Using social media and cloud services to facilitate teaching and learning in teacher education courses
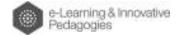
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Abstract

Social media has got much attention from educators over the last few years. It is likely to facilitate learning independent of time and place. It also encourages learners to be active and supports peer and community learning. Social networking sites such as Facebook are more and more popular and become a part of our daily life. Social networks not only enhance both teacher-student and student-student interactions through synchronous and asynchronous web-based communications. They also help instructors connect with their students about assignments, upcoming events, and learning resources inside and outside the classroom. On the other hand, more and more cloud services can take an essential role to facilitate the creation of this kind of learning community. Cloud services offer many possibilities to educators for its use, for example, sharing information and resources through cloud storage. This paper aims to investigate the potential of using social media and other cloud services to foster teaching and learning in teacher education courses.

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Background (1)

- Social software has got much attention from educators over the last few years.
    - It is likely to facilitate learning independent of time and place.
    - It also encourages learners to be active and supports peer and community learning.
- Examples of social software include photo-sharing, social bookmarking, online social networks, blogs, wikis etc.
- Online social networks are more and more popular and become a part of our daily life.
- More researchers conducted studies on investigating the potentials of using Facebook in teaching and learning (Bosch 2009; Madge et al, 2009; Baran, 2010, Ophus & Abbitt, 2009; Kabilan, Ahmad & Abidin, 2010).

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Background (2)

- Social networks not only enhance both teacher-student and student-student interactions through synchronous and asynchronous web-based communications.
- They also help instructors connect with their students about assignments, upcoming events, and learning resources inside and outside the classroom.
- Even during the field experience period, social networks can connect student teachers across schools and provide a simple way to increase interaction among student teachers and their supervisors.

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Background (3)

- ▶ Cloud services help to facilitate the creation of this kind of learning community in which student teachers can get support from their tutors and peers at anytime, anywhere and any place.

- ▶ Cloud services offers many possibilities to educators for its use, whether for communicating with students through social networking services like Facebook, sending out updates via Twitter, providing online tutoring, or having students collaborate on their writing using a wiki.

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Purposes of the study

1. As teachers in higher education institute, we need to explore different kind of technology to improve teaching and learning.

2. As teacher educators, we need to expose our student teachers to different innovative teaching approach that may be good for them in their classrooms.

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Purposes of the study

The study aims to explore the feasibility and areas of using a social network, Facebook in teacher education courses. Meanwhile, the authors will also discuss the opportunities and challenges perceived by student teachers of using social networks in their classrooms.

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Literature Review (1)

- ▶ Online social networks become a part of our daily life. Many people make use of social networks to exchange messages, share photos and other information within their online social network.

- ▶ One of the most popular networking website is called Facebook.

- ▶ Facebook states that
  - ▶ there are 901 million monthly active users at the end of March 2012.
  - ▶ it is also reported that an average of 3.2 billion Likes and Comments are generated by Facebook users per day during the first quarter of 2012.

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Literature Review (2)

- By considering the educational utilities offered by Facebook, the educational usage of Facebook can be examined under three topics:
    - communication,
    - collaboration and
    - resource/material sharing. (Mazman and Usluel, 2010)
- Quite a number of studies on investigating the potentials of using Facebook in teaching and learning can be found recently (Bosch 2009; Madge et al, 2009; Baran, 2010, Ophus & Abbitt, 2009; Kabilan, Ahmad & Abidin, 2010) and the researchers also have diverse focuses
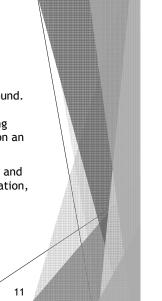
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Literature Review (3)

- Ophus and Abbitt (2009) surveyed one hundred and ten students at a comprehensive Midwestern university and found that
    - their students were largely supportive of using a social networking system in their courses.
    - they also point out that a professional distance should be maintained and it is not necessary for students and instructors to become "friends" in order for communication and sharing.
- Roblyer et al (2010) point out that, from a comparison of faculty and student responses in a small-scale survey:
    - students are much likely than faculty to use Facebook and are significantly more open to the possibility of using Facebook and similar technologies to support classroom work.
    - Faculty members are more likely to use more likely to use more "traditional" technologies such as email.

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Literature Review (4)

- The diverse application of social networks can be found. Lee, Kim and Kim (2010) investigate how social networking technologies such as Facebook is creating alternative avenues of support among participants on an intercultural program.
- Backer (2010) reported that the use of smartphones and Facebook increased the student participants' motivation, independent learning and sense of responsibility.

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Literature Review (5)

- Munoz and Towner (2009) suggest that
    - instruction in using Facebook should be an integral part of teacher education programs, particularly with so many different types of social networks emerging.
    - pre-service teachers must consider a pedagogical rationale for using Facebook.
- Hew(2011) did a review on current published research studies focusing on the use of Facebook by students and teachers.
    - the researcher could not locate any published empirical-based article on high school students' Facebook use although 539 articles were selected for review.
    - It is suggested that current published research on Facebook focused on college or university students.

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Literature Review (6)

- ▶ Cloud services help to facilitate the creation of this kind of learning community in which student teachers can get support from their tutors and peers at anytime, anywhere and any place. Cloud computing is a means of accessing computer facilities via the Internet (Katzan, 2010).

- ▶ Cloud services offers many possibilities to educators for its use, whether for communicating with students through social networking services like Facebook, sending out updates via Twitter, providing online tutoring, or having students collaborate on their writing using a wiki.

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Literature Review (7)

- ▶ The benefits of using cloud computing have been investigated by many researchers (Pocatilu, Alecu & Vetrici, 2010; Siegle, 2010; Sultan, 2010; Wheeler & Waggener, 2009).

- ▶ Ercan (2010) concluded that there is a great advantage for university IT staff to take them away the responsibility of the maintenance burden in the university.

- ▶ However, Holschuh and Caverly (2010) still point out that security, privacy, and ownership issues when it comes to using an online service. It is also important to know how the service provider will both protect and use customer data.

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Research Methodology (1)

- ▶ The study was conducted at the Hong Kong Institute of Education (HKIEd),
  - ▶ the major teacher education provider in Hong Kong.
- ▶ In the study, the researchers attempt to explore the feasibility and areas of using Facebook in teacher education program.
- ▶ Facebook learning activities used in two courses that focusing ICT curriculum and teaching methods were examined.

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Research Methodology (2)

- ▶ To attain the research objectives, the following research questions were posed:
  1. What kinds of educational uses in Teacher Education courses can be facilitated by using Facebook and Cloud services?
  2. What barriers or problems do student teachers anticipate with regards to the integration of Facebook in their own classrooms?

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The participants

- The student teachers enrolled in these two IT courses were from four different programs and they were preparing, upon graduation, to teach IT or related subjects to pupils in secondary schools.
- In the first cycle, there were 45 participants in this study:
  - Two student teachers who were taking a one-year full-time Postgraduate Diploma in Education (Secondary) program
  - Sixteen student teachers who were studying either the first year or the second of a two-year part-time Postgraduate Diploma in Education (Secondary) program.
  - Fifteen participants were enrolled in a four-year full-time Bachelor of Science in Mathematics and Information Technology Education program and were in their third year of study.
  - Twelve student teachers enrolled in a three-year mixed mode Bachelor of Education (Secondary) program. These student teachers were in their second year of study and all of them were IT technicians in secondary schools.
- In the second cycle, threre were 42 participants in total.
- This arrangement was a remedial measure for increasing the sample size.

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The research setting and data collection (1)

- In the study, one of the researchers, as the course instructor of the two selected courses, set up a number of Facebook groups for instructional purpose.
- The participants were invited to join these Facebook groups.
- The participants were free to use their personal profile or a new profile to join the learning activities or make friends with other course participants and the course instructors.

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The research setting and data collection (2)

- Both courses were taught in the same semester and spanned a period of twelve weeks.
- The course instructor had sufficient opportunities to examine the learning process of the student teachers in detail.
- The Facebook learning activities conducted in the whole semester were carefully examined and categorized.
- The footprints left by the student teachers on the Facebook reflected distinct and compelling evidence of their learning process and demonstrated what the participants were able to learn through the use of social networks.

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The research setting and data collection (3)

- The findings from the Facebook groups also permitted the researchers to examine the feasibility and areas of using Facebook in teacher education courses.
- Furthermore, these findings could be triangulated by the information obtained from the students' reflections on the whole process.

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The research setting and data collection (4)

▶ Upon completion of the course, a focus group interview was conducted with the participants.

▶ The MMBEd group still have lectures in the main campus and agreed to join the focus group interview during the lesson break of a course in the new semester.

▶ The focus group interview aimed to collect in-depth data from student teachers about their opinion on using Facebook in several aspects relating to teaching and learning.

The research setting and data collection (5)

▶ A blended approach for the focus group was used to collect the student teachers' opinions.

▶ This data collection process includes a face-to-face focus group and an online supplementary group discussion through the use of Facebook.

▶ The face-to-face focus group session was used to explain the purpose of the study and the interview questions to be asked.

▶ In the study, most of the focus group questions have been discussed in face-to-face session.

The research setting and data collection (6)

▶ On the other hand, all questions to be discussed were posted on their Facebook groups before the face-to-face focus group interview.

▶ After the face-to-face focus group, the student teachers were encouraged to post supplementary information for the questions that have been discussed in the face-to-face session.

Results and analysis

▶ Research Question 1

What kinds of educational uses in Teacher Education courses can be facilitated by using Facebook and Cloud services?

The footprints on the Facebook and the student teachers were analyzed to answer this research question.
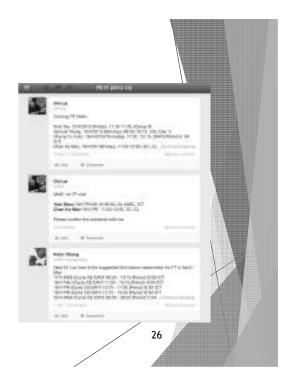
Use Facebook as a communication platform

- Facebook is a social network. It provides various communication tools for the users. The student teachers and the course instructor can discuss openly by posting their messages on walls or their own groups.
- Facebook also has a mature system to allow the participants to exchange personal messages.
- Moreover, Facebook users can also access to Facebook pages through a wide range of Internet access devices such as tablets and smartphones etc.
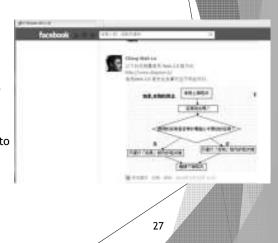
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Example:

The course tutor created a Facebook group and invited his students to join the group to discuss Field Experience arrangements.

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Use Facebook and Cloud Storage as a resource sharing platform

- In the study, the teacher created Facebook groups for specific purpose.
- These Facebook groups were dictated for sharing resources among the participants.
- Participants were encouraged to post links to Internet resources that were useful to ICT in secondary schools

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Example:

- The Researcher created a Dropbox shared folder and invited his students to join the shared folder.
- His students shared documents such as lesson plans and teaching materials with Dropbox.

The updated version of Facebook allows users to upload file attachments in addition to photos and movies.

In short, Facebook can be used as a convenient platform, on which teaching materials, teaching ideas, and learning resources can be shared.

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Use Facebook to facilitate Collaboration

▶ On the Facebook platform, the course participants can can create their own group for brainstorming their ideas, collecting information, and organizing their group activities.

▶ Facebook facilitates the student teachers to build their own learning communities with any difficulty.

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Use Facebook to delivery instructions

▶ Facebook can help teachers to make announcements, open a class discussion and also collect ideas for the course participants.

▶ It is convenient to conduct learning tasks and even hold online discussion within and outside classroom.

▶ Furthermore, the course tutor can create and organize real or virtual events for the course participants. Facebook provides bundle of utilities that are used for delivering instructions.

Example

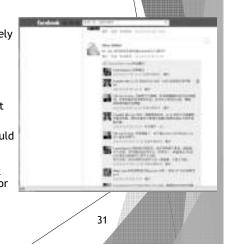▶ It can be used as a Question and Answer platform.

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Use Facebook to facilitate Assessment for Learning

▶ Analyzing the Facebook activities, the course tutor were able to provide timely feedback for the students through Facebook.

Example:

▶ The tutor explained the details of classroom presentation for the student teachers' course assignment.

▶ Moreover, peer assessment activity could be carried out online after a face-to-face class presentation. This blended approach demonstrates that Facebook can be used to facilitate assessment for learning.

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Use Facebook to strength student-teacher rapport

▶ As Facebook is a social network, it should be a handy tool to enhance the friendship among students and teacher.

▶ It also allows users to organizing social events and provides a convenient channel to share their personal feelings and school life.

Example:

▶ A photo posted by one of the student teacher on the course Facebook group.

▶ He wanted to share his happiness with other course participants as he had a wonder experience during the Field Experience period.

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Results and analysis

▶Research Question 2

What barriers or problems do student teachers anticipate with regards to the integration of Facebook in their own classrooms?

Focus group interviews have been conducted to understand the student teachers' perceptions of using Facebook as an online teaching tool. The focus groups were carried in a blended approach. The data collection process includes a face-to-face focus group and an online supplementary group discussion through the use of Facebook.

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Technical aspects:

- ▶ Facebook is blocked by some school server administrators
- ▶ There are some popular games on the Facebook platform. Teachers need to investigate how to block the access to these games
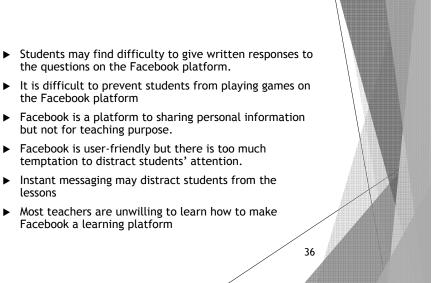
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Course Management issues

- ▶ Students may do different things other than assigned work when they are using Facebook at home. Therefore, it is quite hard to finish a task within a period of time.
- ▶ It is difficult to add every student to a Facebook group that is used for teaching purpose
- ▶ Adding friends is problematic as many students do not use their real names for their Facebook accounts. It is difficult to recognize them.

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Teaching and Learning issue

- ▶ Students may find difficulty to give written responses to the questions on the Facebook platform.
- ▶ It is difficult to prevent students from playing games on the Facebook platform
- ▶ Facebook is a platform to sharing personal information but not for teaching purpose.
- ▶ Facebook is user-friendly but there is too much temptation to distract students' attention.
- ▶ Instant messaging may distract students from the lessons
- ▶ Most teachers are unwilling to learn how to make Facebook a learning platform

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Conclusions

▶ The study indicated that Facebook provides a flexible platform for implementing leaning activities in teacher education course.

▶ The uses can only be limited by the imagination of the tutors and their students.

▶ It suggests that, as social networking tools have become part of our daily lives, they should be also an integral part of teacher education courses.

▶ As the student teachers need to have adequate exposure to new learning technologies, they should be well prepared for their students too.

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Directions for further studies

▶ More empirical studies should be done to give more successful cases for the teachers. For knowledge transfer, using a role model is still inadequate and we need to do more cases in primary and secondary schools and better for local cases.

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