

Examination Of Student Opinions On The Use Of Social Media In Educational Environments

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Abstract

This study aimed to determine the use of social networks in educational environments from a student's perspective, for which 57 students at Kastamonu University, Kastamonu Vocational School, Department of Nursing and Care Services, Child Development Programme and taking Educational Tools and Development course were interrogated. The students were asked to use Facebook, which was among the most used social networking sites in Turkey. A group of administrators were selected based on volunteerism among the students enrolled in the course. A closed Facebook group was created for these students. Each week, the students posted the images of the materials and their ideas of the new course material in this closed group. Other fellow students shared positive or negative criticisms about these posts by stating their reasons. The course instructor commented on students' new ideas. At the end of the 15-week course, students' opinions were gathered via semi-structured interview form and evaluated using a content analysis method. A total of 724 statements of opinion were obtained according to the research results. These expressions were collected under Technological Advantages, Negativities, Influencing Classroom Communication, Factors Considered in Commenting, Idea and Project Sharing.

Keywords: *Social media, Facebook, material development course*

Introduction

Many innovations have come to the fore in the 21st Century in the field of information and communication technologies. One of them is the emergence of some new techniques and applications that transform users into active participants instead of passive recipients in the information building process (Amasha & Alkhalaf, 2017). Social networking sites (SNS) are particularly popular among youngsters (Fewkes & McCabe, 2012). Kaplan and Haenlein (2010) defined social media as 'a group of Internet-based applications that build on the ideological and technological foundations of Web 2.0 and that allows the creation and exchange of user-generated content' and have classified the existing social media as follows:

Table 1: Classification of social media based on social presence/media richness and self-presentation/self-disclosure (Kaplan & Haenlein, 2010)

		Social presence/Media richness		
		Low	Medium	High
Self-presentation/Self-disclosure	High	Blogs	Social networking sites (e.g. Facebook)	Virtual social worlds (e.g. Second Life)
	Low	Collaborative projects (e.g. Wikipedia)	Content communities (e.g. YouTube)	Virtual game worlds (e.g. World of Warcraft)

Nowadays, people not only need online networks connections but also feel obligated to be connected to their SNS that offer a wide range of services (Kanthawongs et al., 2016). People join social media sites, create profiles, connect with existing friends, maintain communication and interpersonal relationships, update various events, share photos, archive events, receive news about their friends, add new friends, inform friends or family members about new developments (Civicevic et al., 2016).

970 million users registered on social media in 2010; this figure reached 2.62 billion in 2018 and is estimated to be 3.02 billion in 2021. As of April 2018, the most used SNS include Facebook (2.234 billion users), YouTube (1.5 billion users), WeChat (980 million users), Instagram (813 million users), Tumblr (794 million users), QQ (783 million users) and Twitter (330 million users) (Statista, 2018). As of January 2018, there are 51 million active SNS users in Turkey, equivalent to 63% of the total population. These users spend an average of 2 h 48 min per

day on SNS. The widely used SNS in Turkey include YouTube (44 million users), Facebook (41 million users), Instagram (37 million users) and Twitter (29 million) (Weareinsocial, 2018).

SNS offer advantages to students, such as sharing information, asking for help and questions to fellow students. Instructors can get access to students even outside school (Mazer, Murphy, & Simonds, 2007), use SNS as a forum and a blog (Barczyk & Duncan, 2013) as well as a learning management system (Manca & Ranieri, 2013).

Social media tools are a powerful means for changing teaching and learning practices in terms of openness, interaction and socialisation (Manca & Ranieri, 2016). Students use Facebook for leisure activities and not for educational purposes. Facebook apps are used less for educational purposes and more for connecting with friends (Kanthawongs et al., 2016). There is no direct connection between the intensity of Facebook use and the academic performance of students (Jankovic et al., 2016; Lambic, 2016). However, several studies mentioned the positive effects of using Facebook for education (Ainin et al., 2015; Irwin et al., 2012; Shih, 2011).

Using collaboration tools and interaction opportunities of Facebook, this study was conducted to determine the opinions of the students regarding the usage of Facebook in material development for educational purposes.

Method

Study Group

The study group comprise 57 second-year students enrolled in 'Materials and Education Development in Education' course in the Child Development Programme of the Kastamonu University Vocational School of Higher Education during the 2017–2018 spring semester.

Process

The research was performed for 15 weeks during the 2017–2018 spring semesters. The course was held face-to-face for 5 h per week. After the course, students shared the necessary changes in their work, the new ideas they wanted to implement, every step taken to achieve these ideas, the materials they used in the closed group created on Facebook. The friends of the students, and when necessary, the instructor responsible for the course, contributed to the sharing of the students by commenting. Students were given the opportunity to criticise the works of their friends in the Facebook group. After the practice, the interview form was used to obtain students' opinions about the course. Three expert opinions on the interview form were taken, and the form was finalised in line with expert opinion.

Data-collection Tool

The data were collected from students with an open-ended interview form, which comprised the following five questions:

- Q1) What were the advantages of using SNS during this course?
- Q2) What were the disadvantages of using SNS during this course?
- Q3) How did using SNS in this course affect classroom communication?
- Q4) What were the things you paid attention to when commenting on the work of your friends on SNS during this course?
- Q5) What type of contribution did your friends share of their work and ideas on SNS with you during this course?

Analysis of Data

The data of this study were obtained with open-ended questions in the interview form. Participants were asked to write their answers in an itemised format. The contents were then analysed in detail considering the similarities and differences between them, and similar data were collected under the categories (main category) determined during the analysis. Subsequently, these data were re-examined and subcategories were created under the main categories (Yıldırım & Şimşek, 2011). Based on this practice, the method can be called as content analysis (Weber, 1990).

Content analysis is a systematic, repeatable technique, in which certain words of a text are summarised by small content categories using codes based on certain rules (Büyüköztürk et al., 2008).

Grounded theory methodology was used for data analysis. Some opinions of the participants were included in the findings of this study. The anonymity of the participants was maintained according to research ethics. While including their opinions, participants were given codes starting with K and indicating their number.

Reliability Study

The draft of the interview form was prepared by discussions and joint opinions of two researchers. This draft form was presented to the expert, and the form was finalised according to the feedback received. A pilot study was conducted with two students to draft a preliminary test of this form. The students stated that the questions were clear and understandable.

Two researchers formed the main categories and subcategories by discussing the data codes at each stage of the content analysis. The coding under the generated categories was presented to two different evaluators who reviewed the coding independently. As a result of the evaluation, it was considered as ‘agreement’ if evaluators agreed with the coding and ‘disagreement’ if they did not agree. The following formula was used to calculate the reliability of coding (Miles & Huberman, 1994): $\text{Reliability} = \text{Agreement} / (\text{Agreement} + \text{Disagreement})$. Reliability calculations were made separately for each sub-problem, which are listed Table 2.

Table 2: Reliability coefficients for the questions

Sub-dimensions	Number of Sentences	Reliability Coefficient
Technological Advantages	221	0.94
Negativities	88	0.82
Influence on Classroom Communication	143	1
Factors Considered on Commenting	117	0.87
Factors Provided by Idea and Project Sharing	155	0.86
Total	724	0.91

Thus, the coding was reliable because the reliability coefficient of coding for each sub-problem was >0.70 . Moreover, until all the reliability coefficients were 1, the researchers discussed the remaining sentences until they reached an agreement.

Results

This section discusses the findings in detail to provide the integrity of the study.

Findings Related to Advantages

Table 3 lists the findings related to the advantages of the using SNS during the course according to university students.

Table 3: Descriptive statistics of the advantages of using SNS during the course

Categories	Frequency
1. Personal Development Benefits	26
2. Easy Tracking of Posts	66
3. Enhancing Communication	18
4. Cooperation / Exchange of Ideas	31
5. Customisation of Materials	30
6. Detecting / Correcting Errors	33
7. Follow-up of Announcements	4
Invalid Statement	13

The students’ responses are divided into seven themes, as shown in Table 3. The first theme was ‘personal development benefits’. One of the students (K1) said that ‘It improved my self-confidence, and my knowledge has increased’. The following statements can be given as examples for other comments: ‘...a better and more functional material development process has occurred’ (K53), ‘... made the activities that I did more creative’ (K3) and ‘made our ideas grow’ (K50). The second most common theme in student comments was ‘easy tracking of the posts. A student (K43) mentioned that ‘I did not have to bring material to school constantly’, whereas another student (K45) said that ‘we have shared every detail of the material we made’. Examples for ‘enhancing communication’ theme can be given as ‘it has provided healthy communication’ (K46) and ‘the instant access of the instructor to the materials we made ensured efficient use of the time’ (K50).

The fourth theme was ‘cooperation/exchange of ideas’. An example that can be given to this theme is ‘helped me to come up with ideas that did not come to my mind before’ (K47). Two examples that may fall into the theme of ‘customisation of materials’ may be ‘I tried to make different activities’ (K39) and ‘I had the opportunity to compare the tools I did with the things my friends did’ (K42). The second theme in the frequency is the ‘detecting/correcting errors’. One participant (K41) described this as ‘I recorded the steps; then, I better realised what kind of errors I made, where I made mistakes and then reached the solution’, and another participant (K49) said that ‘I realised what we did wrong by step-by-step sharing’. The last theme was ‘the follow-up of announcements’, which was the least common theme. An example of this would be the response of the student who was coded as K46, ‘It was better to hear the announcements or other things from the course instructor’.

Findings Related to the Negativities Encountered

Descriptive statistics and statements related to the negativity of using SNS during the course by the university students are provided. Table 4 lists the findings related to this theme.

Table 4: Descriptive statistics of the negativity experienced in using SNS in the course

Categories	Frequency
1. Encountered No Negativity	24
2. Internet Problem	11
3. Student Error	4
4. Possibility of Cheating	6
5. Device Problems	7
6. Communication Problem	8
7. Concern Related to Material	6
8. Not Having an Account	12
Invalid Statement	10

24 students expressed no negativity in using SNS as an aid tool during the course, whereas the remaining answers were divided into seven themes. The first theme was ‘Internet problem’. As an example for this, student who was coded as K21 commented that ‘Facebook is giving an error’, whereas the student who was coded as K22 stated that ‘I have experienced Internet-related problems; quota problem’. The second theme of the problems encountered is ‘student error’. Student who was coded as K10 commented that ‘...it was my first time to post to the group so that I was confused at what stage I should post something, so I waited for some people to share something’. Another theme is ‘possibility of cheating’. An answer to this theme was ‘I hesitated to share the work I did. I was concerned that my friends would see something that I made differently and would do the same’ (K28). ‘Device problems’ is another theme; the student who was coded as K6 commented that ‘I had to log in to Facebook using my friend's phone because my phone was broken for a week’; the student who was coded as K12 stated that ‘my phone had memory problems due to having too many pictures’; while the student who was coded as K18 commented that ‘...the phone's camera was broken’. The next theme is ‘communication problem’. As an example to this theme, the following can be given: ‘I was a little uncomfortable because of the constant notifications’ (K7). The following expressions can be given as examples for the theme of ‘Concerns related to material’: ‘I saw that I was behind when I saw the work of my friends’ (K8), ‘I was demoralised when I saw the better ones than my material...’ (K35) and ‘if I was behind in the construction phase, my fear of not being able to finish increased when I saw that my friends completed their materials’ (K36). When the practice started, it was seen that 12 of the students did not have a Facebook account and some did not insistently open their Facebook accounts. The following statements of the students who were coded as K10 and K11, respectively, are the examples of the last theme of ‘Not Having an Account’: ‘I had to post the pictures of what I made from my friends accounts because I had no Facebook account at that time’ and ‘I had difficulty sharing when I did not have a social media account’.

Findings Related to the Effects on Class Interaction

Table 5 lists the descriptive results of the responses for the question ‘how using SNS in the class affect classroom interaction and communication’.

Table 5: Descriptive statistics about the effect of using SNS on classroom interaction

Categories	Frequency
Communication (Positive)	45
Interaction (Positive)	23
Interaction (Negative)	4
Communication (Negative)	0
Invalid Statement	71

Table 5 shows that a majority of students think that using SNS in the course positively affects communication. Students contributed to this theme with the following statements: K36 stated that ‘I got the chance to talk to new classmates’; K41 commented that ‘I learned the names of my classmates’; K9 said that ‘I got to know my classmates that I did not meet before and it helped me to communicate with them’; K53 commented that ‘we communicated not only about course topics but also for other things thanks to the group’. Many expressions about the positive influence on the classroom interaction have come to fore. K1 said, ‘It helped to increase the interaction when we played games in the group or when we were in the class and told the person that I liked their post’. K32 said that ‘I recognised people better, who made posts, by seeing their pictures and names. My interaction in the class increased and we got more topics to talk about’. Only four expressions, which mention negative effect on interaction, were noticed. These comments are: ‘Only posting on Facebook and not coming together put some distance between us’ (K31); ‘We used to get more positive or negative comments for our materials in the class. There were not many comments on Facebook’ (K7); ‘Interacting with friends on social media instead of meeting in person has affected socialising negatively’ (K50); ‘I received the replies late for the questions I asked, so I could not use my time efficiently which frustrated me and discouraged me to comment on my friends’ (K7).

Findings of the Theme of ‘Factors Considered When Making Comments’

The following table shows the results that students have taken into account when commenting on Facebook shares within the context of the course.

Table 5: Descriptive statistics about the factors considered by students while commenting comment on Facebook posts shared by peers

Categories	Frequency
1. Students who did not comment	15
2. Respect/Empathy/Kindness	26
3. Introverted/Face-to-Face	7
4. Academic	27
5. Objectivity	10
6. Criticism	10
Invalid Statement	22

As shown in Table 5, 15 students did not comment although they followed the posts and benefitted from these posts. The answers of the other students were divided into five different themes. First, several expressions were found under the theme of ‘respect/empathy/kindness’. Student with code K25 commented that ‘I tried to avoid being offending while explaining the wrong aspects’, whereas K29 said that ‘I tried to give my recommendations without offending my friends if they made mistakes; K40 stated that ‘I sought not be offensive’, whereas K42 said that ‘When I comment on them about my opinions, I paid attention not to despise their work’. Some expressions are included under the theme of ‘introverted/face-to-face’, which include ‘I never made comments on Facebook; we had positive or negative comments between us’ (K6); ‘I did not write comments under the posts on Facebook, but I talked about the ones in class that caught my attention’ (K28) and ‘I could not express myself well because I could not use gestures or mimics’ (K7). The most common theme is ‘academic’. For example, ‘when there are mistakes in the development stage of an event, this practice encourages you to do the project without mistakes’ (K3) and ‘...suitability of the material to the assignment given by the instructor...’ (K8).. Some students stated that they were careful to be ‘objective’ when commenting on the posts of their peers: ‘I took care to be more objective when commenting’ (K10). The final theme is ‘criticism’. K6, K8 and K53 stated, respectively: ‘It helped us to be more creative with the criticism of others’, ‘We have criticised whether it is right or wrong’ and ‘We got the opportunity to criticise without the disadvantages of face-to-face communication’.

Findings on Factors Affecting Personal Development Provided by Idea and Project Sharing

The results of the student responses for ‘What did the sharing of works and ideas on Facebook by your friends contribute to you?’ are provided in the following table.

Table 6: Descriptive statistics about the contribution of the posts to personal development

Categories	Frequency
1. Academic Development	23
2. Problem solving skills	7
3. Learning the opinions of others	20
4. Getting inspired	15
5. Making decision	8
6. Competition	12
7. Critical thinking	25
Invalid Statement	45

The answers given to this question are distributed to a total of seven themes. The first theme was ‘academic development’. The student K2 said that ‘I found the opportunity to get more information on the material I worked on’ while K9 stated that ‘When I did not know what to do about the subject given to us, I got the information easier with the help of this practice’. As in line with the theme of ‘Problem Solving’, students stated that they solved their problems and they made the following comments: K10 commented that ‘I chose the fabric by reading your comments and the products made by others’; K32 stated that ‘I corrected my mistakes by seeing the rights and wrongs’ and K34 said that ‘While I was preparing the product, I saw what was missing sides and then completed the product’. The following statements are thought to go under the theme of ‘Learning the opinions of others’: ‘It helped me to come up with new ideas’ (K23); ‘Our exchange of ideas were enhanced and developed new opinions’ (K25); ‘...learned new things as my friends shared’ (K15); and ‘Everybody shared their own ideas’ (K39). Another theme is ‘Getting inspired’, The examples for which include ‘We were able to add new things with the help of concepts shared by our friends’ (K22); ‘I had the opportunity to see many creative material’ (K57); ‘We understood that we had to be authentic when we looked at the work done’ (K51) and ‘We got inspired by our friends who used different materials’ (K50). The following statements are included under ‘Making decision’: ‘It helped me to make a decision faster when I was trying to choose my material’ (K46); ‘The practice made it easier for me to make decisions by looking at the posts of my friends when I was indecisive’ (K56) and ‘... made my decisions clear when I was indecisive on some issues’ (K3). The following statements are examples for ‘competition’ theme: ‘It provided me to compare my material with the materials of my friends’ (K37); ‘I was able to compare the level of my own material’ (K40) and ‘I tried to finish my product faster when I saw the pictures of the finished products of my friends’ (K7). The last and most common theme was ‘critical thinking’. The answers of students with the code of K45, K52 and K55 are as follows, respectively: ‘I think about things I have never thought about and I have gained a different perspective when I see things that have not come to mind’; ‘I have seen how much an idea can be developed’ and ‘It helped me to think how I could produce something different when I see the works of others’.

Discussion

This study aimed at examining students’ opinions about using Facebook in educational environments. Accordingly, the study group comprised 57 students enrolled in the Child Development Programme of the Kastamonu University Vocational School of Higher Education during 2017–2018 spring semester and pursuing ‘Educational Material Development’ course. During the course, students designed educational materials for children in the pre-school period. During the course of designing these study materials, which was time consuming, students discussed the materials developed by their peers among themselves and consulted the course instructor for 15 weeks in a closed Facebook group. After the practice, opinions on the use of SNS in the course were collected via a semi-structured interview form comprising a total of five questions. These opinions comprised 724 sentences, which were coded by two different coders. Then, reliability analyses were conducted and the themes for the opinions of students were formed.

According to the students, the biggest advantage of using SNS during the course was to follow the posts. Students could examine and archive the works of all their friends and be inspired by them. They no longer needed to carry their work to class. One of the biggest advantages provided by SNS in application-oriented courses was to allow students to see others’ activities. Students could observe each production phase of the materials of their peers and find the opportunity to examine many works, which would otherwise have been impossible to experience in a classroom environment. Students believed that these posts allowed them to think by exchanging ideas and that they could rectify their mistakes and produce more original works. In the model of Mazman and Usuel (2010), Facebook had three sub-dimensions for educational use: ‘communication’, ‘cooperation’ and ‘material and

resource sharing'. The advantages stated by the students of the study group concentrated on cooperation and material/resource sharing sub-dimensions.

Students, who had not encountered any negativity while using Facebook as an aid tool during the course, were in majority. The most common negativity included not having a Facebook account. Some students did not have an account at the beginning of the programme; they posted content using their friends' accounts and did follow their peers in the same way. Yapici and Hevedanli (2013) emphasised on similar negativity. Students preferred opening an account after they faced these difficulties. The second most common problem was Internet-related. In the age of information when Industry 4.0 is being discussed, it is clear that the difficulty in connecting the Internet or facing quota problems need to be solved.

Gathering the entire class in a Facebook closed group has enhanced classroom interaction and communication. Although there are only four negative sentences in this regard, students got closer, as determined from the rest of the statements. Many students had learned the names of their peers and communicated with them. Yapici and Hevedanli (2013) also showed that classroom communication improved.

Students commented on their peers shared posts in an academic context and were careful not to offend their friends. Some students stated that objectivity was a priority in their criticism. Almost one-fourth of the students did not comment at all; they only posted, followed the posts of their peers and benefitted from the comments made by others.

When asked about what they benefitted from information sharing via the SNS, the answers of the students were focused on critical thinking skills. Thus, SNS contributed to the critical thinking ability of the students. Similarly, students stated that their knowledge improved in an academic sense. The other important benefits provided are that 'learn from the opinions of others' and 'get inspired'.

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