younger generations of people are familiar with.

Media richness is another benefit of social media that traditional method might find it hard to rival. The massive explosion of the Internet users in the present days (30 percent of the global population) together with the Web 2.0 era that encourages user-generated contents lead to the exponential growth in available digital contents on the Internet. News reports now have diverse viewpoints from different news outlets as well as amateur journalists. Media can be found in different formats, text-based, pictures, videos, audio files on many platforms: social media, blogs or websites. It allows the students to retrieve new, relevant and exciting contents. The role of social media in education will only be improved in the future when more and better contents are available. The role of the instructor might change to be the content seeker and discussion facilitator and let exciting contents and students curiosity do the job in learning.

Students also agreed that homework on social media has the benefit on their constructive thinking. The major mechanism is "peer learning". Students can learn from peers' answers, refine their ideas and construct their own answers. Answers from peers might seem novel to many students in the experiment because the traditional lecture-based and instructor-centric classes in Thailand do not normally encourage student participation. This experiment also integrates homework on Facebook with classroom experience by displaying and discussing students' answers in-class. This method forms the continuous learning loop combining both in-class and online experience.

The last benefit of homework on Facebook is social bond. It is also the least agreed upon benefit. There are two possible reasons. Students might be so familiar with Facebook that they do not find homework on Facebook socially better than what they normally do. Another possible reason is that the number of students, fifty-three, is too large to facilitate healthy discussions between students as one student suggested that there should also be comments from friends. However, a lot of students still perceive social bond as a benefit especially in the aspect that homework on social media make them feel closer to the instructor.

The outcomes of homework on social media are positive and worth noting. Participation in homework on social media is higher than actual class attendance because it is convenient; they can do anywhere, any time and on any device whereas class attendance has more uncontrollable factors. Another possible reason is that the task required is not too demanding (approximately one paragraph answer each). The most positive aspect of this research is the response regarding favorability, 94 percent of the students in the experiment stated that they favor or strongly favor homework on Facebook over traditional homework with 6 percent saying they are neutral. Of the 94 percent, 77 percent "strongly favor" Facebook. The result indicates that students are open to the idea of social media and education. They are comfortable with the method and many of them wrote that they would like more of it in other classes as well. Homework on social media integrates academic aspect of their lives to their usual surrounding, Facebook. It lessens their barrier and burden to learn because traditional method of education does not seem to resonate with their lifestyle anymore. They do not read stacks of textbooks and gather all data; they search for relevant information from Google. They do not have to rely on the professor to solve their problems; they can "crowdsource" from their friends on social media.

Homework on social media also has drawbacks. Peer learning in the experiment led to plagiarism. Students copied the answers from friends. The other notable problem in this method is procrastination; students wait until the last minute before answering. Procrastination reduces the time students can learn from each other and should be corrected in the future experiment.

There are many ways to improve this homework on social media method. The text-only answers on Facebook might be replaced or complemented by other types of answer such as a video answer, picture answer, etc. However, Facebook does not allow putting other types of media in the comment section. So, an integrative method with other services or websites might be considered. The questions in the homework can be changed as well to be in the forms of, for example, polls or multiple choices questions.

VII. CONCLUSION

The implication of this research is for educators to consider this new pedagogic tool. Homework on social media has tremendous potential, it is the duty of teachers and lecturers to explore the opportunities and adapt accordingly. This experiment is an example that shows desirable results. However, this method was experimented on only one class of students, further studies would give us better ideas of the benefits and outcomes of homework on social media.

REFERENCES

[1] M. Prensky, "Digital Natives, Digital Immigrants," *On the Horizon*, vol. 9, no. 5, 2001.
[2] Y. Liu, "Social Media Tools as a Learning Resource," *Journal of Educational Technology Development and Exchange*, vol. 3, no. 1, pp. 101-114, 2010.
[3] K. Silius, M. Kailanto, and A. M. Tervakari, "Evaluating the Quality of Social Media in an Educational Context," *International Journal of Emerging Technologies in Learning*, vol. 6, no. 3, 2011.
[4] T. Nguyen and A. Trimarchi, "Active Learning in Introductory Economics: Do MyEconLab and Aplia Make any Difference?" *International Journal for the Scholarship of Teaching and Learning*, vol. 4, no. 1, 2010.
[5] L. Kurkela, "Systemic Approach to Learning Paradigms and the Use of Social Media in Higher Education," *Journal of Emerging Technologies in Learning*, vol. 6, special issue 1, 2011.
[6] B. Poellhuber and T. Anderson, "Distance Students' Readiness for Social Media and Collaboration," *The International Review of Research in Open and Distance Learning*, vol. 12, no. 6, 2011.

[7] G. M. Muguatosha, P. B. Muyinda, and L. T. Lubega, "A social networked learning adoption model for higher education institutions in developing countries," *On The Horizon*, vol. 19, no. 4, pp. 308, 2011.

[8] R. Leece and E. Campbell, "Engaging Students through Social Media," *Journal of the Australia and New Zealand Student Services Association*, 38, 2011

[9] B. Chen and T. Bryer, "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, 2012.

[10] R. H. Julian and C. Peters, "Does the Medium Matter? Online versus Paper Coursework," *Southern Economic Journal*, vol. 78, no. 4, pp. 1333-1345, 2012.

[11] A. M., Tervakari, K. Silius, T. Tebest, J. Marttila, M. Kailanto, and J. Huhtamaki, "Peer Learning in Social Media Enhanced Learning Environment," *International Journal of Emerging Technologies in Learning*, vol. 7, no. 3, pp. 35-42, 2012.

[12] W. Lee, R. H. Courtney, and S.J. Balassi, "Do Online Homework Tools Improve Student Results in Principles of Microeconomics Courses?" *American Economic Review: Papers & Proceedings*, May 2010, pp. 283-286, 2010.

[13] S. Taylor, J. R. Mulligan, and C. Ishida, "Facebook, Social Networking, And Business Education," *American Journal Of Business Education*, vol. 5, no. 4, pp. 437-448, 2012.

[14] L. Gonella and E. Panto, "Didactic architectures and organization models: a process of mutual adaptation," *eLearning Papers*, 9, 2008.

[15] T. Anderson, "Distance learning – Social software's killer ap?" *ODLAA*, 2005

[16] H. Heiberger and R. Harper, "Have You Facebooked Astin Lately? Using Technology to Increase Student Involvement," *New Directions for Student Services*, 124, 2008

[17] A. F. Ratliff, "Are They Listening? Social Media on Campuses of Higher Education*," Journal of the Australia and New Zealand Student Services Association*, 38, October 2011.

[18] A. M. Fewkes and M. McCabe, "Facebook: Learning Tool or Distraction?" *Journal of Digital Learning in Teacher Education*, vol. 28, no. 3, 2012.

[19] J. Johnson and J. Maddox, "Use of Social Media in Graduate Education: An Exploratory Review for Breaking New Ground," *Journal of Higher Education Theory and Practice*, vol. 12, no. 3, pp. 87-93, 2012

[20] J. Bowers-Campbell, "Cyber "Pokes": motivational antidote for developmental college reader," *Journal of College Reading and Learning*, 2008.

[21] M. Paulsen, "The hexagon of cooperative freedom: A distance education theory attuned to computer conferencing," *DEOS*, vol. 3, no. 2, 1993.

[22] T. Kilian, N. Hennigs, and S. Langner, "Do Millennials read books or blogs? Introducing a media usage typology of the internet generation," *Journal of Consumer Marketing*, vol. 29, no. 2, pp. 114-124, 2012.

[23] D. Boud and A. Lee, "Peer learning' as pedagogic discourse for research education," *Studies in Higher Education*, vol. 30, no. 5, pp. 501-516, 2005

[24] C. Dalsgaard and M.F. Paulsen, "Transparency in Cooperative Online Education," *The International Review of Research in Open and Distance Learning*, vol. 10, no. 3, 2009.

[25] N. Garrett, B. Thoms, M. Soffer, and T. Ryan, "Extending the Elgg Social Networking System to Enhance the Campus Conversation," *Second Annual Design*, 2007.

[26] K. A., Karl and J. V. Peluchette, "Friending" Professors, Parents and Bosses: A Facebook Connection Conumdrum," *Journal of Education for Business,* vol. 86, pp. 214-222, 2011

[27] H. Holden, A. Ozok, and R. Rada, "Technology use and acceptance in the classroom: Results from an exploratory survey study among secondary education teachers in the USA," *Interactive Technology and Smart Education*, vol. 5, no. 2, pp. 113-134, 2008.

[28] N. Topp, R. Mortenson, and N. Grandgenett, "Building a technology-using faculty to facilitate technology-using teachers," *Journal of Computing in Teacher Education*, vol. 11, no. 3, pp. 11-14, 1995.

Viriya Taecharungroj was born in Bangkok, Thailand in 1983. He received his first degree, BA Economics from Thammasat University, Bangkok, Thailand (2005).

He holds two master's degrees: MSc Marketing Management, University of Surrey, Guildford, UK (2006) and MA Publishing, London College of Communication, University of the Arts, London, UK (2010). He is currently pursuing Doctor of Public Administration, National Institute of Development Administration, Bangkok, Thailand.

He is a lecturer at the Faculty of Communication Arts, Siam University, Bangkok, Thailand. He is also a secretary of the Committee on Children, Youth, Women, Elderly and the Disabled, House of Representatives, Parliament of Thailand; working in the fields of preschool children development and human trafficking combat. Another position he holds is a secretary-general of Rak Santi (Political) Party. His previous jobs include a visiting lecturer at Thammasat University, an editor-in-chief of Samret Magazine and a strategic planner at SCG Trading.

Mr. Taecharungroj is awarded Member (Fifth Class) of The Most Noble Order of The Crown of Thailand