Full Length Research Paper

The impact of Facebook in teaching practicum: Teacher trainees' perspectives

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Prompt feedback is one of the critical components of teacher education programs. To reap the greatest benefit from the teaching practicum process, the quality of feedback as well as its implementation by stakeholders, supervisors, cooperating teachers, and teacher trainees, takes on great importance. The purpose of this study is to examine how Web 2.0 tools support a teaching practicum course at a large public university and to discuss Facebook in relation to feedback and informal learning. The use of Facebook in a university setting aims to encourage interactions among stakeholders, thus enhancing instant and appropriate feedback mechanisms and informal learning. Data were obtained by monitoring posts within a closed Facebook group and from a teacher trainee survey whereby teacher trainees indicated the ways in which they adapted to this technology. Findings indicate that teacher trainees have benefited from Facebook in receiving prompt feedback; communicating with their peers, supervisors and cooperative teachers; sharing knowledge; collaborating with their peers; and improving their professional performance. The observed benefits of Facebook use by teacher trainees should therefore be an important consideration for teacher education programs in the 21st century.

Key words: Teacher training, teacher trainees, clinical supervision model, Web 2.0, Facebook, feedback, teaching practicum.

INTRODUCTION

Socializing online has become an increasingly important part of college student life (Petrovic et al., 2014). The prevalence of social networking site (SNS) use is increasing enormously both in Turkey and worldwide. As of the last quarter of 2014, over 30 million individuals in Turkey are Facebook users (i.e., indicative of a 26% penetration rate), most of whom are among the younger generation (The Statistics Portal, 2015). The younger generation communicates and establishes social relationships through SNS. A report by the Pew Internet & American Life Project (Duggan and Smith, 2013) shows that 73% of online adults use SNS and that 42% of them use multiple SNS; however, Facebook remains the dominant platform for users. The rise of Facebook's popularity raises questions about its impact on college students (Kirschner and Karpinski, 2010; Abramson, 2011; Junco, 2011; Kamenetz, 2011; Petrovic et al., 2013; Petrovic et al., 2014) and new possibilities for using

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these tools in the furtherance of active and informal learning (Joly, 2007; Kassens-Noor, 2012; Petrovic et al., 2012; Petrovic et al., 2013, Baltaci Goktalay et al., 2014).

Although social media and Web 2.0 tools were not specifically designed for educational purposes, these technologies have received intense and growing educational and research interest in recent years. Web 2.0 offers new learning environments based on embedded user-driven, participative, and social networking characteristics. Web 2.0 refers to a variety of digital applications, which are mostly open source. Web 2.0 tools transform the learning context by providing multiple opportunities for shared content and resources, reflection, feedback, self-directed learning, informal learning, collaborative learning, and ubiquitous and lifelong learning (Gao et al., 2012; Reupert and Dalgarno, 2011; Glassman and Kang, 2011; McLoughlin and Lee, 2008b).

The educational potential for Web 2.0 has led to many recent studies in higher education addressing topics including social networking (Daher and Baya'a, 2013; Barczyk and Duncan, 2013; Wang et al., 2012; Junco, 2012; Baya'a and Daher, 2012; Cheung et al., 2011; Cheong, 2010; Kirschner and Karpinski, 2010; Roblyer et al, 2010), microblogging (Aydin, 2014; Munoz et al., 2014; Kassens-Noor, 2012), wikis (Hadjerrouit, 2014; Lai and Ng, 2011), and blogging (Bennett et al., 2012; Reupert and Dalgarno, 2011; Halic et al., 2010; Chuang, 2010; Hramiak et al., 2009). Despite this high level of activity, there is limited empirical evidence and few critical accounts that reveal the effectiveness of the implementation of Web 2.0 tools by teacher education programs, specifically in teaching practicum (Goktalay et al., 2014; Bennett et al, 2012).

As a free Web 2.0 tool, Facebook is the most popular SNS among university students. Since its inception in 2004, Facebook has seen a steep rise in users, especially among the younger generation. According to a Pew Research Center report (2014), 71% of young adults (ages 18-29) go online daily, and 87% of them use Facebook. Facebook has the potential to become a useful tool given its popularity and students' familiarity with its use (Barczyk and Duncan, 2013). Because Facebook provides opportunities for users to share knowledge, write comments, and engage in peer-to-peer interaction, it can enhance learning experiences in an informal setting (Kirschner and Karpinski, 2010). This paper aims to examine how Facebook supports a teaching practicum course in terms of instant feedback and informal learning.

Informal and active learning

Dewey (1938) posited that students' experiences and active participation are key factors in their learning process. Active learning is the key principle in Chickering and Gamson (1991)'s study on best practices in undergraduate education. Active learning involves lively discussions between instructors and students, peer-to-peer discussions, reflective writing and feedback, and group work to enhance knowledge through engagement (Kassens-Noor, 2012). Active learning may evolve within formal and informal settings. Although research on informal learning is not new, the advent of Web 2.0 technologies challenged the educational community to pay greater attention to the relationship between technology and informal learning and to explore how informal learning can inform formal learning (Lai et al., 2013). Researchers have adopted different perspectives when defining informal learning. While most researchers (Callanan et al., 2011; Sefton-Green, 2004) focus on location (e.g., *outside of the classroom)* when conceptualizing informal learning, others (e.g., Eshach, 2007; Laurillard, 2008) focus on the structure and process of learning as well as on instructor-student interactions. This view defines informal learning as "a self-directed, intentional interest (rather than curriculum based), non-assessment-driven and non-qualification-oriented endeavor" (Lai et al., 2013). Hicks and Graber (2010) argue that Web 2.0 tools may have created a *learning reality* that differs significantly from the formal learning setting. They therefore encourage researchers to examine these tools in order to reveal new instructional designs that make use of this technology. A review of the existing literature (Gao et al., 2012; Reynolds and Fell, 2011; Reupert and Dalgarno, 2011; Erdem, 2008) shows evidence that digital technologies can facilitate the flow of learning from formal to informal contexts.

Blending formal and informal learning using Facebook

Hannay and Fretwell (2011) predict that Web 2.0 tools will soon be adopted by universities and that the use of SNS in particular will become increasingly commonplace in university coursework. Hamilton (2011) claims that change is a must in education, given learners' expectations, technological change, and changes in teachers' roles. Web 2.0 tools have the potential to lead a redesign of the current learning environment by providing linkages between formal and informal learning. In particular, during the teaching practicum, teacher trainees need continuous feedback from their supervisors, cooperating teachers, and peers. Facebook can help to enrich the reception of feedback and facilitate interactions among stakeholders. Facebook as a mobile technology can also offer mobility and portability as well as provide pedagogical affordances in education, thus enabling learning in both formal and informal settings by eliminating the need for a fixed location and time (Hurt et al., 2012).

Web 2.0 as an e-mentoring tool

Social media as a tool to enhance informal learning has a substantial impact in educational settings (Kassens-Noor, 2012). Previous studies (Caner, 2010; Cheong, 2010; Chuang, 2010; Hramiak et al., 2009; McLoughlin et al., 2007; Single and Muller, 2001) have focused on Web 2.0 as an e-mentoring tool between faculty members and students. E-mentoring allows for greater flexibility than face-to-face mentoring because there are no time and place constraints. Single and Muller (2001) state that it is more advantageous for teacher trainees to give thoughtfully constructed written feedback using any type of Web 2.0 tool (e.g., blogs, discussion boards, emails, Facebook, etc.) than to respond immediately through oral communication. Another benefit of e-mentoring is the development of supportive relationships among peers and the promotion of greater cohesiveness within an online learning group. According to Caner (2010)'s study with 18 Turkish teacher trainees, teacher trainees require substantial feedback both for their lesson plans and their actual teaching practice; therefore, providing a platform whereby supervisors can reflect on teacher trainees' lesson plans and weekly work—and can give online written feedback—could contribute to teacher trainees' professional development. In addition, this type of online platform can encourage teacher trainees to be more active in class discussions and to become more interactive and collaborative learners (Caner, 2010). Cheong (2010) implemented Second Life during teaching practicum in the Republic of Korea with 110 pre-service teachers. The results showed that online collaboration and reflections/feedback affected pre-service teachers' personal teaching expectancy; however, it had no impact on their teaching outcome expectancy. In a similar study, English and Duncan-Howell (2008) used Facebook to examine 28 Australian teacher trainees' teaching practicum experiences. The results of this study indicated that Facebook can be utilized to support students during the practicum process. Yoon (2008) used online chat rooms and virtual reality to enrich communication between supervisors and teacher trainees. The results of the study suggest that supervisors and teacher trainees can communicate more easily through the Internet, without time and space-related limitations. In another study, Chuang (2010) examined how social media shaped 31 Taiwanese student-teachers' reflective practice during the teaching practicum. The results revealed that online conversations promoted collaboration, encouraged reflective practice, and enhanced community-building. Hramiak et al. (2009)'s study involving 38 teacher trainees in the UK demonstrated that online feedback helps teacher trainees to develop abilities with which to reflect critically on their experiences in school, thereby contributing to their professional development. Although affirmative research in the literature is plentiful, e-mentoring is not without its difficulties. For example,

Ensher et al. (2003, p. 276) identify five key challenges related to e-mentoring, including the increased likelihood of miscommunication, the slower development of relationships, the need for computing skills, the potential for technology malfunctions, and privacy issues.

Purpose of the study and research questions

As presented above, the literature supports three conclusions about Facebook use in teaching practicum. First, researchers who have experimented with Facebook and similar social networking sites agree that they can have a positive impact on communication among stakeholders in teaching practicum. Second, a number of studies have affirmed that Facebook encourages reflection and can be used as an e-mentoring/feedback tool. Third, researchers suggest that Facebook has the potential to transmit knowledge, promote informal learning, and inspire peer collaboration, especially in teaching practicum.

Despite various suggestions about the use of Facebook in academic settings, there are few empirical studies available, and none address teaching practicum courses in Turkey. In addition, qualitative studies examining the effect of using Facebook outside of the classroom as an informal learning tool do not yet exist. Therefore, the goal of this study is to examine Facebook as an informal learning tool. This study explores the ways in which teacher trainees, supervisors, and cooperating teachers communicate, give feedback, and retain knowledge when using Facebook during teaching practicum. The research questions are as follows:

1. What is the social network adoption level among teacher trainees according to Unified Theory of the Acceptance and Use of Technology (UTAUT)?
2. For what purposes do teacher trainees use social networking sites in general?
3. Does Facebook accelerate communication during teaching practicum?
4. To what extent does Facebook use in teaching practicum serve to solicit increased feedback from peers, cooperating teachers, and university supervisors?
5. Does Facebook promote peer collaboration during teaching practicum?
6. To what extent does Facebook use in teaching practicum serve to improve the professional performance of teacher trainees?

THEORETICAL FRAMEWORK

To date, many models of technology acceptance have been developed; of these, several examine pre-service teachers' technology acceptance in particular. This research draws on the UTAUT model as the theoretical

framework for this study (Venkatesh et al., 2003). Venkatesh et al. (2003) integrated factors from previous technology acceptance models. Usluel and Mazman (2009) generated a Facebook adoption model (SNA) based on the UTAUT model in Turkey and thereby identified five factors affecting the Facebook adoption process: usefulness, ease of use, social influence, facilitating conditions, and community identity. This study also draws on Pedagogy 2.0 (McLoughlin and Lee, 2008a), which aims to form an online or face-to-face learning environment within a class wherein all stakeholders contribute to and discuss a collective understanding of the topic/practice. For students to maintain control over their own learning in the classroom with Pedagogy 2.0, the instructor should provide an effective learning environment with attention to the following:

1. *Content*, including a wide variety of learner-generated resources
2. *Curriculum*, open to negotiation and student input as well as blending formal and informal learning
3. *Communication*, offering various forms of visual, verbal, written, and auditory tools among stakeholders
4. Contextualized and reflective *learning processes*
5. Multiple formal and informal *resources*
6. *Scaffolding*, students have support from a network of peers, teachers, and other experts
7. Authentic and personalized *learning tasks* designed by students

In the current study, a learning environment with Pedagogy 2.0 features was provided to teacher trainees through a closed group on Facebook.

METHODOLOGY

This study was conducted during the spring semester of the 2013-2014 academic year. The ultimate goal of the larger project was to develop a Teaching Practicum Program based on the Clinical Supervision Model (Bulunuz et al., 2014; Gürsoy et al., 2013) in which teacher trainees receive maximum feedback and supervision. This study examines the use of a Facebook group as an informal learning tool in the experimental group.

Participants

The participants in this study were 41 teacher trainees, from a national university's teacher education program in Northwestern Turkey, enrolled in a required teaching practicum course. Traditionally, teacher trainees in Turkey complete their 4-year teacher education preparation courses and spend one year (i.e., one semester as an observer, one semester as a student teacher) at designated primary/elementary schools as part of their teaching practicum. University supervisors are supposed to engage in at least three visits to each teacher trainee during this time to provide feedback and support for her/his professional development. In the current study, after teacher trainees successfully completed the course and were graded, they were asked to take part in a survey.

Course design and implementation

In this case study, a Facebook group was used in a teaching practicum course, a four-credit required course offered during the spring semester of the 2013-2014 academic year. A total of 48 teacher trainees took part in the course. The course was 14 weeks long and comprised both two hours per week of face-to-face sessions and six hours per week teaching practice at primary schools. The Facebook group was created at the beginning of the semester and all stakeholders (i.e., 48 teacher trainees, 8 cooperating teachers, and 8 university supervisors) were invited to join to the group. The administrator of the group was the author. The Facebook group was originally set up as "open" to the public so that access did not require users to be Facebook friends. After all stakeholders joined the group, it was set to "closed" so that group discussions could be kept away from random access by others. During students' first face-to-face session, stakeholders were invited to a computer lab and were instructed as to how they were to use the Facebook group as a feedback and communication tool during the semester. Stakeholders were also asked to keep any personal messages mentioning the teaching practicum for submission to the author at the end of the semester. Four teacher trainees refused to use Facebook for personal reasons; therefore, 44 teacher trainees were included in the study and of these, 41 completed the survey.

The Facebook group provided access to a course syllabus, a clinical supervision model booklet covering key concepts, readings, announcements about the course requirements, meetings, seminar presentations, course materials, weekly forms and assignments, shared experiences, videos, and photos. In this way, course supervisors had the advantage of being able to provide course content for teacher trainees more quickly than in other conventional/formal learning environments. The blending structure of the teaching practicum course in this study can be seen in Figure 1. The Clinical Supervision Model has five stages including pre-conference, observation and data collection, data analysis, post-conference, and reflection. First, a supervisor organizes a pre-conference with a teacher trainee to provide a plan for future observation. Then, he/she conducts a systematic observation and collects data on the teacher trainee's teaching practice, followed by an analysis prior to a three-way conference between the supervisor, cooperating teacher, and teacher trainee. During the post-conference, stakeholders (e.g., peers, supervisors, cooperating teachers) provide supportive feedback to the teacher trainee so that he/she can make plans to improve his/her future teaching performance. Lastly, a supervisor may ask a colleague to reflect on their performance during the previous stages of the Clinical Supervision Model.

Instrument and data collection

A combination of constructs from two models (i.e., UTAUT, SNA) underpins this research study (Table 1). In addition, three variables were added to the study: Peer Collaboration, Benefits in terms of Communication, and Feedback. These constructs were combined into a survey (see Table 1 for the source of the constructs and Appendix 1 for the survey items). The survey was divided into three parts: the first part gathered demographic data (4 items), the second part included questions about the nine constructs (i.e., actual use, usefulness, ease of use, social influence, facilitating conditions, community identity, communication benefits, peer collaboration, and professional performance expectancy) (26 items), and the last part included open-ended questions asking participants to provide comments on how they used Facebook in terms of receiving feedback from their cooperating teacher and university supervisor (2 items).
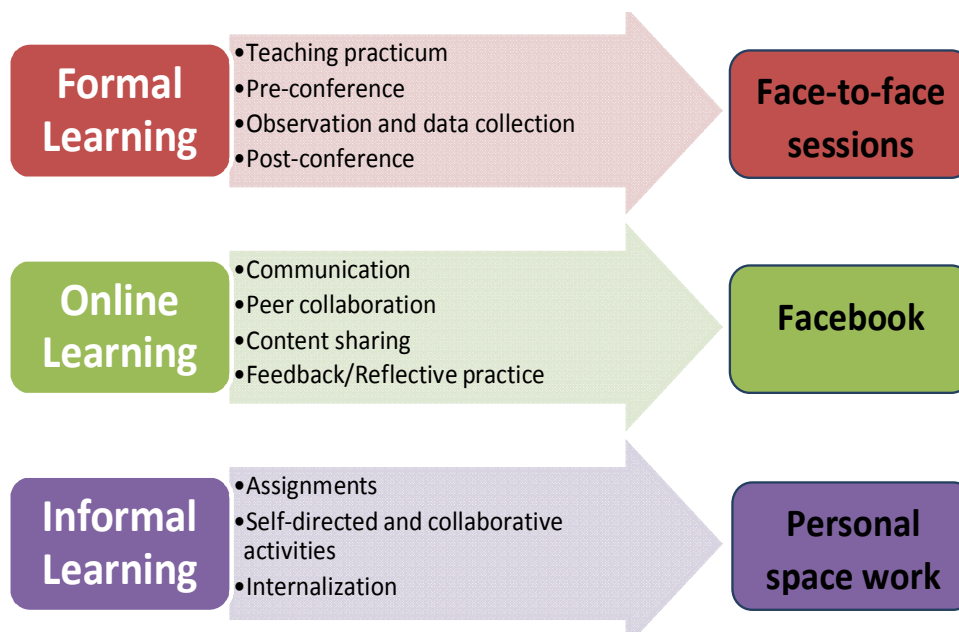
Figure 1. The blended structure of the Teaching Practicum Course based on the Clinical Supervision Model (Modified from Lai et al. (2013) and the Mobile-Blended Collaborative Learning Model).

Table 1. Constructs and source.

Constructs	Source
Usefulness (U)	SNA, UTAUT
Ease of Use (EoU)	SNA, UTAUT
Social Influence (SI)	SNA
Facilitating Conditions (FC)	SNA, UTAUT
Community Identity (CI)	SNA
Performance Expectancy (PE)	UTAUT
Actual Use (AU)	UTAUT
Benefit in terms of Communication (BoC)	Newly added
Peer Collaboration (PC)	Newly added
Feedback (F)	Newly added

Data analysis

Data analysis was both quantitative and qualitative. Quantitative data (e.g., means, standard deviations, frequencies) were calculated using SPSS 22.0. Open-ended questions were analyzed with a hybrid approach to qualitative data analysis using both a data-driven inductive approach described by Boyatzis (1998) and a deductive a priori template of codes approach outlined by Strauss and Corbin (1990). This approach involved the creation of a template in Excel, developed a priori based on the research questions and theoretical framework, to be applied as a means of organizing text for subsequent interpretation. In practice, the analysis process was conducted in the following phases. First, open-ended questions were read through to familiarize with the questionnaire's content. Second, the data were coded deductively into four themes (Inan and Lowther, 2010): communication benefits, feedback, peer collaboration, and professional performance expectancy. Third, further inductive thematic analysis was carried out within each theme. Benefit in terms of communication was organized into three categories: communication, feedback, and sharing knowledge. Feedback was organized into three categories: course plans, course materials, and common student issues/questions. Peer collaboration was organized into three categories: sharing course plans, sharing course materials, and communicating with and/or helping one another. Professional performance expectancy was organized into three categories: faster communication, sharing knowledge, and prompt feedback.

RESULTS

Quantitative results

A total of 48 teacher trainees enrolled in the teaching practicum course during this study; however, four of these teachers did not agree to participate in the study because they were not willing to use Facebook at all. When volunteer teacher trainees were asked to take part in the survey at the end of the semester, 41 teacher trainees participated in the survey. The overwhelming majority of participants were female (86%, 38), a demographic breakdown that is in line with the general gender ratio of the department. The majority of participants reported having a 'good' or 'very good' level of computer literacy (95%, 42), with only 2 participants reporting that they could not operate computers well. When asked how often they used Facebook, the results were 73% (32) a few times a day, 11% (5) once a day, 7% (3) very rarely, and 9% (4) only used for this course.

Table 2 shows that the highest mean was indicated for ease of use (4.335±0.704), followed by facilitating

Table 2. Means of social network adoption (SNA) subcategories.

Factors	N	Minimum	Maximum	Mean	Std. Deviation
Usefulness (U)	41	1.75	5.00	3.835	0.697
Ease of Use (EoU)	41	2.00	5.00	4.335	0.704
Social Influence (SI)	41	1.00	4.50	2.664	1.011
Facilitating Conditions (FC)	41	2.40	5.00	4.092	0.492
Community Identity (CI)	41	1.00	4.50	3.323	0.887

Table 3. Purpose of using social networking sites.

Purpose	N	Percent
Using only for teaching practicum	7	8
Communicating with my friends and find new ones	27	32
Having fun in spare time	20	24
Playing games	7	8
Joining groups and being social	8	9
Sharing information/videos/photos	16	19

Table 4. Themes for communication benefits.

Communication	f	Feedback	f	Sharing knowledge	f
Faster communication	10	Detailed/constructive feedback	1	Common questions	5
Ease of communication	30	Prompt feedback	15	Course documents	6

conditions (4.092±0.492). Social influence has the lowest mean (2.664±1.011). In another question, when participants were asked for what purposes they use social networks, 32% of stated that they used SNS "to communicate with my friends," followed by "for fun" (24%) and "to share information" (19%), as seen in Table 3.

Qualitative results

Benefit in terms of communication

When participants were asked "Do you think using Facebook in the teaching practicum accelerates your communication with other stakeholders?" of the 41 participants who responded to this question, the majority (93%, 38) answered in the affirmative, while three (7%) indicated that Facebook did not accelerate their communication with others. The three participants gave the following reasons for their negative views: "Since I don't know the others in my group in person, I was hesitant to communicate with them through Facebook" (Respondent 2); "Since some of the stakeholders did not use Facebook, it could not help to accelerate our communication" (Respondent 38); and "I used Facebook only for this course, and did not use it for communication purposes. I just followed the others' posts on the wall"

(Respondent 30).

Participants who thought Facebook was beneficial in accelerating communication stated that "…Facebook made it possible to communicate faster and get prompt feedback" (Respondent 11 and 23), "It was nice to share knowledge through Facebook with peers experiencing the same teaching practicum process" (Respondent 39), and "Since Facebook is at my disposal, it was easy to communicate with others through Facebook" (Respondent 34).

Table 4 shows the response frequencies of the follow-up question: "What kinds of benefit do you think using Facebook added to your teaching practicum process in terms of your communication with other stakeholders?" Three themes emerged from participants' responses: communication, feedback, and knowledge sharing. While 40 responses mentioned communication, 10 focused on how Facebook made communication faster, and 30 responses discussed the ease of communication. Respondent 4 stated, "We always communicated via Facebook throughout the semester with my peers, my cooperating teacher, and my university supervisor." It was also stated that "Knowing that I was able to reach my cooperating teacher and supervisor via Facebook at any time reduced my concerns. We were able to communicate without any interruption. I had a strong relationship with my teachers" (Respondent 11). On the second

theme, one participant stated, "We communicated faster and received constructive feedback through Facebook" (Respondent 1), and 15 participants indicated that they received prompt feedback. Respondent 16 stated, "I was able to modify my course plan when I received my university supervisor's feedback through Facebook before the course. Moreover, I got feedback from my cooperating teacher about the activities I prepared in my course plan and I went to my class very well prepared. We also gave feedback to each other as teacher trainees when we saw our course plans on Facebook." Another participant mentioned "Our practicum school was far away from my house. It would have been so hard to get prompt feedback from my cooperating teacher if I hadn't used Facebook. I could also use Facebook with my peers any time of the day." A further 11 participants also mentioned the benefits of using Facebook to share knowledge. While six respondents indicated that they were able to become more aware of course requirements and obtain documents and forms more easily through Facebook, five participants also mentioned that they did not have to ask as many questions because they were able to find answers to common questions about the course on the group's Facebook wall. Three participants reported negative experiences with Facebook use. One (Respondent 2) stated that "I was able to get feedback after 3-4 hours, though sometimes it took as much as 24 h through Facebook. I prefer prompt feedback by calling my cooperating teacher and talking on the phone."

Feedback

The main reason that Facebook was used in the teaching practicum was to provide prompt feedback to teacher trainees. This study therefore investigated Facebook use from the perspective of all stakeholders involved (e.g., cooperating teachers, university supervisors, teacher trainees). First, participants were asked "To what extent do you agree that the use of Facebook in the teaching practicum course helped you to get more feedback from your University Supervisor?" While 36 participants (87%) answered this question positively, five participants (13%) reported that they did not receive feedback from their university supervisor through Facebook. These participants gave the following reasons for their negative answers: "My supervisor answered my questions on Facebook, but I did not receive feedback in regard to my course plans or materials" (Respondent 20), "We were communicating face-to-face to receive feedback on my course materials" (Respondent 28), "Since I did not share anything with her, she did not give me any feedback on Facebook" (Respondent 30), "We didn't share much on Facebook" (Respondent 35), and "We preferred face-to-face meetings instead of Facebook" (Respondent 39). Positive answers were categorized into three general

themes: *course plans, materials,* and *common questions.* A total of 24 participants indicated that they received feedback on their course plans from their university supervisor through Facebook. For example, Respondent 41 stated that "Every week I shared my course plan with my supervisor on Facebook. After my supervisor gave me feedback, I made the necessary modifications and shared it again to receive final approval from her." One participant reported that he/she used Facebook at least three times a week to share course plans, videos, and materials to get feedback as well as to brainstorm in preparation for the next course (Respondent 15). Eight participants indicated that in addition to getting feedback on their course plans, they also received feedback on their course materials. For example, Respondent 32 stated "My supervisor always gave me feedback on my songs, activities, videos, visuals, etc., that I planned to use in my next course. I believe I received very constructive feedback from her. I asked for help from her any time I needed it, and she was very responsive. We also talked about common problems that all of us faced during the practicum." Four other participants also indicated that Facebook was a beneficial tool for solving common problems/issues. Table 5 shows how the responses related to feedback from university supervisors were categorized.

When asked, "To what extent do you agree that the use of Facebook in the teaching practicum course helped to get more feedback from your cooperating teachers," the response pattern was a little different from that of the previous question. While 30 participants (73%) answered in the affirmative, 11 (27%) indicated that they did not receive feedback from their cooperating teachers through Facebook. Participants receiving feedback through Facebook reported that they received feedback both for their course plans (19) and for their course materials (14). Feedback with regard to course plans was rated the most highly by participants. Almost half of the participants (19) received feedback on their course plans from their cooperating teacher. One participant reported, "We were using Facebook at least four times a week to share materials to get feedback. She gave me very handy feedback about course plans, materials, and school resources. I believe that I received very adequate feed-back from my cooperating teacher" (Respondent 15).

Another participant responded that "my cooperating teacher suggested movies and books that I could use in class and gave me feedback on my course plans" (Respondent 38). One participant indicated that although she received feedback on her course plans through Facebook, it was not always a quick response; thus she preferred to engage with her cooperating teacher in face-to-face meetings through the end of semester (Respondent 8). Four participants indicated that they received feedback with regard to common issues and inquiries about students who needed extra attention in

Table 5. Feedback received from university supervisors through Facebook.

Feedback	f (n=41)
Course plans	24
Course materials (Videos, songs, hands-on activities, visual materials, etc.)	8
Common issues/questions/problems	4
Received no feedback	5

Table 6. Feedback received from cooperating teachers through Facebook.

Feedback themes	f (n=41)
Course plans	19
Course materials (Videos, songs, hands-on activities, visual materials, etc.)	14
Common issues/questions/problems about school/students	4
Received no feedback	10

Table 7. Peer collaboration.

Peer collaboration themes	f (n=41)
Sharing course plans	15
Sharing course materials (activity sheets, visual materials, videos, songs, etc.)	11
Communication/Brainstorming/Helping each other	19
No communication through Facebook with peers	5

class. There were a high number of responses (10) reporting that they could not receive feedback through Facebook from their cooperating teachers. One participant reported that "Although I sent all my course plans and materials such as photos, videos, songs, and activity sheets to the cooperating teacher, she only wrote "thanks" and gave no feedback" (Respondent 23). Out of 10 negative responses, seven reported that they did not use Facebook at all. One indicated that "my cooperating teacher was not active on Facebook, so we preferred face-to-face conversations" (Respondent 12). Two participants responded that they preferred face-to-face meetings, but gave no reasons for this choice. Table 6 presents the teacher trainees' responses with regard to feedback they received from their cooperating teachers.

Peer collaboration

In answer to the question, "To what extent do you agree that the use of Facebook assisted with peer collaboration?" the participants' responses echoed three major themes: sharing course plans, sharing materials, and communication (Table 7). While 36 participants (87%) reported that they communicated with their peers through Facebook, five reported that they preferred not to communicate with their peers through Facebook; instead, they called each other or used WhatsApp messages.

Three of the participants who did not use Facebook as a collaboration/communication tool indicated that they preferred phone calls (Respondents 21, 37, and 38), while another stated, "They were my close friends, so we were meeting face-to-face instead of messaging through Facebook. I think face-to-face meetings prevent misunderstandings" (Respondent 2), and the last participant (Respondent 30) did not indicate any reason why she did not use Facebook with her peers. In addition, eight participants answered simply "yes, it was useful," but gave no other explanation. Of the 24 participants who reported that Facebook was useful in peer collaboration, 15 indicated that they used Facebook to share course plans, 11 used it to share other course-related materials, and 19 used Facebook to help brainstorm about course preparation, give feedback, share announcements, and communicate course requirements.

One participant reported, "I used Facebook only with my peers in my teaching practicum group. We shared all of our course plans and gave feedback to each other. We always supported each other" (Respondent 31). Another stated, "When someone in my group needed help in any course-related activity or homework, we worked collaboratively, did some brainstorming and solved

Table 8. Themes for improvement of professional performance (n=41).

Communication	f	Feedback	f	Sharing knowledge	f	Negative response	f
Faster communication	10	Prompt feedback	12	Common questions	2	Facebook has no effect on professional performance	8
Ease of communication	7			Course documents	2		

problems" (Respondent 32).

Improvement of professional performance

The last open-ended question was "To what extent do you agree that the use of Facebook in the teaching practicum course helped to improve your professional performance?" While 33 participants agreed that Facebook helped to improve their professional performance, eight did not agree (Table 7). A total of 17 participants reported that they communicated more quickly and easily with their cooperating teachers and supervisors and thus received more feedback. Faster communication therefore affected their professional performance in a positive way. Four participants mentioned that sharing knowledge with their peers helped them to improve their performance, and 12 observed that receiving prompt feedback on their course plans through Facebook was very helpful in improving their professional performance. One response was "I can't deny Facebook's help. It was very easy for us to get feedback from our teachers. In addition, I joined some other Facebook groups about the teaching practicum and other teacher trainees' suggestions gave me new ideas to apply to my own courses" (Respondent 18). Another similar response was "It was helpful to be able to see my peers' activity sheets, course plans, photos, and other posts to form my courses" (Respondent 39). Two participants reported that Facebook made it possible to reach all stakeholders anytime they needed. However, eight participants reported that Facebook had negligible effects on the improvement of their professional performance (Table 8).

DISCUSSION AND CONCLUSION

This study has provided a real world overview of the adoption of Facebook as a Web 2.0 technology in a teaching practicum course, investigating teacher trainees' reflections on the impact of this approach from different perspectives: peer collaboration, communication benefits, feedback, and the improvement of professional performance. This study followed Pedagogy 2.0 theory while providing a rich environment in which learners could communicate with a variety of tools, receive feedback, access resources through formal and informal

means, seek support from Facebook group stakeholders, and complete authentic learning tasks during the teaching practicum.

The first research question explored teacher trainees' adoption of social networking sites. When the means of social network adoption were examined, results were in line with a study by Tanrıverdi and Sağır (2014). Teacher trainees stated that they preferred to use the Facebook group primarily because it was easy to use in terms of soliciting feedback for their lesson plans and classroom activities.

The second research question addressed teacher trainees' reason for using social networking sites. Findings show that communicating with friends was the most frequently cited reason for using Facebook, followed by a way to spend spare time and sharing information. A similar study reports that college students primarily spend time communicating with their peers, playing games, and watching videos (Rideout et al., 2010).

The third research question examined whether Facebook accelerated communication during the teaching practicum. The findings show that the majority of participants (93%, 38) agreed that they benefited from Facebook in terms of communication with their peers, as well as cooperation with teachers and university supervisors. It was found that fast and easy communication facilitated prompt feedback and the sharing of knowledge. Teacher trainees reported that Facebook is a convenient tool for enhancing discussion. These results support the study by Barczyk and Duncan (2013), which addresses Facebook use in higher education courses.

In the fourth research question in this study, the author sought to identify the extent to which Facebook use in the teaching practicum served to facilitate the exchange of feedback between students, their peers, cooperating teachers, and university supervisors. Most teacher trainees (87%) reported that they received prompt feedback from their university supervisors. This finding runs contrary to that of Roblyer et al. (2010), who found that only 6.5% of faculty members communicate with their students with regard to class activities. However, it was reported that fewer teacher trainees (73%) received feedback from cooperating teachers through Facebook. Even positive responses revealed that cooperating teachers preferred oral communication or phone calls to Facebook. The difference between university supervisors and cooperating teachers might be attributable to gender or age. University supervisors in the study were all

females in their 40s, while cooperating teachers were mostly males over the age of 50. Moreover, university supervisors were more aware of the importance of giving feedback to teacher trainees than were cooperating teachers. Teacher trainees need to receive substantial feedback on both lesson plans and other classroom activities during the teaching practicum course (Caner, 2010). The need for feedback is always emphasized among education faculties. Teacher trainees also stated that they received frequent feedback from their peers through Facebook as well as through oral communication. They also responded to the fourth research question by stating that Facebook promoted peer collaboration by allowing users to easily share course plans and materials and to help each other with course-related problems. The last research question examined teacher trainees' perceptions of the effect of Facebook on professional performance. While 80% of respondents answered to the affirmative, 20% indicated that Facebook use had not improved their professional performance.

The study revealed that teacher trainees were not using Facebook as an educational tool prior to the inception of this study. This lack of usage could be attributed to the fact that Web 2.0 technologies had not yet been sufficiently introduced into the higher education environment. By contrast, with the introduction of the FATIH project (MEB, 2012), K-12 teachers were required to be technology savvy and able to integrate Web 2.0 technologies into their instruction. In addition, according to Pedagogy 2.0, Web 2.0 tools should be integrated into coursework to support knowledge sharing, enable peer-to-peer networking, and facilitate greater learner autonomy (McLoughlin and Lee, 2008b).

Increased feedback for teacher trainees is an important benefit of the use of Web 2.0 tools in teacher education programs. Integrating such tools into the teaching practicum in particular can serve to advance the student-centered learning approach of Pedagogy 2.0. This study highlights the positive outcomes from creating an informal learning environment for teacher trainees that centers on the affordances of social networking tools to improve teaching practices.

Additional research investigating the teaching practicum is warranted, specifically studies that focus on how cooperative teachers and supervisors can benefit from using Web 2.0 tools to change their pedagogical practices to better serve teacher trainees. This study focuses solely on teacher trainees in primary education, many of whom had known each other for four years, i.e., the duration of their degree course. This familiarity may have skewed the data in favor of positive perceptions of Facebook that might not otherwise have been presented. Scholars are encouraged to replicate this study with teacher trainees in other disciplines to validate the findings discussed herein. Studies involving larger groups of teacher trainees might also provide another perspective on the building of community among teacher trainees,

cooperative teachers, and supervisors who are away during the practicum and who rely on Facebook to communicate and give feedback.

The findings of this study may have important implications for teacher education programs that apply a clinical supervision model and seek to prepare teachers to teach in 21st century classrooms. While integrating the effective use of Web 2.0 tools, teacher trainers can facilitate the transformation of their own roles as they work with teacher trainees, who in turn might adopt these tools in their K-12 classrooms.

Conflict of Interests

The author has not declared any conflict of interests.

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