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Positive and negative aspects of using social networks in higher education: A focus group study

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Social Networking Sites (SNS) have become popular among students and faculties, especially for all young population. SNSs are a relatively new technology, and little research has been conducted on the beliefs of the teacher candidates about using Social Network as an instructional tool. The study was conducted to find out for what purposes prospective teachers usually use SNSs in their daily lives, which learning methods can be used with SNSs and what positive and negative aspects of using social network in higher education are. 72 prospective teachers (14 males and 58 females) participated in the study. The focus group as a form of qualitative research method was performed to collect data, which were examined using content analysis method. Findings indicate that social network sites have some positive aspects and some negative aspects in terms of education. However, these negative effects of social network sites in terms of education can be eliminated or lightened using the cooperative learning approach.

Key words: Social network sites, cooperative learning, teacher education, prospective teacher.

INTRODUCTION

Most of higher education institutes continue to give education using traditional instructional tools. Some education institutes have integrated smart boards and projectors in the classes (Shi et al., 2003; Preston and Mowbray, 2008; Somyürek et al., 2009). These and similar technologies have been used in higher education for a long time. Faculties' reluctance is a major issue to integrate more recent technologies in education (Roblyer et al., 2010). A recent finding on educational technology use in teacher education programs emphasized that lack of interest of faculty is a major barrier to integrating technologies into teacher preparation. According to the National Center for Education Statistics (Kleiner et al.,

2007), 73% faculties that participated in the research stated that faculty reluctance was a main obstacle; a quarter of them said it was a moderate to major issue. Briefly, faculty members are not willing to integrate technologies in their classroom. One of the most important reasons of that problem is about how to integrate technology into the classroom environment that they do not use in their daily lives. However, social networking sites may change this. Many teachers and teacher candidates especially from young population use the social media in daily life. Two out of three of the world population visits a social network, and that rate is increasing rapidly (Halis, 2012). In recent years, the

social media known as Social Networking Sites (SNS) such as MySpace, Facebook, Cyworld, Bebo, Twitter, LinkedIn, YouTube and Instagram (Sewe, 2014) have become popular among students and faculties, especially for all young population. They have integrated these social network sites into their daily practices. Boyd and Ellison (2007) defined social network sites as web-based services that allow people to create a public or semi-public profile, add a list of other users whom they know in their own accounts, and view and revise their list of connections and those made by others within the system. Social network sites have common features. While signing up the first time, a person is asked to fill out application forms containing several personal questions. This information is generated under "about me" section. The visibility of the information varies according to user discretion and site administration. Some sites make profiles visible to anyone, other sites allow users to choose whether or not the viewer is a friend or has an account. Most SNSs also provide a tool for sending messages for a user to leave messages for their friends. Also users can write messages on the message board of SNSs that give options to the users to define whether the message is visible for friends, one has or does not have an account. Some have photo-sharing, video-sharing or document-sharing capabilities; while others have built-in instant messaging technologies that even support camera chatting.

Various website platforms have supported a wide range of interests and practices. It is kind of a new method of communication. SNSs are the fastest-growing and most popular form of the Internet-based technologies among young people (Roblyer et al., 2010). The characteristics of this innovation may lead to higher rates of acceptance among people. It is not unusual to believe that SNSs would be also popular among faculties. One of the reasons behind its popularity is that SNSs are communi-cation tools of new ages (Ellison, 2007). According to Ellison et al. (2011), many scholars from different fields have examined SNSs to figure out how to use them in practices, implications, and assessment for their courses. Many young generations think that if they want to communicate with the friends, they should open a Facebook account (Urista et al., 2009). Therefore, email accounts have been replaced by Facebook accounts. SNSs incorporate new information and communication tools (Boyd and Ellison, 2007); for example, smartphone apps, blogging, photo and video sharing and instant messaging.

The term "Social Network" was first coined by Barnes in 1954 (Akyüz, 2009). The emergence of the social media as a historical process began with Usenet founded in 1979 by Jim Ellis and Tom Truscott (Kaplan and Haenlein, 2012). Usenet is a discussion platform that allows users to send and take messages across the Internet (İşlek, 2012). The emergence of today's social media was established by Bruce and Susan who deve-loped Open Diary Web site in 1989 (İşlek, 2012) that allows users to write online diaries.

Classmates, the first social network articulating the lists of friends, emerged in 1995. SixDegrees is the first social network that allowed users to list friends, family members and acquaintances both on the site and external contacts invited to join the site (Boyd and Ellison, 2007). Boyd and Ellison defined social network sites as

Web-based services allow individuals to construct a public or semi-public profile within a bounded system, articulate a list of other users with whom they share a connection, and view and traverse their list of connections and those made by others within the system (p. 211)

Not only SNSs allow individuals to meet strangers but also make visible their social networks to others. This makes possible to meet with others; otherwise, it would not be made easily. This is not the primary purpose of using SNSs, but the features of the SNSs allow users to communicate with people (Boyd, 2007) who are a part of the social networks that their friends have or know. While there are several SNSs actively used, each of them has a wide variety of technical features allowing users to interact with differently, such as uploading pictures, enhancing their profiles, locating the place, adding multimedia content, or chatting online, etc.

Social Networking Sites (SNSs) are a relatively new technology (Boyd, 2007) and little research has been conducted on the beliefs of teacher candidates about using Social Network as an instructional tool. The study reported here was designed to gather information regarding feelings of teacher candidates about using SNSs as an educational tool as well as their thoughts about the use of social networks in higher education with which educational approaches. According to the ways of using SNSs, some of educational approaches can be integrated into social network sites to use for educational purposes. For example, blended learning, cooperative learning, student-based learning, mastery learning, project-based learning, critical learning, or life-long learning can be integrated in social network sites. The study was mainly conducted to find out answers to the following research questions: What purposes do the prospective teachers usually use SNSs in their daily lives for? What are positive and negative aspects of using social network in higher education? Which learning methods can be used with SNSs to eliminate the negative aspects of social networking in education?

METHODOLOGY

In the current study, the researcher employed focus group technique as a form of qualitative research methods. Focus group studies are used to listen and gather information in social studies (Kruger and Casey, 2009). Kruger and Casey (p. 2) suggested that the focus group technique is a way to better understand how people feel or think about an issue, topic or service. This way, opinions and

Table 1. Distribution of population of focus group interviews and the participants' views.

Group	Population	Male	Female	Using SN in education
1st group	13	4	9	Proponent
2nd group	6	2	4	Opponent
3rd group	7	1	6	Neutral
4th group	6	0	6	Opponent
5th group	7	2	5	Proponent
6th group	6	3	3	Opponent
7th group	5	0	5	Proponent
8th group	8	0	8	Opponent
9th group	9	2	7	Proponent
10th group	5	0	5	Opponent

Note: SN means Social Networks.

perceptions of people are gathered. Focus groups usually consist of 5-10 people who have similar thoughts about the research topic. A skilled interviewer led the discussion, prompted participants to share their ideas and perceptions about the research topic.

The research was conducted on the students who took the instructional material design course at Gaziantep University in the Spring Semester of the 2013-2014 academic year. During the semester the course was given in a blended way. Course topics were taught face-to-face and presented using Powerpoint slides. The course materials and Powerpoint slides used during the course were distributed via the Moodle-based learning management system (LMS). Prospective teachers taking this course had knowledge about Moodle LMS because they took *Computer I* as an online course through Moodle in the previous semester. During the course period of 14 weeks, in the first nine weeks theoretical and practical issues of the course were examined and taught, and in the last five weeks prospective teachers designed and created the course materials using instructional technology tools and presented their materials in the classroom.

At the same time, the process of this research was carried out in the last five weeks. Before conducting the research, during the course prospective teachers were informed about the research and its procedures. Afterwards, they filled out the social network survey online to determine their stances about social networks. The survey questions were taken from Robyler's (2010) research and were modified by the researcher to use in this research. The survey focused on whether or not each prospective teacher had a social network account, and, if so, how much and for what purposes they currently used it and whether or not they would use it in the future as an instructional tool. A copy of the survey is shown in Appendix A.

Based on the survey results and the prospective teachers' preferences, the focus groups were arranged and conducted. The population of each group and their supporting views are shown in Table 1. The interviews lasted for five weeks in total, two interviews for each week, and each section of the focus group interviews was audio-taped and transcribed. The interview section was not video-recorded in order to ensure the participants feel comfortable. The participants (proponents) in 1st, 5th, 7th, and 9th groups advocated the use of social networks for educational purposes and the participants (opponents) in 2nd, 4th, 6th, 8th, and 10th groups claimed that social networks cannot be used for educational purposes. Apart from these, the participants in 3rd group believed that using social network for educational purposes has some advantages and disadvantages.

Participants

The sample of the study consisted of 72 prospective teachers (14 males and 58 females). They were undergraduate students at Department of Primary Mathematics Teaching. The participants were selected from among 135 sophomore prospective teachers and the focus groups were set up based on the survey they filled and their preferences. The survey results were used to figure out who has positive and negative feelings towards a social network. The focus groups were created mainly based on the participant preferences, for example, they wanted to be in the group and their availability at the time the interview conducted. According to the survey, all of the participants had knowledge and experience about social networks. They used social networks on a daily basis, and some of them preferred to close their accounts when they started to go to the university. 16 of the prospective teachers who participated in the study did not have any social network accounts, and the rest of them had at least one social network account. The extra credits for the course were given to the students who participated in the focus group interviews to encourage them to join in the study.

Data Collection

In the study, the researcher individually interviewed prospective teachers using semi-structured interviews created for the purpose of the present studies. At the beginning of the study, the interview questions were created according to the literature review about social networks (Ellison, 2007; Ellison, Steinfield, & Lampe, 2007; Hargittai, 2007; Roblyer et al., 2010; İşlek, 2012). The other interview questions were prepared by modifying and updating previous interview questions at the end of the each meeting. The following questions are illustrative of the research questions asked to the participants: How often do you connect to SNSs on a daily basis? What purposes do you use social network sites for? Why do you perceive using social media in the educational process as negative/positive? Do you have any examples regarding this subject? Do you have any memories related to social networks leaving impact on you? If we want to use SNSs in education, how can we do that?

For the study, ten focus groups were conducted: four groups' members who believed that using SNSs in higher education has positive effects on learners, five groups' members who believed that using SNSs in higher education has negative effects on learners, and one group's members who believed that using SNSs

in higher education has both negative and positive effects. The prospective teachers filled out the perception about social networks survey, and based on the survey results, the focus groups were created. One faculty who had a lot of experience about conducting interviews led the interviews as an expert. When the views of the groups started to replicate, the interviews were ended. The focus group interview was performed on just one group who believed that SNSs have both negative and positive effects because it was not possible to find more prospective teachers with supporting both sides. Each group consisted of 5 to 13 participants. Each focus group discussion was audio- and video-recorded and transcribed. The audio and videos were transcribed by graduate students, and they overviewed each other's transcription. The transcriptions were analyzed using content analysis to create categories from the texts.

Data Analysis

The focus group interviews were transcribed, carefully examined and then coded (Boyatzis, 1998; Patton, 2002). The researcher, firstly, read the transcription and coded them based on the meaning of the text via using content analysis method. Then, the coded sentences were used to define the categories. Finally, the researcher collected the coded sentences with the similar meaning under the same category as shown in the Table 2. The reliability of the data was analyzed via member checks, peer debriefing and inter-rater reliability (Boyatzis, 1998; Lincoln and Guba, 1985).

Member Checks

Member checks can be defined as a process in which the transcribed data obtained from the participants are shared with the participants and are revised based on their comments (Lincoln and Guba, 1985). According to Creswell (2007), the participants play a major role to examine rough drafts of the transcription of the interviews and provide their opinions whether the transcribed data reflect the perceptions of participants. In this study, at least two prospective teachers, who participated in the focus group interview, read transcribed data and gave their opinions in written whether the transcribed data reflected their views and opinions. Furthermore, the researcher took the views of the participants about coding categories to see their views and what was missing.

Peer Review

It provides the view of someone from outside the study with knowledge about the research process (Creswell, 2007; Lincoln and Guba, 1985). A peer can help uncover taken for biases, perspectives and assumptions on the researcher's part. A peer, usually chosen outside the study but has knowledge about research methods and process, keeps the researcher honest by asking question about methods, meanings of unclear part of study and interpretations (Creswell, 2007; Lincoln and Guba, 1985). In the study, a faculty member from Department of Educational Sciences acted as a peer. The peer works in instruction and curriculum programs and has knowledge of the scientific research methods. The researcher and the peer examined the research questions, checked the transcribed data and discussed the coding categories together.

Inter-Rater Reliability

Inter-rater reliability requires at least two coders to apply the code or theme to the subsample from the sample. It determines the degree of consistency of judgments of the coders (Boyatzis, 1998).

The coders should have extensive knowledge about both research subject and research methods. The study was coded by the researcher and two more coders who were academicians in the field of educational sciences. In this study, the researcher created the codes by examining the transcribed data. The researcher and the two coders separately examined the transcriptions of the interviews and categorized the data through coding. During this process, the coders also tested the codes whether they covered the transcription of the interviews. These codes, the categories and the expressions of the researcher and the coders were compared crosswise. There was only one disagreement between the coders that was solved by discussion and adding one extra code into the coding categories. All codes are shown in the Table 2 below with the definitions handled from the focus group interviews. An inter-rater reliability of 94% was calculated.

In this study, the interview data were classified into two groups which are proponents and opponents of using social network sites for educational purposes. Therefore, the codes were divided into two categories which are positive beliefs and negative beliefs. Also, the codes under the negative beliefs were categorized into two subgroups as *direct effects on the users* and *indirect effects on the users.* The codes in the former subgroup define the actions that have direct impact on student behavior in terms of education. The codes in the latter subgroup define the actions that do not have direct impact on student behavior, but as a result, student's education will be affected.

RESULTS

Following the data analysis, the obtained findings were collected under the themes of *Negative beliefs* and *Positive beliefs.* The *Negative beliefs* are grouped into subcategories as *Direct effects on the users* and *Indirect effects on the users. Waste of time, Being asocial, Remaining under the influence of the thoughts of others, Distraction, Disturbing,* and *Privacy* are grouped within *Direct effects on the users* and *Entertainment, Gossiping, Giving beneficial and harmful information together, Addiction, Obligatory, Unreliable, Writing mistakes, Fake characters, Digital division, Plagiarism, Misunderstanding of an idea by the opponent,* and *No respect the to teacher* are grouped within *Indirect effects on the users. Announcements, Communications, Discussion, Motivation, Resources, Enabling restudying, Self-evaluation,* and *Easy to reach* categories are within the category of *Positive beliefs.*

Negative aspects of using social networks

In the focus group interview, prospective teachers were asked to describe the negative aspects of using social networks. The theme of the *Negative aspects of using social network* is explained in detail in Table 3.

Waste of time: It was concluded from the findings that the students have been using social networks to spend their leisure time. Most of the social network users often spend their free time in Facebook or similar social networks. Interestingly, although most of the users log in the social site for a short time, they unwittingly spend too much time there.

Table 2. Operational definitions for coding categories.

1. Negative beliefs (Harm to the user)	Definitions
a. Direct effects on the users	
Waste of time	Individuals spend all their spare time entering the social network by connecting through cell phones or computers. At the beginning while entering the social network, they have intention to spend for five to ten minutes but, unfortunately, it takes one - two or more hours.
Being asocial	Individuals, instead of coming together to talk face-to-face in the natural environment, prefer chatting or texting via the social networks.
Remaining under the influence of the thoughts of others	The ideas of individuals or groups are not formed in freedom. They remain under the influence of the thoughts of others. The thought, style, political view of the group become group members' thought, style and political view. Individual's thoughts are directed and manipulated by the group.
Distraction	Notifications or distracting messages are sent through social networks during the course.
Disturbing	People of opposite sex send messages and make unpleasant comments about the users.
Privacy	Individuals or groups easily share and write their own proprietary information, images, and thoughts on the social network environment. Shared information, images and thoughts are used by others without authorization.
b. Indirect effects on the users	
Entertainment	Individuals, in general, share and do things that they enjoy and like doing on social networks such as playing games, watching movies or similar activities.
Gossiping	The most of the information shared on social network is useless, not related to education. Individuals use a social network to chat or talk with each other.
Giving beneficial and harmful information together	Both the materials that can be used for educational purposes and the materials that can prevent education stay together in the same environment.
Addiction	Individuals consistently want to log in a social network. At any time, they want to enter a social network and use for entertainment and communication purposes.
Obligatory	Individuals who do not have a social network account and do not want to use a social network will have to use it.
Unreliable	Individuals behave frivolously and artificial in a social network environment. The things they write or share would not be credible.
Writing mistakes	The language used in correspondence on a social network is inaccurate and incomplete. The sentences are shortened and created using inappropriate words. The words in sentences are created with consonants without the use of vowels.
Fake characters	The individual acts like a person who wants to be in a social network. One who is quiet and introvert in his/her daily life can behave as a very active and social person through a social network.
Digital division	The lack of technological infrastructure restricts people to enter social networks.
Plagiarism	Copying and replicating an idea or thing that does not belong to you and share it as if it belongs to you.
Misunderstanding of the idea by the opponent	People cannot express their opinion to the other side and the other side misunderstands ones through social network during the discussion.
No respect to the teacher	The relationship between a student and a teacher in social networks become unofficial. The students do not show respect for their teachers and behave them as if she/he was a classmate.
2. Positive beliefs (Benefits to the users)	**Definitions**
Announcements	The dates, changes and important things related to the course are announced and introduced. Group members, who keep their social network accounts open, are immediately informed, and they can inform other group members.
Communications	Individuals and groups meet through social networks and they discuss, share and exchange ideas among themselves via social networks. They can know each other better by looking at these shares.
Discussion	Individuals and groups can freely talk with each other, discuss on particular subjects or questions via a social network that provides an effective learning environment. Social networks can be used as a forum to share their questions and provide aid to each other problem.
Motivation	Student presentations and group work recorded on a video and shared via a social network motivate students.
Resources	Course materials, exam questions, and other materials related to the course are shared within the group through a social network. Additional sources can be found from other groups sharing through social networks.
Enabling restudying	Individuals have opportunity to reread and review the course materials shared via social network.
Self-evaluation	A course material prepared by a student and presented during the course is shared through a social network. The student and the classmates can evaluate it through a social network.
Easy to reach	Individuals can connect to social networks using various communication devices to follow the course materials.

Table 3. Categories, frequencies, percentages and sample expressions related to the theme of Negative beliefs.

Categories	N	%	Sample expressions
a. Direct effects on the users			
Waste of time	9	90%	When ones log in a social network site, they deal with a lot of things and waste a lot of time
Being asocial	4	40%	Some users become asocial, not social, because they stay in front of a computer all day long connected with a social site.
Remaining under the influence of the thoughts of others	3	30%	Twitter and Facebook environments manipulate people's comments or feedback.
Distraction	4	40%	There are a lot of distractions. A shared topic falls to a main page. When a friend connects the site, the notification warning sign comes on the page.
Disturbing	4	40%	Nowadays people use technology to access the opposite sex so it becomes very distressing. Otherwise, social networks can be used for educational purposes.
Privacy	10	100%	People share everything on social networks. The privacy of people that should be something special must remain private.
b. Indirect effects on the users			
Entertainment	8	80%	If I get bored and want to deploy my head, I get stuck into a social network. You can play games, you can watch movies there.
Gossiping	6	60%	A social network is something like a rumor mill: people talk there about what one has done; what others have shared; been engaged or married to another? Where one went on vacation with whom?
Giving beneficial and harmful information together	8	80%	There is so much to do besides studying in social networks. Even if one signs in a social network to study course materials, he or she will most likely do other things.
Addiction	6	60%	Social networking is addictive. When you log in a social network site, you play games, follow others' comments, and get in touch with the world. You cannot leave when you want.
Obligatory	5	50%	Ones who do not use social networks must open social network accounts if lesson materials are loaded there and required to be downloaded from there.
Unreliable	10	100%	Someone stole my Facebook account and, using my account and my name, texted my friend, Merve. In this way, he/she tried to reach Merve's personal confidential information.
Writing mistakes	5	50%	The language of people used in social networks completely changes. While texting on a social network, people abbreviate everything in the text massages. Writing shifts towards bad words.
Fake characters	8	80%	People on social networks are tinged with fake personalities they want to be. I do not think they normally feel or behave what they pretend.
Digital division	8	80%	Some people do not have computers and Internet connections. What will they do when courses are delivered through social networks? They will not be able to follow the courses.
Plagiarism	4	40%	After completing an assignment, a student would share it on the website of another student group. Then someone may use it as his/her own assignment. It can be revealed by a teacher. However, if it is shared on a website that has open access to everyone, someone may use it as his/her own assignment. Also it is not easy to reveal it. There is nothing a teacher can do about it.
Misunderstanding of an idea by the opponent	3	30%	While a comment you write on a social network might be very simple, very normal for you, the other person can feel it in a very friendly manner, and this can lead to unwanted things.
No respect to teacher	3	30%	Facebook has a very relaxing environment. I think education requires an environment that should be taken more seriously.

Note: N shows the number of group.

The first focus group stated that "someone's statement comes as notification, and then when you look at one notification and then to another, it takes at least 20 min". The second focus group stated that "even though a lot of people enter the social networks for educational purposes, they deal with something else. When they log in the social networks, they say that "let me see a social network's activities before studying", then they do not get up in front of it. The fourth group said that "it is inevitable to talk with people who are online, and spend a lot of time looking at pictures and messages that were uploaded by your friends. It could be useful but not necessary". The sixth group stated that "the social networks are used to spend time, easy way to waste your time. It is something

for me to waste time. It is really addictive. In my opinion, one of your friends writes a message, then the second one, and then the third one writes messages. It takes hours to reply their messages and chat with them. It is impossible to do something on the social networks related to education". The eighth group said that "when I have any free time, I enter Facebook. It definitely cannot be used for educational purposes. Students sit in front of it and use it for things other than education. They may sit half an hour for educational purposes, but then they wonder what their friends are doing, and then they will be addicted to social networks".

In sum, nine of the ten focus groups stated that using social networks for educational purposes can lead most students to waste of their time. Students with social network accounts could prefer to spend most of their spare time surfing in a social network instead of studying course materials.

Being asocial: It was concluded that most users log in social network sites to become more gregarious. However, unfortunately they become asocial because people on the social networks do not do any common activity. They have little time to socialize due to spending all their spare time on social networks.

The second group stated that "people think they are social by entering the social sites, but I think they become very nerdy". The sixth and tenth groups stated that "Facebook makes people asocial because they sit in front of the Internet constantly and do not do anything common with another person. The eighth group stated that "Students always stay on Facebook, and they no longer have a relationship with the outside world. Facebook is students' everything; therefore, they cannot socialize. I think social networks should be removed to socialize students. Social networks are a major obstacle to socialize.

In brief, four out of the nine focus groups stated that social networks become an obstacle to students' socialization. Most students sign up for Facebook to socialize, but they become asocial. In addition, the time needed to socialize is spent in Facebook.

Remaining under the influence of the thoughts of others: It was concluded from the findings that people in a social network environment try to impose their ideas on others. There are many ideas consciously aimed at influencing the opposite party in form of innocent dialogs on the social networks.

The sixth group stated that "a subject on the agenda is getting hot, and then the subject is started to be shared among users on the social networks. After that the subject shifts to a different place. Anyone dealing with the issue is trying to impose their own opinions to others. People naturally like to spread their thoughts to one side. This is natural". The eighth group said that "although it seems as if everyone writes their own idea, I think they

are routed. Most of the time, they can be pulled in the direction desired. I think they are oriented in a very easy way on social networks like Facebook and Twitter. There are certain stereotyped things. Not only do a person but also groups and members have a certain way of thinking of which members of the group remain under the influence". The ninth group stated that "I think social networks are used for political and provocative purposes. We stay under all kinds of orientation including political, social, and economical. When we enter social networks, we share most of the things as if they were our own thoughts. These thoughts may be wrong. People who read the message have been directed politically, socially and economically. People read these messages, learn our thoughts on these issues, and so the form of their thoughts can be changed. I know a lot of friends who come up with just the issues they have learned on social networks to argue with me. These people do not learn the meaning of life, grew up with social networks and are deprived of social relationships".

In sum, three out of the ten focus groups said that social networks can be harmful to individuals whose ideas and thoughts are insufficiently developed. Students on a social network environment are exposed to the ideas including all kinds of political and illegal propaganda, and as a result their thoughts are affected. Especially at a young age, immature students can stay under the influence of this propaganda and their ideas may change or be blurred.

Distraction: It was concluded from the findings that a lot of users on a social network environment are exposed to various distracting stimuli which are pop-ups, statements, messages or announcement sent by others.

The first and seventh focus groups stated that "notification pop-up is coming when someone shares a new massage, which distracts us. We enter the social network to look at what messages come". The fourth group stated that "I think social networks have distracting environment. While dealing with something on social networks, messages or notifications directly come up from bottom of the screen". The fifth and sixth groups stated that "friends' shares fall on our pages on social networks that distract our attention. We wonder what our friends say, and we look at the messages". The tenth group stated that "when we connected the social network for education to receive educational materials, it was just a friend who shared something that distracted our attention. If your attention is distracted, education cannot be given. There are so many things that can distract your attention on social networks. Some course materials are discussed on the social network. While students write messages regarding topic of the debate, one of the friends posts a message. Therefore, students will start to answer their friend's message or their mind will be there. The debate is disrupted and is not performed as the course environment requires".

Taken together, four out of the ten focus groups stated that students' attention can be distracted by statements, messages or announcement sent by others that disrupt students' motivation and prompt them towards social network websites while studying a course material. Therefore, social networks are not an appropriate environment for sharing course materials and studying lessons because incoming messages, notifications and pop-ups distract and affect students' motivations.

Disturbing: It was concluded from the findings that the people of the opposite sex on social networks will cause disturbance to each other. One will bother by sending a message to the person whom one likes and has an interest in. Social networks help individuals feel themselves to be free and do things that they normally do not in their daily lives. One can easily send a text message to his or her interest in the opposite sex and this way can disturb him or her.

The fourth group said that "the last time someone wrote in the confession page that four girls laughed a lot in the linear course, you think you are so sweet, but you are unlovely and repulsive." The sixth group stated that "In this age, people usually have a tendency towards the issues regarding the opposite sex and use the social networks for this purpose that even gives more trouble among different genders, but the social networks can be used for educational purposes, too". The seventh group said that "you would like to study course materials on the social sites, but someone has stolen your photo or personal information and has used it for malicious purposes. At that moment your psychology is disrupted and you cannot study. There was a guy called Musa, adding everyone in his social network account and poking them". The eighth group stated that "People probably feel free and behave irresponsible against others on the social network environment. People may not be someone like that, but social network environment affects them to behave in this way". The tenth group stated that "At the end of the high school, someone sent me an invitation to join his social network. I refused the invitation. I received the invitation from the same person, and refused it again. He sent me a message and asked me to meet. I certainly did not reply any of his messages. Then he continued to send messages, wrote that 'this time you went this place, and did this or that".

Briefly, four out of the ten focus groups said that individuals used social network environments for different purposes. It is especially very common to use social networks to send a message to the opposite sex. If social networks are used for educational purposes, the possibility of disturbing the opposite sex by sending a message will raise.

Privacy: It was concluded from the findings that personal information can be easily learned from the social network environment. People still do not realize how unsafe social

networking is and the information put there can be accessed by anyone in some way.

The first group stated "People share every moment they live on Facebook or Twitter. It is not normal to share pictures on Facebook or Twitter if someone wants privacy". The second group stated "I think that there is no privacy in social networks. I do not like that everyone uploads pictures and shares thoughts about everything. The moment you put your personal information or pictures in the Internet environment, you lose your control over them. Twitter is worse. People share what they do on it: I ate lunch with my boyfriend; took a shower; combed my hair; I am on my way now, going to a concert". The fourth group stated "Primary school friends share some photos, even we are ashamed of them in front of everyone. There is one, you used to be a good friend and talk with him/her anything, keeping all the messages belonging to you. Then somehow, your friendship is disrupted but all the messages still stay in his/her account". The eighth group stated that "Someone can use messages or pictures you shared on social networks in a different way that you don't expect. Everyone does not have to know everyone's special things. Last time one broke my Facebook account, took my password and chatted with some girls from our class. The girls shared their private information. Therefore, when I met with them on my way, they were blushing for a week". The tenth group stated "when you say social networks, it reminds me of sharing the account of information about the lives of friends. People who are engaged share pictures of engagement and people who got married share pictures of the wedding. I think these kind of pictures should be private, should be shown to only special people who are your intimate friend, family members, or relatives. However, when you share the pictures on the social networks, not only your friends and relatives but also their friends can see them".

In brief, all of the focus groups stated that the social network environment violates the privacy, and information shared there is not secure any more. In addition, even if it is used for educational purposes, personal information of users can be reached. The students, who will use the social network, should be informed about the privacy of personal information and warned to be careful when sharing personal information before using it.

Entertainment: The findings showed that one of the reasons people open a social network account is entertainment. Social networks affect people's ideas when they decide for entertainment. For the entertainment purposes, they read the news, play games, look at the comments related with the newly released movies, even buy a book based on the comments written on social networks. The second focus group stated that "I read cartoons and play games when I log in social networks". The fourth and sixth groups noted that "I mostly enter the social network for communication, entertainment

and games. I opened the account for games. I have been watching various videos and chatting with my friends." The ninth group stated that "I enter social network sites for the purpose of entertainment. The best movies and book lists are shared so I follow them and read people's comments about them." The tenth group stated that "It is useful to relax. After a while, spending time on social network sounds fun. If you feel bored or have difficulty in something, and you want to deal with something, log in a social network and hang out there. In the social network environment, if I enter to enjoy the things, I do not notice the course materials.

In sum, eight out of the ten focus groups stated that "in general we are using social networks for fun. When feel bored, we enter a social network to have fun. Therefore, we do not think we look at course-related materials on the sites. Instead of studying the course materials, we prefer to enjoy with fun materials."

Gossiping: It was concluded from the findings that another purpose for using social networks is gossiping. People are doing each other's gossip in there. People follow who is doing what and then share them with other friends.

The second group stated "I live in the dormitory with five girls. They all have social network accounts and I did not see them using it for educational purpose. It is something like a rumor mill. They entirely chat on what has made, what others have shared, if one has engaged or married, where he went on vacation, or something like that." The fourth group stated that "There are also things such as confessions on the confession page. It is completely full of gossip." The eighth group stated that "Someone broke my Facebook account and chatted with the girls. My Facebook account after all consisted of many girls. But you have to see about what they talked; normally I am not talking such things face to face. The girls shared their privacy with ones whom they don't know." The ninth group stated that "Nowadays, gossiping is very common, mostly happening in the virtual world. Although it is not real, it has been done. I think the biggest reason of people's actions in the social network is curiosity. Because when I entered the social network, I wondered what my friends were doing, and checking their pages, following their actions. Already you can see everything that your friends shared. Even on the bus, you can tweet."

To sum up, six out of ten focus groups stated that social network users are generally gossiping on social networks. This environment is not suitable and very difficult to use for educational purposes. A person entering these networks for educational purposes can find himself/herself in the environment that someone is gossiping about him/her, or after a while that person may find himself/herself in the middle of the rumors."

Giving beneficial and harmful information together: It

was concluded from the findings that useful and harmful information in terms of education is given together in social networks. While trying to reach information, one can unintentionally reach the information that he/she does not want to expect and see.

The second group stated that "Social networking looks like that: one says you will get only the pen but besides the pen, a book, an eraser and etc. as a package are offered. So I just cannot take the pen. Besides these, harmful things exist together. The third, fourth and eighth groups stated that "course materials and other things outside of the course materials can be seen together on Facebook. There is so much to do apart from studying. Even if you enter the social network to study, you might deal with something else". The sixth group stated that "I do not believe that one can use it one hundred percent in education, I mean that it is not used for education or bad intentions, but maybe for the game or something else. For example, in our group, many things irrelevant to the courses are shared." The ninth group said that "Social networks are being used a lot outside of the meaning of education such as entertainment, comedy, horror as well as politics. It is more difficult to use it in terms of education. While we use social networks for fun, but if there are materials for educational purposes, we may log in them not only for fun but also for education."

In brief, eight of the ten focus groups stated that "the social network environment is not suitable in terms of education. There are too many things to do besides studying. While some people enter a social network to study, after a while their attention shifts to a subject other than education."

Addiction: The findings indicated that social networks have addictive effects on users. After a while users start to spend all of their spare time there. Even some of them spend every minute connected to a social network via cellphone.

The second, third, fourth and eighth groups stated "when entering the social networks, you play games, follow your friends' sharing, and connect with the world; all these things are addictive. You would like to look at social network accounts as soon as you connect the Internet or have spare time". The sixth group stated that "no, it is not a bit but too much addictive. Some people do not ever log out the site; people can reach social network sites via cellphones as well as computers." The tenth group said "I cannot stop myself from logging in Facebook and Twitter. I did not believe that when people said it is addictive, but it is. Every day I spend one hour for Twitter and one hour for Facebook. I use both of them on a daily basis. I am bound of them and cannot get away from them. For instance, I said this time I will freeze my account and stop to use it. OK, it is over this time but then I open it again. It is addictive."

To sum up, six out of the ten focus groups stated that "social networks can be useful for education, but they

make addictive impacts on the users. After a while, users become addicted and they spend all their time outside of class. After a while, students start to use social networks not for studying but for activities they become addicted to."

Obligatory: The findings indicated that some students did not use social networks because they found them to be detrimental or their family did not allow them to open a social network account. It is not acceptable due to personal rights to force these people to open a social network account.

The fourth group stated that "I have some friends whose parents did not want them to use the social networks in any case. If lessons are given on the social network, it will become necessary to open an account or they will be unable to attend classes. The eighth, ninth and, tenth focus groups said that "But it becomes compulsory to use social networks for students who do not have Facebook or similar network accounts. Even though they do not prefer, they are obliged to use it."

In brief, five out of the ten focus groups stated that "if the social networks are used for educational purposes, students who do not have social network accounts have to create a new one. This case will create problems for families who do not want their children to use social networks and for students who do not have a social network account. Therefore, students and families will oppose the use of social networks for the course."

Unreliable: The findings indicated that the environment of social network is unreliable. The users of social networks can easily lie to each other and send untrue messages. When they want to send a message, they write the message that the other party wants to hear.

The first focus group stated that "last semester some students consciously and deliberately transferred the homework questions and answers given by the course teacher to their friends incorrectly." The second and fifth groups stated "Social networks are frivolous and unnecessary. My Facebook account was stolen from someone, and this person using my account sent a message to Merve to try to get her private and personal information. My friend, Merve, thought that it was me and shared her private and personal information with the person. Because of that, Merve felt ashamed when looking at my face during one week." The third group said "one can open an account on behalf of others without getting their permission. My friend faced a similar situation. One signed up a separate Facebook account instead of her using her profile picture from Facebook and shared totally different topics, pictures, messages that embarrassed her." The fourth group stated that "the social networks have a very relaxed atmosphere; however, education requires an environment that should be taken seriously. I think nothing real exists on Facebook." The sixth group said "people share false information

there. For example, one said the exam time was at nine and another one said the exam time was eleven. I had never believed them anyway." The eighth focus group stated "For example; my cousin, because she was underage, opened a Facebook account indicating her age older in the registration process." The ninth focus group said "I have done things. For example, I posted my physics exam grade on the Facebook group. My grade was too low. It was 5 and I changed it by putting 7 on the left. It became 75. I did the same thing for a few more people, too. No one knew my real score in the class. That's why it cannot be trusted. Moreover, people believe what is shared there, and they think it is true in any condition."

In brief, all of the focus groups stated that social networks cannot be suitable for education purposes because they are unreliable. The users on the social networks gave wrong information to each other and there is no an easy way to control factors that create an unsuitable and unreliable educational environment. When students join social networks for educational purposes, they will encounter unexpected problems in an unreliable environment.

Writing mistakes: The findings showed that chatting and texting on social networks disrupt the language people use in daily life. Abbreviations used in texting are also started to be used in daily life, even in the school environment, which affects social network users' conversations and correspondence.

The second group stated that "people's use of language has completely changed. They shorten everything in messages when they text. Abbreviations shift to bad words later. The word "geleceğim" (I will come) turns into "glcgm" (I wll cm) when someone writes on Twitter or other social networks. The vowel letters are usually dropped and only the consonant letters stay in the sentence." The fourth group stated that "A corrupted language is used in social networks. Slang language is used a lot. I usually drop the vowel letters in a sentence and do the same thing in hand writing. Sometimes instead of dropping vowel letters in the sentence, I shorten some of the words." The sixth group stated that "there are always abbreviations. I sometimes do not understand the sentences written by combination of three or four letters and numbers. There is always abbreviation. "Mrb, slm, nbri npysn… (hll, h, wht r u dng)" They remove the vowels and write the rest. They write "slm" instead of "salam" and "nbr (wht's p)" instead of "naber (what's up)". Sometimes I really don't understand what they write. They write three letters and when you try to understand what it is, you understand that it is an abbreviation of a sentence."

In brief, five out of ten focus groups stated, "Chatting or messaging via social networks has different side effects in terms of education. According to the findings, if we try to give education on social networks, it will be seen that

students' writing could be corrupted largely, and they would shorten original sentences by using expressions instead of writing sentences. In addition to this, they would remove the vowels and write the sentences with consonants only."

Fake characters: It was concluded from the findings that individuals in social network environments try to behave like people they want to be instead of how they behave in reality and show their repressed emotions or behaviors. This causes individuals to do things that they are averse to do or don't do in their daily lives on social networks environments.

The second and eighth groups stated "People impersonate in different personalities on social networks. They hide their real personalities, use fake characters, and behave the way they want to behave. In reality, I don't think they feel like the way they behave. I have a friend who is shy and don't speak comfortably among people. But I cannot recognize him on Facebook. His attitude is very different and he behaves differently on social networks from his normal daily life." The third focus group stated that "Girls open boys' accounts and boys open girls' accounts. They open accounts by using others' photos to meet with the opposite sex. When it comes to introducing themselves, they explain their real identities. The ones who meet with them get shocked." The fourth group said; "We don't want to add people from our relatives to our social network accounts due to fact that we don't want them to know our different characters and talking styles." The sixth group stated; "If we search a name of a popular artist on Facebook, hundreds of pages appear. If the name we chose is a singer, all of these pages put fake concert photos from different places. Everyone pretends to behave the same as people they want to be or look like." The seventh group said; "On social networks, people may have self-confidence that they don't have in real life because self-confidence in real life needs courage, but courage in social networks doesn't require knowledge." The tenth group said; "Everyone can behave at their wills because their emotions aren't sincere but virtual. Because of the fact that people's minds are in a virtual dimension, they can speak with everybody at their wills. It depends on individuals since everybody's manners aren't clear there. In other words, people can show their manners that they don't show in reality, and they attempt to masquerade as different people. Thus, they aren't the same as they are in reality."

To sum up, eight out of ten focus groups stated that individuals display virtual behaviors in social network environments, and this causes inappropriate situations for educational usage of these environments. Providing a serious environment in these social network environments is a major difficulty because they behave very comfortably. In addition to this, knowing their real ideas about this subject may be tough due to their fake behaviors.

Digital division: It was concluded from the findings that connecting these social networks needs some hardware and the Internet. For instance, it is required to have computers, tablets, the Internet, smart phones or mobile phone connecting packages supporting the Internet connection. This causes individuals to have a certain economic level to connect social networks. Individuals not having this economic level can't follow any activities performed on social networks.

The first, third, fifth and tenth focus groups stated; "Every student needs a laptop, tablet or smart phone to share classroom materials on social networks. To give an example, I have to download a pdf file, and all smart phones may not be suitable for this and you can't do it. If students don't have their own computers, they may have to go to school every single time to follow their classes and to do their assignments." The fourth, sixth, seventh and eighth groups stated; "Having a computer isn't enough and there should also be an Internet connection. I have been staying in a dormitory for two years, and there is an Internet connection problem. I can't connect the Internet in dormitory. We have friends not having Internet connection at their homes."

Taken together, eight out of ten focus groups stated that students need necessary hardware and an Internet connection to use social networks for educational purposes. If students don't have the necessary infrastructure and an Internet connection, they would not follow the classes and that would cause negative discrimination.

Plagiarism: It was concluded from the findings that it is very easy to use something on social networks as if we have it, but we don't indeed. In the Internet environment, you can copy and share something you like on your social network, and you don't have to take any permission from anybody while doing this. While you are doing this, it is very hard to find out for the ones whose things you use. Many people use ready-to-use materials instead of creating some new ones.

The first group stated; "If we share the assignment in the school group and someone gets and uses it as his/her own assignment, it might be noticed. But another person from a different school takes and uses the homework in an environment open to all; therefore, it cannot be found out easily. After all, we can do nothing about it. In my view, if I am done with that homework, no problem for me if someone uses it. However, if the one who has taken my homework acts as if it is his own homework, it may be a problem in terms of education." The sixth group stated that "One website shares something, hundreds of people share it at the same time, and it used to be personal previously. Now you see that four or five people own it. It is unknown that whose idea it is. The weird thing is that some words are quite familiar, and we know whom they belong to. You see that he shows it as if it was his own saying. He creates such an impression. The eighth group stated that "people try to prove themselves on Facebook as well, and mostly they

don't do it by their own words. Well, writing other authors' words or a sentence that he has read from a book seems peculiar. It results in such a situation that the person cannot use his own ideas. Those are not his own ideas; he just copies and pastes the ones that he admires most. I think that nobody writes their own feelings there. That is, technology can be easily copied and multiplied after all. The tenth group stated; "In my opinion, to submit a sample study may be a problem like that: Then everyone would make his own work to resemble that one. It is also a risk. Here is an experience: One of my friends said to the other 'you had done that homework last year, give it to me and I'll have a look, the topic is the same any way.' and he gave the homework. He saw that it was exactly the same presentation; the receiver didn't change anything and presented it. I had seen similar events like that."

In brief, four out of ten focus groups stated that when the social media is used in educational fields, students tend to copy and use the materials prepared by others. Formerly used materials are copied by students, they do exactly the same or a similar one, and this affects their creativity and development. The use of these networks in educational fields causes an increase in plagiarism.

Misunderstanding of an idea by the opponent: It was concluded from the findings that communication via text messages on social networks leads to misunderstandings. You cannot express your feelings in a chat environment. A message that needs to be serious may be interpreted as trivial by the other party or vice versa.

The third focus group said: "when communicating via messages, you cannot transfer it duly to the other party. For example, if I write a message and I am angry, it does not mean anything to the other party emotionally. I write when I am angry or happy, but the other party interprets it according to his own emotional mood. He reads the message when he is angry, and he misunderstands my message in the end." The eighth focus group stated: "They said that it isn't a very good place. And when I asked why, they said 'yes, you can probably converse freely, but still their explanations are not so clear. When someone sent a comment, I couldn't write my own there." The tenth focus group stated: "a comment that you write on Facebook is quite normal, or does not cause a problem for you. However, another person may interpret it informally, and this might result in unpleasant situations."

In brief, three out of ten focus groups stated that discussion of an educational idea through social network may be challenging. People may misunderstand each other. Ideas regarding emotions cannot be transferred to the parties properly or may be misinterpreted.

No respect to the teacher: It was concluded from the findings that social networks enable people to act freely, and it hinders these networks from doing something that requires great attention. People act formally in face-to-

face contacts, but they cannot maintain this in a social network environment.

The second focus group stated: "I also think that the social network media disrupts the authoritative structure within classroom environment. Even a trivial improper behavior may disgrace the teacher, may put the teacher into an unpleasant situation. An example I witnessed indicates it clearly: At Dokuz Eylül University, we were under the control of the teacher in the network portal and the students mocked the teacher. One student treated his teacher as if the teacher was his Facebook friend, not his teacher. The fourth group said: "Facebook is a very comfortable place. I think education requires more attention. The teacher should be respected. It is non-existent in Facebook and social network environments." The tenth group said: "There is no discipline in the virtual world unlike the classroom atmosphere. That is, students are more familiar and relaxed towards their teacher than they are in the virtual world."

In brief, three out of ten focus groups opined that social networks are slack and loose environments; hence, it is improper to get benefit from them in educational spheres. Classes might start in a formal way but turn into an interview atmosphere where the teacher seems to be absent or is treated like a person attending a party. It is impossible to teach the students efficiently through grasping their attention to the topic in such an environment.

The positive aspects of using social networks

In the focus group interviews, prospective teachers were asked to describe the positive aspects of using social networks. The results of the interviews were used to create operational definitions for coding categories in Table 2. The theme of the *Positive aspects of using social networks* is explained in detail in Table 4.

The following dialogs taken from several interviews clearly explain how prospective teachers feel about using social networks for educational purposes. Furthermore, these dialogs have been used to create each category found out in the study.

Announcements: It was concluded that social networks are generally used for announcements. It is very useful to announce something to somebody. People using social networks certainly see the announcements first when they sign in social networks. Young people often use social networks. They certainly sign in social networks every day and follow daily activities, so it is enough to share an announcement on social network groups if someone wants to let people hear her/his announcement.

The first group stated: "Our friend, Pınar, announced that there would be a discussion in class and everybody came for it. If something is announced on Facebook, I can hear it in a short time even if I don't have the Internet connection. Moreover, if someone is online in Facebook,

Table 4. Categories, frequencies, percentages and sample expressions related to the theme of Positive Beliefs.

Categories	N	%	Sample expressions
Announcements	8	80%	I sign in my social network account for announcements every day. Especially, if we share something about announcements, everyone can be informed about that.
Communications	9	90%	I can send messages and share something with my friends. Everybody is there, so I can reach them by this way instead of messaging everybody. Generally, I use it for communication.
Discussion	7	70%	I can share my ideas about classes more comfortably there. Instead of discussing in classes, it would be better if we could discuss on Facebook.
Motivation	5	50%	If you tell us to record videos of our presentations and share them on a social network, we could prepare better materials. It would be motivating for us.
Resources	3	70%	Our friends share materials about classes before the exam s, and we study them. Previous exam questions are also shared on Facebook.
Enabling restudying	4	40%	We can study again and again because the shared materials are stored there. If the questions were answered before, you don't have to ask them again. You can see the answers on Facebook.
Self-evaluation	4	40%	If we could shoot videos of our class presentations and share them on a social network, I could see my own point of view, change my mistakes and develop myself.
Easy to reach	4	40%	It is very easy to reach social networks. Even if you don't have the Internet at your home, you can connect the Internet via your cellphones. Many cellphone operators give the opportunity to connect the Internet in a cheap and limitless way.

Note. N shows the number of groups.

I can see it and contact him/her. If I send a message, he/she can see and respond it. Interaction is much quicker and easier on SNSs." The third, fourth and fifth groups stated: "I always sign in for the announcements. If we share an announcement, everybody can reach it. For instance, if there is information about an event that is updated, it can reach you immediately." The sixth and eighth groups said: "Exam results are announced there, and we can be informed about them. For example; we can be informed about news, for example, 'something like a pop quiz would happen or there won't be a class tomorrow'. The ninth group stated: "We take invitations about activities such as a concert or meeting once a week. If there are events like these, Facebook can reach us easily. Sometimes, there can be announcements, and if there are materials related to the class, they are shared and announced there. The tenth group stated: "It is very useful for me to announce recent issues."

In brief, eight out of ten focus groups stated that they could use social networks effectively to announce something about classes, exam questions or exam results. It could be more effective to use social networks to inform students as most of them use them every day.

Communication: It was concluded from the findings that many young people use social networks as a new communication tool. They prefer social networks to communicate instead of calling people or sending them e-mails. Providing the opportunity to reach many people immediately is a reason to use social networks as a communication tool. Also, it gives the opportunity to find a person someone is searching for and send a message to contact him/her.

The first group stated that: "The message sent on social networks could reach more people because we can reach more people by social networks. Communicating with teachers on social networks somehow affects your relationship with them in daily life, and it can make your relationship deeper. The second group noted that: "It is decided which departments we would go before starting our universities. People look for their department's social network groups, and curiosity for finding friends in your departments starts. Then, they try to socialize there." Third group said: "Even if we don't know each other's cell phone numbers, we can communicate." The fourth group noted: "You can send messages to your friends and share something. Everybody is there, so you can leave a message there and reach them instead of sending a message to all of them." The fifth group said: "For example, our class has 95 students, and we don't know many of them. However, if we use Facebook, we can add them as our friends, and then we can talk to them after a while. We can share our ideas related to classes there more comfortably." The sixth group said: "I especially use social networks to find people around me and get information about them. As a result, I can know the people around me better there." The seventh and ninth groups said: "For example, I like to talk with my childhood friends. It was very easy to find them thanks to Facebook, and now we can meet. Sometimes I was talking to foreigners to improve my English. I had a friend that I talked and messaged regularly. There are some groups, and I follow what they share. I also share something. I don't add pictures to what I share, but I add wise sayings, my ideas, music and the things I like. The tenth focus group said: "It is nice to chat with friends. I

also use it for communication. Sometimes I use it for reading news and the comments people make. In other words, I generally use it for communication."

In brief, nine out of ten focus groups stated that social networks can provide students or student groups to communicate for educational purposes. The students who don't know each other in the class environment can meet on social networks easily. They can get information by looking each other's social web pages."

Discussion: It was concluded from the findings that another purpose of using social networks is it providing a discussion environment. The ones who are members of social networks can share information about different issues with each other. In addition, they can share their ideas comfortably because they aren't face to face.

The first group said: "There can be a question, or a topic which isn't completely understood in exams. Discussion environments could be created about this question or topic and information about these can be interchanged." The second group stated: "I like to have a look at something that one has shared and make a comment on it." The fifth group stated: "We can share our ideas about classes there comfortably. For example, we discuss like that; it would be better if we do that on social networks." The sixth group said: "If you check the comments that people make, you can see comments of some people who get over themselves." The seventh group said: "Some people were writing questions and the others were writing answers under these questions. Actually, I wasn't making comments actively but reading theirs." The ninth group said: "We could post on our wall the materials the teachers gave us and the ones we would present. Our friends could make comments about them like saying 'do this thing like that', so they can help us." The tenth group stated: "A very important event happens, and everybody makes comments about it. One of our friends, Oktay, wrote that he would take a course from upper classes and he couldn't decide which course he should take. Nobody knows him from upper classes, but many students wrote him about which course he should take by saying that the course instructor's stance in giving grades."

In brief, seven out of ten focus groups stated that it can be used as a discussion environment for education. Students can express their opinions in a more comfortable way and defend them courageously. The students who do not join the discussions in class can join these discussions thanks to social networks. These environments give more time to students to think. They express their opinions after they think about the subject. In addition to that, students can evaluate each other's opinions more comfortably this way.

Motivation: It was concluded from the findings that it makes people happy to share things about them on social networks. Therefore, people feel themselves happy because of the good things shared about them.

The first group stated: "But if you see yourself in the social network shown as an example, s/he showed you as a model. That can make you feel happy and you can share it on your page. It can be motivating. The third, fifth and seventh groups said: "It is absolutely a source of motivation. We take it more seriously." The ninth group stated: "Absolutely, it motivates us. If they see the assignment you did, they would try to do a better one. If our teachers told us to shoot a video and share it on a social network, we can be sure about that we have prepared a better material. I think it affects positively because it gives people ideas there. If you don't put all of them but just the ones you liked, it would be a gift for students."

In brief, five out of ten focus groups stated that it would make students happy to share their works on the social networks. Explaining students that their assignments would be shown on social networks might cause students to prepare assignments that are better, devoted and have a developed content.

Resources: It was concluded from the findings that social networks are rich in terms of content. It is possible to find something about you search for or you are interested in. It provides to reach different sources about different subjects. Social network users create groups about different subjects in accordance with their hobbies and share materials having rich content.

The second and third groups stated: "Something related with the courses or exams can be easily shared, especially last year we did that. For example, I had exam preparation questions for distance education courses in English, and I shared them on Facebook." The fourth group said: "Again they put the content. They shared the exam questions. We used them for sharing our knowledge." The fifth group stated: "There are many different groups. For example, there was a group about language learning. You share the link there, and everybody in the group knows it. There are many materials you can find there." The seventh group stated: "Sometimes I don't know where my class notes are. For example, I'm looking for the notes of algebra for the summer school. I can find them there easily." The ninth group said: "Much information comes out in exam terms. Our friends share the information about our classes or other instructors' classes. The exam we had is already here, so they can take a photo of it and share it. When we find notes, we share them there."

In brief, three out of ten focus groups stated that they can use social networks for education. School materials, class materials of previous years and exam questions can be shared on social networks. Nothing happens to these notes in there, so new students can use the same materials. Student groups can create their own groups and share the entire common materials during a term on the network.

Enabling restudying: It was concluded from the findings

that they have a chance to see the materials again which were shared on social networks. The materials shared on social networks can be seen by users whenever they want.

The first group said: "We can analyze previous presentations and prepare our presentations according to this. There can be many people who want to ask the same question." The third group stated: "The advantage is that the question which was asked before stays there, and if people have similar questions, they can visit the website and learn the answer." The fifth and ninth groups stated: "They can study the subject two or three times. They can study whenever they want. There is no time limit like day and night, and no need to come to school. There isn't time limitation, so we can use it in terms of communication."

Briefly, four out of ten focus groups stated when it is used for education; it provides students with using the materials again and again. There is no possibility of losing the materials shared by students on social networks. Until the person who uploaded the material removes it, it can be stored on social networks.

Self-Evaluation: It was concluded from the findings that the materials shared on social networks may help students to evaluate themselves. A presentation that students can shoot can be shared on social networks. It helps students to evaluate themselves. At the same time, as other students have a chance to watch the video, they can prepare better materials.

The first group stated: "According to my point of view, if my presentation is recorded to a video and shared on the Internet, I can see my faults; I can try to fix them and improve myself. It can be motivating not to do the same mistakes again." The third group stated: "If you share my video on the Internet, I carefully watch it and evaluate myself. If I encounter a problem on my presentation, I will try not to do the same thing again. I can also consider the comments about my video even if they don't reflect the reality. This may help people who will make presentations later." The fifth group said: "You do not know how you behave in front of your friends and teachers, how you speak and what you say about a topic. Therefore, a video recorded and uploaded on social network may help you to realize how you behave in the classroom and evaluate yourself." The ninth group stated: "It would be better if students write their own criticisms. We would have the chance to evaluate the material we prepared at the same time. I could see how, why and where I used something."

In brief, four out of ten focus groups stated that social networks help students evaluate themselves. Students can see the materials on social networks and evaluate themselves."

Easy to reach: It was concluded from the findings that one could connect to social networks in different ways. It is possible to connect them by necessary hardware with the Internet. We can connect social networks with a lot of

devices such as computers at our homes or workplaces, tablets, or mobile phones.

The fifth group stated: "There are some students who are always on Facebook because it is very easy to connect to it on his/her mobile phone. If class materials are shared on Facebook, we can download them easily. If we don't connect to the Internet at our homes, our mobile phones can connect to Facebook, so we can download them. You can buy a mobile phone line with just Facebook connection. They cannot reach websites, but just log in Facebook." The seventh group said: "I can connect to Facebook, but I cannot connect to the websites created specifically for the course." The eighth and ninth groups said: "I was connecting to social networks with a computer before, but now, I connect with my mobile phone. I used to them when there was the Internet, but now I can even connect on a bus. Everybody may not have a computer, but I don't think nobody does have a mobile phone."

To sum up, four out of ten focus groups stated that having a mobile phone is enough for them to use social networks for educational purposes. They can do all the activities with their mobile phones on social networks. In addition, students can join activities shared on social networks from every place with the Internet.

DISCUSSION AND CONCLUSION

According to the findings gathered in the research, it was concluded that prospective teachers who participated the research mostly use social networks to spend their free time. Because there are lots of stuff to spend time on, they do not realize how the time passes when they hang out there. When they are bored, they use it to play games, watch movies, and relax. To sum up, they use it to have fun. Although the findings show that the ones who participated in the research think that social networks set aside privacy, it has been seen that most of them share their private things there. Another reason of students' using social networks is to gossip. As they feel that nobody tracks them on social networks, they feel more secure and try to share everything there. They can say things that they cannot say in their daily lives easily there. Another aim of using social networks is to share their ideas. They use them to join groups whose ideas are similar to theirs and discuss their ideas. They feel more comfortable when they are in groups consisting people who have similar ideas, and they can share all of their thoughts easily. In addition, as social networks are places to communicate for them, they believe that when they want to reach their friends and share something with them, they do this on these social networks.

The second question of the research is what positive and negative aspects of using social networks in higher education are. The findings related to that question are that social network sites have some positive aspects in terms of education. However, it has some negative

aspects as well. In the current study, the negative aspects, which have been found from the analysis of the interviews, can be divided into two groups. The first one is that when social network sites are used as a learning environment, it directly harms users in terms of education. The second one underlines that social network sites do not directly harm users, but at the end, users are affected negatively in terms of education.

The third question of the research is which learning methods can be used with SNSs to eliminate the negative aspects of social network in education. I argue that these negative effects of social network sites in terms of education can be eliminated or lightened using various educational approaches such as blended learning, cooperative learning, student-based learning, mastery learning, project-based learning, critical learning, or life-long learning can be integrated into social network sites.

In most of the focus group interviews, the prospective teachers mentioned that each class had its own group on SNSs easily created by one student. The classmates shared many things on the SNSs group related to the class, such as course materials, exam results, course assignments, and so on. The prospective teachers noted that they preferred to use SNSs group because it is easy to create, easy to join, and easy to use. Besides this, when using SNSs for educational purposes was mentioned, the first thing came the prospective teachers' mind was to create a group on Facebook and share course materials there. SNSs allow to create small or large groups. Given division of the class into groups to study as teams (Slavin, 1996; Felder and Brent, 2007), one of the first learning models which need to be considered is cooperative learning teaching strategy.

Adapting cooperative learning in SNSs may be one of the best solutions to eliminate the negative effects of SNSs in many ways. In cooperative learning, students work in small groups to help one another to have mastery on academic content (Slavin, 1996). There are many forms of cooperative learning depending on duration and tasks (Slavin, 1996) that affect the size of the groups (Ormrod, 2004).

Kagan (1994) listed the benefits of cooperative learning as: group members learn from each other; all group members share a common endeavor that improves cooperation; groups know that everyone's performance is needed to be successful; groups celebrate and feel proud of the achievement of a group member, which means that the success of a group member is attributed to the group. Felder and Brent (2007) argued that cooperative learning can be used for any type of assignments given to students in classes, laboratories, lectures or project-based courses. Several research studies conducted in higher education about cooperative learning resulted in positive findings for a variety of cognitive and affective outcomes (Johnson et al., 1998; Bowen, 2000; Johnson et al., 2000; Cabrera et al., 2002; Felder and Brent, 2007).

Therefore, cooperative learning approach integrated into social network environments was thought to be more effective to eliminate the negative effects of the SNSs used in education. Further research may focus on which learning approach integrated in SNSs can be more effective in education.

For this purpose, the description of cooperative learning and some critical features are going to be given. Then, how cooperative learning approach eliminates or lightens negative effects of social networks in education is going to be described.

Cooperative Learning

Cooperative learning is a learning approach to organizing classroom activities into academic and social learning experiences (Slavin, 1990; Kagan, 1990) that involve students working in teams to accomplish a common goal (Johnson et al., 1998). In cooperative learning, students work together to learn (Slavin, 1996) and complete common tasks collectively toward academic goals (Ormrod, 2004). The students are responsible for not only one another's learning but also their own. Cooperative learning focuses on group members' resources and skills. The group members can explain assignments for one another, aid one another with class notes, evaluate one another's ideas, and track one another's work. Moreover, the teacher's role changes from teaching to facilitating students (Johnson and Johnson, 1994). In order to be successful in cooperative learning, teachers must design course activities in such a way that cooperation helps to achieve group goals in the given task. According to Omrod (2004), some critical features of the cooperative learning can be summarized as:

- Groups are typically comprised of two to six members, relatively heterogeneous in makeup (include male and female, high and low achievers, various ethnic backgrounds)
- Groups have one or more common goals to achieve successfully. At the beginning of the cooperative group activity, the goals should be clearly defined by the teacher.
- Group members should be acknowledged how to behave in cooperative learning so that they achieve their goals successfully together.
- Teachers monitor interaction of each group and guide them to become productive and social. Teachers also serve them primary resources related to course.
- Group members are rewarded for the group success; therefore, one helps another understand the material being studied.

Integrating Cooperative Learning into Social Network Sites

The instructor divides the class into heterogeneous

Table 5. Eliminating negative effects of social networks in education using cooperative learning model

1. Positive effects on negative beliefs	
a. Direct effects on the users	
Waste of time	Cooperative learning requires group working. Each individual is responsible for the group members since it is group working that will channel individuals in the group to use the social network for educational purposes. Therefore, the individuals are going to spend most of pursuit for the course on social networks. Members of the group stimulate one to another to motivate to study when they log in a social network site.
Being asocial	Being asocial drawback of social networks will continue since course will be processed via social network.
Remaining under the influence of the thoughts of others	Group members motivate each other to study the course materials so that they more like logging in social network sites to study instead of spending time with other groups.
Distraction	Although distraction on social networks cannot be avoided, the group members can prevent dispersion of motivation to stay online for studying. Each group member is responsible for a specific duty to do that keeps them focusing on course materials. Also, the group members check each other to prevent them from being affected by distracting messages.
Disturbing	Although disturbing cannot be avoided on social networks, the group members can prevent dispersion of motivation to stay online for studying. None bother each other within group since each group is comprised of 5 or 6 people who are well-known each other. Also, the group members check each other to prevent them from being affected by unpleasant comments or messages.
Privacy	Privacy issue can simply be avoided by informing individuals how it may affect their life. If individuals know that sharing personal information on social network may cause what kinds of problems, they will not share it on there.
b. Indirect effects on the users	
Entertainment	Group members are responsible for each other and they need to spend a lot of time for the group works. It is impossible to prevent students from playing games, watching movies or dealing with similar enjoyable activities. But group members know that everyone's performance is needed to be successful and leads them to study instead of attending other activities.
Gossiping	Group members are responsible for each other, and this will lead group members spend a lot of time together. An environment for gossiping does not occur because the groups are small. Therefore, they use social networks to communicate with the group members to do group assignments, rather than chatting.
Giving beneficial and harmful information together	It is impossible to prevent harmful information on social networks. However, group members meet each other to engage in extra-curricular activities on social network sites. Group control mechanics help group members follow beneficial information.
Addiction	Addiction to social networks is one of the biggest problems but if students log in a site to study, it is not a problem. Entertainment and communication features keep people on the site, they cannot easily leave and thus become addicted. Cooperative learning divides students into small learning groups that use SNSs for communication and sharing documents related to the course. Group members control each other and do not allow them to spend their time for games in order to be successful as a group.
Obligatory	It will be obligatory that students create an account for social network to study the course materials created for cooperative learning. If it is only used for the desired direction, that is, cooperative learning, that will contribute to students' learning.
Unreliable	It is a small possibility of individuals to misinform each other because group members will only be dealing with group members and be responsible for each other learning. SNSs will be reliable sites if they are used for educational purposes, and each group member communicates only with other group members.
Writing mistakes	Individuals use proper language on the sites in order to be graded for the activities done on social network sites. Spelling mistakes occur when people think that the environment is informal. If students know that they will be graded based on the activities they perform on the SNSs, they will use standard language free from mistakes.
Fake character	It is a small possibility of individuals to introduce themselves in the wrong way or the way they would like to be known because group members will be dealing with the individuals from the group they belong to.
Digital division	Digital division is always a challenge for web-based training. Individuals who agree to take courses through social network sites must admit to have a computer and the Internet connection for these courses. Otherwise, digital division will be a problem for online education.
Plagiarism	When individuals are going to be graded as a group, the group members will control each other and will not let them break the regulation of the school rules.
Misunderstanding of an idea by the opponent	Each group is comprised of a small number of people, so it will be easy for them to understand each other. They also can make videos or voice calls with each other through social networks to clear up misunderstandings.

Table 5. Contd.

No respect to the teacher	The relationship between teachers and students does not change because the teacher does not deal with students on social networks. The students use SNSs for group works. The success of group member affects the other members of group. Therefore, they should show respect to each other and the teacher, too.

groups which comprise five or six students. Each group includes male and female students, different ethnic groups, and students with different learning levels. This provides that hard-working students will help weak students in the group. The instructor provides the expository information related to cooperative learning. It is stated that each student is responsible for his/her own group, and the grade of group will affect each student in the group. Afterwards, each group creates its own social network group, and the teacher is added as a guest user. Thus, the teacher can monitor the movements of students on the social network but cannot intervene. The teacher, also, adds the course materials and activities on the social network. The students learn the course materials more permanent with the help of group members and their interaction. At the end of each chapter, section assessment to evaluate the group and group members is done. The effects of cooperative learning model on negative characteristics of social networks in terms of education are as follows in Table 5.

What makes Social Network Sites attractive is addressing people's curiosity. People are curious about things that related to others, and this way, people can learn about others easily through social network sites. Because of this feature, many people spend a lot of time on SNSs. Indeed, as demonstrated in Table 3, the groups commented mostly on "waste of time" and "privacy" issues. We need to prevent these negative features in order to use SNSs in terms of education. To prevent these, the researcher used grouping feature of cooperative learning. Since each member of groups is responsible for one another and the success of each member affects the group's success, the researcher tried to prevent the negative effects of SNSs by a kind of control mechanism constructed in the groups.

In addition, people deceive others by using false information on SNSs to get benefits through others. The findings of the research, such as Unreliable, Fake characters, Gossiping, Plagiarism findings as shown in Table 3, supported this argument. In this sense, before using SNSs environments for education, students need to be educated on this issue and warned beforehand.

Today, social network sites affect young individuals in a negative way. Many of young people spend their valuable time in social network sites instead of socializing with people who live around of them or learning new things. As found in the research, SNSs have several negative effects on young generation, and the results of many other studies are consistent with the findings of this research (Ellison et al., 2007; Hargittai, 2007; Kirschner and Karpinski, 2010). Unfortunately, revealing negative aspects of social networks does not warrant its use in terms of education. Instead of this, it is more important to focus on positive aspects of social networks and look at how we can use them for educational purposes. In addition, research on how to overcome the negative features of SNSs is important in terms of education. In fact, the researcher found out negative points of SNSs and has attempted to propose the learning model to remove them in this research.

It is possible that by using the right learning model, these people can be led to use their valuable time to study on a new subject and learn something new. For that reason, cooperative learning model thought as an alternative model can be integrated into social network sites and the features of cooperative learning can be used to eliminate the negative features of social networks mentioned in Table 2. This study is also important in terms of indicating the direction of future research studies on how to use SNSs in education.

In a further study, one course can be designed using the cooperative learning model, and the course activities can be modified in an appropriate way. The course will be taught using the materials designed for the cooperative learning model via social network sites. The results of this future study may give us more detailed information about positive and negative aspects of using the cooperative learning model in social networks. In addition to that, which courses are suitable for teaching on social networks and which ones are not could be another research topic. The final suggestion is that other learning models can be integrated into SNSs environment and applied on students, and then the results can be compared with other learning models.

Conflict of Interests

The author(s) have not declared any conflict of interests.

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Appendix A. Social Network Survey

Directions

The purpose of this survey is to gather information on students' use of social networks and to understand students' perceptions of using social networks as an instructional tool. Please fill in the gaps and select an answer.

This survey has only nine items and should take you no longer than 5 minutes to complete. Please feel secure, any information from the survey will not be shared with anyone or any institution.
Thank you for attending this survey!

1.   Name and surname: _____
2.   What's your department/major? _____
3.   What grade are you this year?
○ freshmen,   ○ sophomores,   ○ juniors,   ○ seniors
4.   **How old are you?**
○ **18,**   ○ **19,**   ○ **20,**   ○ **21,**   ○ **22,**   ○ **23 and above**
5.   **Are you?**   ○ Male   ○ Female
6.   **Do you have a social network account?**   ○ Yes   ○ No (Answer only the question 9)
7.   On average, how many times each day do you check your social network account?
○ Less than once a day ○ 1-5 times a day   ○ 6-10 times a day
○ 11-15 times a day   ○ 16-20 times a day   ○ More than 20 times a day
8.   For what purposes do you check your account? (You may choose more than one answer.)
○ Keep in touch with friends   ○ Let others know what is happening in my life
○ Communicate with my students on class projects or assignment
○ Connect with people I have lost touch with   ○ Do career networking
    Other (please specify) _____
9.   What are you feeling about using Social Networks as an instructional tool? (You may choose more than one answer.)
○ It would be convenient.
○ I would welcome the opportunity to connect with students on Social Network.
○ Social Network is personal/social - not for education!
○ My privacy would be invaded
○ I don't care
    Other (please specify) _____