Determination of teacher candidates' anxiety levels on using facebook for instructional purposes

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Abstract

In this study, candidate teachers' anxiety levels were determined based on the use of Facebook for instructional purposes. The research is a clear sample of descriptive study. The research was held in the department of Computer Education and Instructional Technology of Near East University. With the aim of gathering data on this specific subject, a questionnaire was put to the participants. The sample was taken from 202 candidates between the ages of 20 and 32.

Keywords: Education, Social Network, Facebook, Negative Effects

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1. Introduction

Education is one of the major ingredients of life. With the aim of achieving or accomplishing an objective in life, learning should be put at the centre of attention. According to this significant point of view, education is a fundamental right of a human being. Education can be achieved in two different ways. A learning outcome can take place through an unwanted experience (touching a hot surface and learning that it is hot) or after planning and exerting effort (Laska & Gürbüztürk, 1989).

To provide an organized and well-designed education, educational programmes are required. Educational programmes are prepared according to needs. Those needs could be based on community, technology, culture or politics. Therefore, taking those particular aspects into account would assist in generating an educational programme (Laska, 1976).

Considering the technological advances happening today, it is generally accepted that educational programmes should embrace recent developments. Due to the entrance of technological advances into education, a new approach has emerged called Educational Technology (Selwyn, 2011). Social media is a branch of this significant formation. It consists of social networks such as Facebook, Myspace, YouTube, Weblogs, Xanga, Friendster, Orkut, Bebo and Wiki (Kayri & Cakır, 2010). These platforms are used for various reasons. In particular, students have begun to communicate with friends and teachers after school hours. Facebook is one of the platforms whose number of users is growing with considerable speed. The major reasons for the use of Facebook in Turkey are: communicating with friends, share of video, images, photos and music, playing games, organizing events, political, e-marketing, sexual reasons (Toprak, Yıldırım, Aygül, Binark & Comu, 2009).

The main characteristics of social platforms are:

- Easy to share documents via e-mail, chatting platforms, videos, blogs
- Create an environment for users where they can find each other, generate groups and share ideas
- Most of them are free
- Provide active learning
- Develop student motivation for learning
- Enhance writing skills
- Assist informal learning
- Provide interaction by communication
- Easy to reach up to date information
- Generate cooperative environment
- Generate critical-thinking environment (Mason, 2006; Ozkan & McKenzie, 2008; Ferdig, 2007).

Besides all of the benefits mentioned above, there also exist some drawbacks, according to Connolly (2011). The author highlighted that using social network platforms may bring a number of problems. Those who use networks such as Facebook, Google or other services are paying excessive attention to them. Without realizing it, users' focus, concentration or persistence is subverted. Some researchers have found that excess use of social networking may generate less patience, tenacity or weakened critical-thinking ability. This occurs especially when a student shifts from one subject to another. In this way, students find it harder to control their focus and attention.

Kirschner and Karpinski (2010) also found that students might share inappropriate documents through social networks. Furthermore, spending a long time on such platforms decreases levels of

student motivation and performance. Therefore, teachers should be careful when using these social networks.

1.1. Facebook

Facebook is one of the most popular social networks today, developed by Mark Zuckerberg on 4 February 2004. Facebook was constructed with the aim of enabling communication between Harvard University students. However, the use of Facebook quickly spread across Boston, followed by the graduates and students of all the schools in the United States of America within a year (Facebook, 2014).

Tiryakioglu and Erzurum's (2011) study based on the use of Facebook for educational purposes found that, for 68.8% of the candidates who took part in the study, 'Facebook helps to build up a relation between classmates', for 63.3% 'Facebook helps to increase the communication between the lecturer and the student', for 61.2%, 'Facebook is a useful medium for announcements about the class and the school', for 58.3% 'Facebook is a useful medium for forming academic groups who have common interests and needs' and for 54.2% 'Facebook is an effective medium to implement group studies'.

2. Aim

The main aim of this study is to determine candidate teachers' anxiety levels on using Facebook for instructional purposes. With that in mind, the study aims to answer the following questions:

- What are the candidate teachers' context-related anxiety levels based on Facebook use?

- What are the candidate teachers' lesson-related anxiety levels based on Facebook use?

- What are the candidate teachers' privacy-related anxiety levels based on Facebook use?

- What are the candidate teachers' anxiety levels based on instructional Facebook use?

3. Methodology

3.1. Research Model

This research is a sample of descriptive study prepared in order to determine the anxiety levels of candidate teachers based on Facebook use for instructional purposes. The sample of 202 candidate teachers were from the 4th grade Computer Education and Instructional Technology, ELT, Classroom Teaching, History Teaching, Preschool Education Teaching and Psychological Counselling and Guidance departments of Ataturk Education Faculty, Near East University. Participants were between the ages of 20 and 32.

3.2. Data Collection

A questionnaire was developed with the aim of gathering data under the name of 'Instructional Facebook Use Questionnaire'. The questionnaire was composed of two parts. The first part of the questionnaire was based on demographic information of the candidates and the second part consisted of 40 statements regarding instructional-related Facebook use.

3.3. Data Analysis

The questionnaire was a five-point Likert Scale. The points in the scale are assigned as: 5 - "strongly agree", 4 - "agree", 3 - "sometimes", 2 - "rarely", 1 - "never". For data analysis, the most recent version of SPSS program (20.0) was adopted for assessing the gathered data. After assessing the data, tables were utilized to display the information. Data were presented as percentage (%), frequency (f) and mean (X).

4. Results

4.1. Demographic Information

4.1.1. Candidate teachers' Facebook use according to their gender

Candidate teachers' Facebook use is displayed in Table 1. According to the percentages, it can be seen that the number of female users is greater than male users. However, the difference between the proportions is not conspicuous.

Table 1. Candidate teachers' Facebook use according to their gender

Gender	Frequency (f)	Percentage (%)
Male	99	49.0
Female	103	51.0
Total	**202**	**100.0**

4.1.2. Candidate teachers' Facebook use according to their age

As seen in Table 2, the ages of the candidate teachers were between 20 and 32. According to the assessed values, the greatest proportion (31%) of teacher candidates were aged 22. The second greatest proportion were aged 23. According to the results, the largest proportion of teacher candidates were aged 22 and 23.

Table 2. Facebook usage of candidate teachers' according to their ages

Age	Frequency (f)	Percentage (%)
20	1	0.5
21	12	5.9
22	63	31.2
23	50	24.8
24	31	15.3
25	17	8.4
26	14	6.9
27	4	2.0
28	2	1.0
29	2	1.0
30	5	2.5
32	1	0.5
Total	**202**	**100.0**

4.1.3. Educational departments of candidate teachers

According to the results provided in Table 3, the majority of the candidate teachers from the Psychological Counselling and Guidance department, with a proportion of 52.0%. The second greatest proportion belongs to the preschool teaching department, with 21.3%. On the other hand, the smallest number of candidate teachers were from the History Teaching department, at 0.5%.

Table 3. Educational departments of candidate teachers

Departments	Frequency (f)	Percentage (%)
CEIT	42	20.7
ELT	9	4.5
Pre-School	43	21.3
PCG	105	52.0
Classroom Teaching	2	1.0
History Teaching	1	0.5
Total	**202**	**100.0**

4.1.4. The proportion of candidate teachers who have a personal Facebook account

According to the proportions provided in Table 4, it can be seen that the majority of the candidate teachers had personal Facebook accounts. The proportion of candidate teachers who did not have a personal Facebook account was only 8.9%. As the figures show, Facebook is an extremely popular social network with high levels of membership among the candidate teachers.

Table 4. The proportion of candidate teachers that have a personal Facebook account

	Frequency (f)	Percentage (%)
Yes	184	91.1
No	18	8.9
Total	202	100.0

4.1.5. The frequency of Facebook use by candidate teachers

Table 5 shows that the majority of the candidate teachers utilize Facebook regularly. This means that teachers are using Facebook systematically and that it forms a part of their life. The smallest proportion belongs to the candidate teachers who never use Facebook, at 5.9%.

Table 5. The frequency of Facebook use by candidate teachers

Frequency of use	Frequency (f)	Percentage (%)
Never	12	5.9
Rarely	38	18.8
Regularly	88	43.6
Often	64	31.7
Total	**202**	**100.0**

4.1.6. The duration of Facebook use by candidate teachers

As demonstrated in Table 6, the greatest number of candidate teachers, 63, spend a duration of 15 minutes on Facebook. This number is followed by 49 with a duration of 1 hour. In general, candidate teachers prefer to utilize Facebook for 15 minutes. It can be said that 15 minutes is enough to meet their needs.

Table 6. The duration of Facebook use by candidate teachers

Hours Spent	Frequency (f)	Percentage (%)
15 min	63	31.2
30 min	44	21.8
1 hour	49	24.3
1-3 hours	46	22.8
Total	202	100.0

4.1.7. Other social networks utilized by the candidate teachers rather than Facebook

Considering the data in Table 7, it is obvious that the major proportion (81%) of the candidate teachers prefer to use other social networks. The second most preferred social network according to the results is Twitter. The smallest proportion of candidate teachers prefer to use blogs, at 3.5%.

Table 7. Other social networks utilized by the candidate teachers rather than Facebook

Social Networks	Frequency (f)	Percentage (%)
Twitter	76	37.6
Blogs	7	3.5
Vine	22	10.9
LinkedIn	16	7.9
Other	81	40.1
Total	202	100.0

4.1.8 Major reasons for Facebook use by the candidate teachers

Taking into account all of the results illustrated below, it is clear that most of the candidate teachers utilize Facebook with the aim of social networking (33.7%). The second major proportion uses it for other reasons. Only 2.5% of the candidate teachers utilize Facebook for finding friends.

Table 8. Major reasons for Facebook use by the candidate teachers

Reasons	Frequency	Percent
Finding friends	5	2.5
Social networking	68	33.7
Cooperation	29	14.4
Educational	35	17.3
Other	65	32.2
Total	202	100.0

5. Instructional related Facebook use

5.1. Candidate teachers' context-related anxiety levels based on Facebook use

Candidate teachers' context-related anxiety levels are displayed in Table 9. According to the data, 40.1% of candidate teachers strongly agree that the publishing of materials (photos, videos etc.) by others without permission would be annoying. In addition, 26.7% of candidate teachers agree that finding appropriate visuals to support the course content would cause panic, 24.3% of participants agree that unauthorized sharing of the course content by students would cause panic and 29.7% of

participants stated that the possibility of irrelevant sharing and causing discussion by sharing the course content sometimes causes worry. On the other hand, 48% of candidate teachers stated that the visibility of sharing by people other than students never causes panicking. In addition, the proportion of candidate teachers who specify that the quality of the course content never causes anxiety is 44.6%.

Table 9. Candidate teachers' context-related anxiety levels based on Facebook use

Instructional-related Facebook use	Never	Rarely	Sometimes	Agree	Strongly Agree
Context Based					
The publishing of materials (photos, videos etc.) that I have used in the course content without permission by others would bother me.	13.9	10.9	18.8	16.3	40.1
The possibility of irrelevant sharing worries me.	20.8	16.3	29.7	19.8	13.4
The quality of the course content that I have shared panics me.	44.6	19.8	19.8	10.4	5.4
It worries me that my sharing of the course content will cause a discussion.	20.8	16.3	29.7	17.8	15.3
The visibility of my sharing by people other than students panics me.	48.0	14.4	12.9	13.4	10.9
Unauthorized sharing of the course content by students worries m	32.7	11.9	18.3	24.3	12.9
Finding appropriate visuals to support the course content panics n	29.7	16.3	14.9	26.7	12.4

5.2. Candidate teachers' lesson-related anxiety levels based on Facebook use

Table 10 shows the lesson-related anxiety levels of candidate teachers based on Facebook use. The greatest proportion of participants (57.9%) are never worried about using Facebook for instructional announcements, 55.9% of candidate teachers also never worry about using Facebook for the course and creating a group on Facebook for the course. In addition, 30.7% of participants specified that negative comments of students on Facebook concerning the course sometimes cause them worry. Moreover, 30.2% of candidate teachers are sometimes worried about the possibility of affecting students' success negatively through insufficient instructional sharing on Facebook. In contrast, 26.2% of participants agree that they worry their instructional sharing might be posted through their own account on Facebook by others.

Table 10. Candidate teachers' lesson-related anxiety levels based on Facebook use

Instructional-related Facebook use	Never	Rarely	Sometimes	Agree	Strongly Agree
Lesson-Related					
Creating a group on Facebook for the course worries me.	55.9	17.8	9.9	9.4	6.9
Using Facebook for the course panics me.	55.9	13.4	15.3	7.4	7.9
Using Facebook for announcements concerning the course worries me.	57.9	15.8	9.9	7.4	8.9
Negative comments of students on Facebook related to the course worry me.	22.3	13.4	30.7	23.3	10.4
The possibility of affecting students' success negatively through my insufficient sharing on Facebook regarding the course worries me.	20.8	17.3	30.2	19.8	11.9
It worries me that other people might post instructional sharing on Facebook by using my name.	21.8	12.9	19.3	26.2	19.8

5.3. Candidate teachers' privacy-related anxiety levels based on Facebook use

Privacy-related anxiety levels of candidate teachers regarding Facebook use is shown in Table 11. Of the sample group, 39.6% never worry when their location notifications on Facebook are seen by the students and the same percentage also never worry if the students would like to be in the same place as them in terms of the location notifications. In addition, 36.1% of candidate teachers never worry when their personal opinions are interpreted by the students. On the other hand, 28.7% of participants strongly agree that the possibility that others might hack their Facebook accounts is worrying. Furthermore, 27.2% of candidate teachers agree that the visibility of their private sharing may cause them to lose their discipline over their students.

Table 11. Candidate teachers' privacy-related anxiety levels based on Facebook use

Instructional-related Facebook use	Never	Rarely	Sometimes	Agree	Strongly Agree
Privacy-related					
It worries me that others might hack my Facebook account.	12.9	15.3	16.8	26.2	28.7
It worries me that my location notifications on Facebook are seen by my students.	39.6	19.3	19.8	13.9	7.4
It worries me when my personal opinions are interpreted by my students.	36.1	14.9	23.8	15.8	9.4
It worries me that my students would like to be in the same place with me regarding my location notifications on Facebook.	39.6	12.9	22.3	17.3	7.4
It worries me that the visibility of my private sharing would cause me to lose my discipline.	26.7	14.4	22.3	27.2	9.4

5.4. Candidate teachers' anxiety levels based on instructional Facebook use

According to the proportions in Table 12, 44.1% of the sample group stated that it is never worrying if they do not keep up with innovations on Facebook because of their usage insufficiency. The table also shows that 36.1% of candidate teachers never worry that their sharing on Facebook would be visible to other people because of their usage insufficiency. Moreover, 30.2% of participants stated that they are never worried that they might affect their students' success negatively because of their insufficient usage of Facebook. On the other hand, the possibility of not communicating with students on time because of personal insufficient Facebook usage has the highest proportion, as 19.3% of candidate teachers strongly agree.

Table 12. Candidate teachers' anxiety levels based on instructional Facebook use

Instructional-related Facebook use	Never	Rarely	Sometimes	Agree	Strongly Agree
Instructional-Related					
It worries me that I might not keep up with innovations on Facebook because of my usage insufficiency.	44.1	20.3	19.8	9.9	5.9
It worries me that sharing on Facebook would be visible to the public because of my usage insufficiency.	36.1	19.3	22.8	16.3	5.4
It worries me that I might affect my students' success negatively because of my insufficient usage of Facebook.	30.2	17.3	15.8	23.8	12.9
It worries me that I might not communicate on time with my students because of my insufficient Facebook usage.	21.8	12.4	19.3	26.7	19.3
It worries me to spend excessive time on Facebook because of its difficulty of use.	29.7	12.4	21.3	23.3	13.4

6. Discussion and Conclusion

At the end of the research, it could clearly be seen that teacher candidates quite often use Facebook for social networking. The results of the questionnaire demonstrated that the average time spent on Facebook was 15 minutes. The answers based on instructional use proved that most of the candidate teachers never panic about the quality of the posted content and the possibility of it being seen by people other than students. In addition, candidate teachers feel completely free and comfortable while creating network groups on Facebook. The answers based on the anxiety levels related to Facebook use pointed out that the chance of being hacked is one of the things that make candidate teachers worried. They do not worry about their location notifications being seen by the students. Considering the results with regard to instructional-related Facebook use proved that, in general, teachers do not hesitate about having poor skills when using Facebook. As can easily be seen from the results gathered through the questionnaire related to the anxiety levels on using Facebook for instructional purposes, the candidate teachers illustrated that generally they feel confident and do not experience problems. The study mainly highlighted that Facebook could be considered as one of the most effective and preferred network environments that could help teachers to communicate with their students.

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