¹Preservice Teachers' Views on Using Facebook as a Virtual Platform within the Learning Process

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Abstract: The purpose of this study is to determine whether using Facebook as a virtual platform contributes to the learning process among pre-service teachers. The study group included 73 pre-service teachers studying at a university in 2011. Within the study process, a group page was created on Facebook, which was used to share pre-prepared videos of lessons in which different course materials were used. The trainee teachers were asked to watch these videos and design course materials oriented to their domain. The views of the trainees were taken in written using a questionnaire that included open-ended questions. The obtained data were analyzed via peer debriefing, member checks and inter-coder reliability processes. The findings revealed that using Facebook as a supportive tool when designing course material positively contributed to the learning process. According to the study results, it is suggested to use Facebook for teacher education in general and for instructional technologies and material design courses in the private sector.

Key words: Facebook · Social media · Teacher education · Instructional design

INTRODUCTION

Emerging transformations together with information technologies create a society that lives one move ahead of the physical borders, sharing various cultures, accelerating information flow and changing its form. Castells [1] defines this formation as a network society. A network society is easily affected by rapid developments and is in the center of an uncontrollable change. New communication channels that emerged via social networks are regarded as the driving force of this change [2-5]. Currently, such platforms as Facebook, Google+, MySpace and Twitter form the components of social networks, of which Facebook is accepted as the most popular [6-9].

Facebook was designed in 2004 by Marc Zuckerberg during his first year at Harvard University. Facebook was intended as a social sharing site that only Harvard students could join via their own e-mail accounts. Then, from 2005, the site gradually opened its doors to the whole world [10-11]. Facebook occupies one part of social life in terms of communication. Facebook can be defined as a platform by which users come together and communicate with each other [12-13]. Users are able to define different privileges for sharing content related to either their personal lives or social life. Users can issue invitations to events such as weddings, concerts, picnics or conferences through shares; or inform each other of the issues occurring indifferent regions of the world. For example, Facebook was used as a communication platform during the Arab Spring process, especially within Egypt [14-21]. Similarly, both public institutions and nongovernmental organizations arrange the relief projects via their Facebook groups to people involved in recent natural disasters around the world [22]. However, the use of Facebook is not limited to communicating issues of daily life between individuals or groups. Today, Facebook is used in such domains as advertising, finance, marketing, medicine, sport, management and education [23-27].

Facebook Usage Within the Education Process: Facebook usage within the education process is generally preferred by students. A large majority of high school and

college students are Facebook users [28-34]. According to previous studies, students prefer to use Facebook to communicate with each other about issues related to their lessons [35]. Similarly, it was observed that students help each other and strengthen their collaboration on Facebook. For instance, Bosch [36] reported that students with a Facebook account showed considerable collaboration on lesson-related issues. According to Lim [37], student participation in discussions via Facebook and Facebook usage contributed to students' academic development.

Together with the increasing frequency of use, the use of Facebook as a virtual platform enables students and teachers to collaborate. Previous studies indicated that educators and students communicate and share things related to social life on Facebook [38, 39]. The findings of on this issue differ. For instance, Bosch [36] stated that students have positive perception regarding communication they establish with instructors without being under pressure, which enables them to prepare more efficiently for lessons. Some studies indicated that Facebook use strengthened communication between teachers and students provide students with more opportunities for collaboration and increased student motivation [7, 38, 40, 41, 42]. In addition, some studies revealed that students using Facebook achieved lower grades, exhibited a tendency to cheat in exams, wrote on walls, studied less and mocked students who study much [43, 44].

The common basis of previous studies is the finding that students use Facebook not only as part of their daily lives but also as part of their education processes. In addition, using Facebook within the education process to contribute to the personal, social and academic development of the students is only possible when educators attach importance to and support the use of social networks for education [45, 46]. According to Fewkes and McCabe [47], 73% of high school students used Facebook for education, whereas 27% stated that at least one of their teachers made use of Facebook during lessons. In addition, 77% of the students stated that teachers blocked access to Facebook via school computers. It is therefore clear that some educators are resistant to the use of Facebook within the education process. Within the education process as a whole, it can be concluded that Facebook and other social networks are not only used to communicate but also as a platform that supports learning [48, 49]. However, there are an increasing number of studies on the benefits of using

social networks as a digital learning framework within the education process. In this context, the general focus is the active use of social networks and the specific focus is the use of Facebook by teachers within the education process [50, 51]. In addition, the most important point is the inadequate number of applications that provide models for educators wishing to use social networks in education.

Similarly, the training that educators receive about how to use Facebook as a course material can contribute to increasing the number of model applications and to promoting the preference for social networks as a supportive material for courses either within or outside school. From the teacher's perspective, efforts to raise awareness of how to efficiently use social networks within education can contribute to training teachers who easily adapt to ever-changing learning-teaching environments and can use these environments efficiently. In this context, the purpose of this study is to determine whether using Facebook as a virtual platform contributes to the learning process, from the perspective of pre-service teachers.

MATERIALS AND METHODS

The population of this study comprised of 136 pre-service teachers studying in instructional technologies and material design course in 2011 in the Department of Turkish Language Teaching, at a university, Turkey. Students were informed about the application at the beginning of the courses. It was explained that courses would progress as normal during the first four weeks; beginning from the fifth week, students would be asked to design course materials oriented to the Turkish Language Teaching and to deliver a presentation on how to use this material in the teaching process. It was also explained that these presentations would be videotaped and shared on created group page created on Facebook. This page would also be used to share announcements about courses, information on additional documents and websites beneficial to the lessons. The students were invited to participate in this application and were asked to explain their thoughts on this issue in the following week. Of 136 students enrolled in the courses of instructional technologies and material design, 73 chose to participate in the Facebook study.

This study was completed over seven months time in three stages. In the first stage, a decision-making matrix was used to determine whether Facebook could be used

as a supportive tool within the material design process. A group was created on Facebook according to the data obtained from this matrix. In the second stage, lessons using previously prepared materials were videotaped and shared on the created page. In the third stage, the students participating in the study group were asked to watch these videos, design course materials oriented to their domain and to present a model course using their material. The student presentations lasted for ten weeks in total and each presentation was videotaped. Approximately seven course materials were presented each week and each recorded presentation was shared on the Facebook group page within the same day. Sample videos were there by provided for students who would make the subsequent presentations. In order to exclude any worry regarding grades, the views of the students were taken in written after all the exams and lessons had been graded.

Data Collection Tool: In this stage, a questionnaire form was created to determine students' opinions on the application. This form included a brief explanation of the conducted applications and five open-ended questions. These questions were prepared to determine whether the sharing of resources and course announcements contributed to the material design process and trainees' pedagogical views. The first parts of the questionnaire comprised an introduction explaining the purpose and extent of the study and the reason why it was conducted; the second part consisted of five open-ended questions. The expressions and questions included in the form were prepared on the advice of two acknowledged academics who are experts in their fields. A linguist was then consulted to conform the clarity, apparentness and grammatical structure of the expressions, which then corrected in line with his/her suggestions. In this process, the researcher explained in detail that the data would be obtained via the participants' opinions that were taken in written.

Data Analysis: Participants' responses to the survey questions were carefully examined and then coded [52, 53]. The reliability of the obtained data was analyzed via peer debriefing, member checks and inter-coder reliability [52, 54].

Peer Debriefing: A peer is a person who is outside the context of the study, is not interested in the issue of the study but is knowledgeable about research methods and can also discuss the problems related to the study process [54]. Researcher and peer can discuss the data collection process, findings, results, etc. The peer can express opposite opinions to the assumptions of the researcher in relation to the findings within the discussion. The inclusion of a peer within the study process could provide much comprehensive data analysis and a critical view [54]. In the present study, a faculty member acted as peer to the researchers. The peer is active in education management and supervision and is familiar with scientific research methods. Interview transcripts were investigated by both the researcher and the peer. The participants' answers were studied and productive discussions were held regarding potential coding frameworks and themes.

Member Checks: Member checks can be defined as a process in which the comments of the researcher are shared with the participants and are tested according to the data obtained from the participants. This process gives the opportunity for the researcher to determine whether their own notes about the opinions expressed by the participants actually reflect the perceptions of the participant [54]. In this study, the opinions of the students were taken in written. One participant reviewed the written transcript of his/her questionnaire responses together with the researcher and his/her thoughts on the determined theme and categories were taken. The researcher took the advice of the students while creating the categories and functional definitions of the written text. This procedure enabled the researcher to verify their own classification of the students' questionnaire responses.

Inter-Coder Reliability: Inter-coder reliability refers to building consensus among at least two coders on the quality of any content [52]. The second coder should have comprehensive knowledge of both the research subject and appropriate research methods. In this study, the second coder was an academic in science and technology. The researcher and the second coder separately examined the transcriptions of the questionnaires, coded the responses and then categorized the data through coding. The codes were created by examining the interview texts of each category of data. These codes and the expressions of the participant were compared twice at different times. The themes, codes and the functional definitions that were created from the data are shown in Table 1.

Table 1: Themes, codes and functional definitions derived from questionnaire responses

Themes	Categories	Definitions
Process	News Source	The shared announcements, documents and links shared on Facebook function as news sources for students, their parents and also for educators.
	Digital Archive	The videos shared on Facebook function as an archive for students, educators and everybody interested in the field; and also record the learning history of the students.
Outputs	Source of Inspiration	The videos shared on Facebook are a source of inspiration and a guide for designing course materials.
	Originality	The videos shared on Facebook prevent plagiarism and contribute to designing original and appropriate materials.
Pedagogy	Motivation	As a result of the videos shared on Facebook, lessons become more enjoyable, students are more interested in the lesson and believe that they can design original materials.
	Self-confidence	The videos shared on Facebook motivate students and thereby increase their self-confidence.
	Self-evaluation	Individuals evaluate themselves more healthily within the framework of the comments and opinions given on Facebook

RESULTS

Following data analysis, the obtained findings were collected under the themes of process, outputs and pedagogy. The *News Source* and *Digital archive* categories are within the theme of *Process;* The *Source of inspiration* and *Originality* categories are within the theme of *Outputs;* and The categories *Motivation, Self-confidence and Self-evaluation* are within the theme of *Pedagogy.*

Process: The opinions of the participants that are under this theme are collected under the categories of news source and digital archive. The *Process* theme is explained in detail in Table 2.

News Source: It was concluded from the findings that the students were able to access the news and announcements posted to the group page; and that the activities were not only used by the study group but also by other students and teachers from different universities. Participant Ceylan stated that she and her close friends spent most of their time communicating via Facebook and that they were aware of the activities that were conducted in the lessons by referring to the group page. Similarly, Ezgi stated: "We were aware of the activities via the videos shared on Facebook. Also, students from other universities were also able to access these videos. This situation is very exciting"; Aykut stated: "Watching the shared videos on Facebook, students and also teachers had knowledge on the intra-class activities." Fatma stated: "We spent much of our time on Facebook and we could access the announcements and news about our lessons." Büºra stated that she could not attend all of the courses and said: "It was not possible to attend all of the lessons to

see the presentations given by my friends." She was therefore able to access the presentations via Facebook when she was absent. Burak stated: "Creating a group page on Facebook created a tight news network. We were able to access all the announcements related to the courses. Also, we could question our teachers via this page. All the documents were recorded via this page and if not so, these studies would be forgotten."

Another issue discussed was parents' access to the shared videos. Ezgi said: "The beauty of it was the opportunity for parents to watch these videos". Mikail said: "Our parents and our close relatives watch our presentations and they had an idea about our education in college." Yunus said: "Our parents watched the shared videos on Facebook and it was enjoyable to relive the atmosphere of a course at home. All Facebook users could also access these videos and it is a good feeling to know that other people benefit from our presentations." The opinions of Hüseyin were also supportive: "We can discuss the issue with a different point of view. Via these shared videos on Facebook, our parents suddenly saw that we were talking in the class and so they were proud of their children when they saw this." Burcu stated that the shared videos also give information about the university departments: "People watching the videos could make an evaluation both about us and our department's activities. She stressed that the departments could also be evaluated by other people.

In brief, 33% of the students stated that they could easily access to the news and announcements about lesson by these videos and expressed that these videos can also be watched by students from other universities, the educators working in the relevant area and the families of the students. This finding demonstrates that Facebook users could more easily access shared content and also lead their close friends to this content.

Table 2: Categories, frequencies, percentages and sample expressions related to the theme of Process

Theme	Categories	N	%	Sample expressions
Process	News Source	24	33%	•This application introduces the intra-class activities to parents, students and teachers.
				•Posting content to the group page gives the opportunity to introduce our activities to the people around us.
				•I had the opportunity to introduce the material that I designed.
	Digital Archive	45	62%	•I learned how to efficiently design and use course materials by watching the shared videos several times on Facebook.
				•I think one of the advantages of sharing via Facebook is providing a resource for future students who will choose this lesson

Table 3: Categories, frequencies, percentages and sample statements related to the theme of outcomes

Theme	Categories	N	%	Sample statements
Outcomes	Source of Inspiration	41	56%	• I think the things that are shared on Facebook are quite beneficial. I did not think about this before. New ideas came to my mind thanks to the shared videos. Then, these videos became my source of inspiration.
	Originality	37	51%	• Watching the shared videos forced me to think about the course and I had more creative ideas, so this was a precaution to prevent possible copy-paste materials.

Digital Archive: It was concluded from the findings that the group page created on Facebook also functions as a digital archive, especially about the key points of designing course materials. The students emphasized this issue. Participant Melike said: "When we have Internet access, the first thing we do is check our Facebook accounts. We have a chance to easily access announcements related to lessons." Similarly, Adem said: "I usually use Facebook and so it is easier to watch the shared videos on Facebook. I mean, it is easier to access and watch the videos." Hüseyin stated: "I must say that the created Facebook page is more practical than the Moodle page that is used in the college. Course resources are available from the Moodle system in the college. In this system, each student has an account, but it is boring for me because it only includes issues about the courses. However, I am continually online on Facebook and so I can easily access the shared content and important messages."

The other issue discussed was regarding the shared videos on Facebook as a reference resource. Participant Hamit said: "One of the advantages of the shared videos is that they are a resource for the next students on these courses." The opinions of the other students were similarly supportive.

Participants also raised the issue of the importance of the videos as memory. Meral said: "It will be interesting to watch my younger ages when I get older." and Hüsniye said: "Think about it! We will watch our own videos and remember these years after fifty years. Our children and seven grandchildren will watch these videos." Ezgi said: "It is the most interesting thing to watch these videos after years."

In brief, 62% of the students stated that they could easily access the shared content, that these function as reference sources for their professional life and that this resource will make a difference as memoirs in terms of accessing their educational past through the videos of their studentship years. However, from a different perspective, content shared on Facebook could be used as both a resource and archive for the students to benefit from. These videos also function as visual archive, demonstrating how a lesson was taught at a specific period in the past.

Outcomes: Within this theme, participants' opinions were categories as *Source of inspiration* and *Originality*. Detailed information on the theme of *Outcomes* is shown in Table 3.

Source of Information: The findings showed that most of the shared videos were sources of inspiration on how to design course materials. Participants stated that watching the shared videos on Facebook contributed to creating new ideas in the process of designing course materials. Participant Esra stated: "The things shared on Facebook opened up new horizons for most of the students and teachers. At first, we had the common idea "how much material can we design about Turkish lesson?". However, thanks to the group page, re-watching the presentations enabled us to develop new ideas. We created various educative-informative, effective, entertaining materials."

Similarly, Burak stated that if the videos were not shared, he would be able to watch only some of the videos and said: "This situation is a golden opportunity for us. In the first days of the course, I had no idea about

designing course materials. However, I believe that now I learned lots about designing material and how to design good material." He emphasized statement that the things shared on Facebook were a source of inspiration for him. Participant Hamit said: "At first, I had no idea. After the uploading of the videos, I came up with new ideas. Then, these videos became my source of inspiration." Berivan said: "The shared videos on Facebook were beneficial for us to have an idea about designing material. We took examples from some of the videos, so we came up with new ideas." She stressed that the shared videos were a kind of guide. Adem stated that he did not previously think that a social networking site could be so beneficial. He also stated that the things shared on the group page were interesting, directive and inspirational. In brief, 56% of the students stated that the shared videos on Facebook were some kind of inspiration for them to learn about how to design course materials and that the videos also guide the students. Students stated that they created their designs by taking the contributions of their close friends as models. This shows that the group page enabled students to learn from each other.

Originality: It was concluded that the things shared on Facebook contributed to students creating original course materials. The responses on this issue express two different opinions, although both have some common ground. Some students stated that the application had compeller effects; however, this feature contributed to the creation of original course materials. Participant Burak said: "The students who made their presentations in the first week narrowed the design field of the later presentations. However, this enabled the students to come up with more creative ideas." Ayşegül said: "The disadvantage of the shared videos is to see that the material I thought to design was already designed by somebody else. I then had to design new material. Feyzullah said: "these shared videos prevented the copying and re-design of material. Each student tried to design their original materials." Similarly, Feyzullah stated: "The disadvantage of these shared videos is that the design of a material that I thought to design before. This situation put me in trouble, but, led me to make different designs. This caused me to think about it for several days and get into trouble. However, the material that I designed by the help of other materials was quite successful and original."

The second opinion on originality is not about the compelling features of the application, but about its ability to support the creation of original designs. Students used more positive statements on this issue. Participant Büşra said: "Watching the shared videos on the page prevented me delivering the same material. Therefore, I designed a more creative and original presentation." Fatih stated that he came up with new ideas and original material due to the group page on Facebook. Hümeyra said: "Thanks to the videos, the same materials were not designed repeatedly and students designed original materials." Naci stated that he started to design original materials by using the creative opinions of the students. Another participant, Ramazan stated that: "For example, before I designed my material, I watched the videos to see whether anyone else had previously presented my material. Then I designed a more successful material." Sadullah said: "If this group page were not created, there would be the same or similar materials rather than original ones." He emphasized that students were led to design original materials. Similarly, Ceyda stated: "Thanks to these videos, we see what we can do for our branch, how to diversify our subjects. We had the opportunity to access different choices and to form an opinion. The videos of the student presentations displayed creative thinking and gave the opportunity to evaluate the subject from different perspectives. Of course, the quality of the presented material is important; but, our style and posture and having a good command of the subject are also quite important. I think that the shared videos taught us to be more elaborate and sensitive to our subjects."

In brief, 51% of the students stated that they watched the shared videos before designing their materials and could thereby gain different perspectives on the design of course materials and employ creative thinking; nevertheless, this situation was very demanding. However, they also emphasized that the shared videos prevented students from copying each other.

Pedagogy: This theme includes *Motivation, Self-confidence* and *Self-evaluation*. Detailed information on the *Pedagogy* theme is shown in Table 4.

Motivation: According to the findings, the shared videos on Facebook contributed to motivating the students, especially about the design of course materials. Participant Büşra said: "Another advantage of this application was that it motivated me. I felt an ambition when I watched good presentations." Ömer said: "You can watch the presentations of other students and motivate yourself to do better." He emphasized that the competitive environment, in some way, provided motivation. Dilek stated that she used Facebook nearly

Table 4: Categories, frequencies, percentages and sample statements related to the theme of Pedagogy

Theme	Categories	N	%	Sample statements
Pedagogy	Motivation	17	23%	• One advantage of this application was that it motivated me. As I watched the shared videos of the lessons, I tried to say to myself "I can do better."
	Self-confidence	16	22%	• The most important feature of these videos was that they alleviated my worries and enabled me to be self-confident.
	Self-evaluation	17	23%	• Watching the shared videos on the group page enabled us to see the advantages and disadvantages of the materials we designed and I think this was beneficial for all of us

every day and said: "The thought of "I wonder what kind of an activity my friends carried out today?" enabled us to be enthusiastic about this application." She emphasized that being curious was a major motivator for the lessons. Turgay approach the issue from a different perspective and said: "We should be better, we should design better; because, our material would be seen. This led us to be motivated and to avoid failure." He also stated that he was motivated because the videos were also watched by other people in addition to classmates. Participant Ahmet stated: "Including the lesson in such a virtual environment, especially during a period in which Facebook is very popular, is favourable for students. The sharing of suggestions, information and the videos on this page, forced us to be more curious and to visit the group page to learn about the lesson."

Some participants, who approach to the issue from a different perspective, stated that the videos shared on Facebook made the lessons more enjoyable, which motivated the students to attend the lesson. Participant Demet stated that the things shared on the group page made the lessons more enjoyable and comprehensible. Gülseren said: "By carrying out these activities, we both enjoyed and started to make the first strides towards being a teacher who teaches willingly and has a good command on the subjects, instead of being a boring teacher in our professional lives." Another participant, Mehmet said: "The shared videos on Facebook showed us to how to teach a lesson without being boring. The pre-service teachers now have knowledge of how to teach a lesson." He emphasized that this application contributed to the students' professional development. In brief, 33% of the students stated that the videos shared on Facebook made them believe that they could do better. The students continually followed the things shared with feelings of curiosity and excitement. They also stated that these shared videos made the lessons more enjoyable and motivated them to attend the lessons.

Self-Confidence: The findings indicated that the students gained the feeling of self-confidence from two different aspects after watching the shared videos. The questionnaire responses placed great emphasis on the

first point: "If my friends can do something, I can do it, as well. "If my friends can do this, so can I; Or: If my friends can do this, I can do better? Participant Dilek said: "Our friends who do not have a Facebook account are also able to watch these videos via the accounts of their friends. The most important aspect of these videos for me is that these videos decreased my worries about the lesson and enabled me to be self-confident." Akif said: "If we approach the issue from a different point of view, it gave me confidence to come into prominence with my own design, gave me confidence and made me proud. Also, sharing my own design and receiving people's compliments made me proud." He emphasized that being watched and praised by people increased himself-confidence. The opinions of the other participants were similarly supportive.

The second issue that the students emphasized was the thought of using social networking sites for instructional purposes in their professional lives. Burcu said: "Even hearing our own voices and watching ourselves on a virtual platform gives confidence." She emphasized that confidence is also important in addition to knowledge while preparing for professional life. In brief, of 22% the participants stated that their worries about academic activities decreased due to watching the shared videos. They also stated that the lessons became more enjoyable. This finding shows that students are less worried about the lesson after they watch themselves on video; that the lessons become more enjoyable; and that receiving positive feedback makes students more proud of themselves.

Self-Evaluation: The findings showed that the shared videos gave students the opportunity for self-evaluation. About this application, Esra said: "Watching the shared videos on Facebook enables us to see the shortcomings, advantages and disadvantages of a designed material and this enabled us to design better materials." Ayşe said: "I saw my shortfalls and failures by watching my own video on Facebook." She emphasized that watching the shared videos contributed to self-evaluation. The opinions of other participants were similarly supportive. For example, Bahar said: "These videos enabled us to

watch ourselves objectively and helped us to see our failures easily." Burcu said: "While watching ourselves, we saw all of our failures, shortfalls and truths." Dilek said: "Each activity on these videos in fact showed us what kind of a teacher we will be in the future." Fahriye said: "Thanks to the comments about the shared videos posted on Facebook, we saw our shortfalls. So we will avoid the same failures when we become a teacher in the future." Nur said: "The re-presentation of the lesson videos on Facebook is very efficient for us. We were able to see our failures and shortfalls with this way." Seçkin said: "At the end of recording each presentation and sharing these videos on the group page on the Internet, comments were made on these videos. Even if these comments and criticisms are not accurate measurements, they can give a clue to the quality of our performance." Sibel said: "The opportunity to see the shortfalls and failures of our materials enabled us to evaluate ourselves by watching our videos."

In brief, of 23% the students stated that the things shared on Facebook gave the opportunity to evaluate the quality of their designs and enabled them to easily see their failures. They also stated that this application was a preparatory activity for their professional lives.

DISCUSSION AND CONCLUSION

Throughout the history, the teaching profession has employed contemporary technological tools to assist students to reach their expected learning targets. This situation continues and only the features and qualities of the tools have changed. The Internet, computers, smart board, wireless devices and cloud technologies provide good examples of these tools. Social networks, which are especially commonly used in social life to communicate and share are the focus of interest for students of all ages. These social networks became the environments within which students spent most of their time. This raises the question of whether it is possible to benefit from social networks not in social life but in learning process.

In this study, it was found that the students easily accessed announcements of academic activities and useful links via the group page on Facebook. It was also concluded that the students were happy to introduce their own studies to their close friends and that they regarded this platform as a source of news. The findings showed that the group page created on Facebook functions as a guide for students, teachers and people who are interested in the issue of designing educational materials. This page was also regarded as an archive of the students' learning experiences. Students' statements both about the accessibility of the academic and instructional announcements and activities and about the structured availability of their past learning experiences are important in terms of the serviceability of the application.

The findings revealed that each item shared via Facebook was a source of inspiration for the design of course material and also contributed to the creation of more original materials. The students emphasized that the shared videos prevented the "copy-paste" and repetition of previously presented designs. Mayes and Fowler [55] stated that students learn not only from the books and teachers but also from each other within on-line learning environments. According to Kirschner and Karpinski [44], students who use Facebook have lower marks than those who do not use Facebook. In this context, Facebook is also an on-line learning environment. The results of the present study support those of Mayes and Fowler. The present study did not take into account the academic grades of the students and the personal views of the researcher about the application process. However, the students' opinions that they designed original materials indicate that Facebook contributed to the development of academic skills when used for instructional purposes.

In this study, it was explored that the sharing of content via Facebook increased students' motivation, reinforced feelings of self-confidence and provided opportunities for them to self-evaluate their projects. That is why it can be claimed that Facebook could be beneficial to the teaching process by improving student attendance so that it could be recommended that teachers and teacher educators consider Facebook as a teaching tool during their courses to motivate their students, to enhance student learning, to improve student self-confidence and develop a positive teacher-learner environment in the virtual world. It can also be considered to include modules on using Facebook for instructional purposes in teacher education programs.

This study was conducted within the framework of instructional technologies and material design lessons. The study participants comprised a limited number of trainee teachers within the Department of Turkish Language Teaching. This study may be repeated with students from different departments and for different courses, using different data collection methods and carrying out data variation in a more comprehensive way.

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