

## Research Article

# Current State of Usage of Social Media for Education: Case of Turkey

Yasemin Gülbahar

Ankara University, Turkey

**Abstract** Despite of popularity of social media and its use for educational purposes in recent years, research studies are in their preliminary stage and researchers are trying to explore this new phenomenon from different perspectives. Thus, the main purpose of this research study was to reveal the patterns and implications of social media usage by higher education institutions in both face-to-face and online teaching environments, namely for blended learning and e-learning. For this purpose, interviews were conducted with instructors and students from two universities, selected as cases, in order to answer various questions. Although there were only two universities selected as cases, the results indicates the current state of social media usage in higher education in Turkey, since these two universities are the leading ones for technological implementations all over the country, together with the presentation of current literature on the issue. One of the main findings was perception of social media as an informal environment that is used for communication and knowledge sharing, as an information source. Another finding was that both instructors and students were unaware of the potential tools and resources that they can benefit from in their educational and research activities. Moreover, the participants were also aware of the need for a change in both perceptions and skills acquisition of individuals in order to cope with these technological innovations. Hence, it was suggested that more and widespread training opportunities together with an institutional strategy are needed for effective implementation. As a result, this research study revealed that social media for higher education is used and implemented only by individual attempts through a limited know-how in terms of potentials that social media can bring to an educational context.

**Keywords** Social media in education, interactive learning environments, improving classroom teaching

**Yasemin Gülbahar**, Ankara University, Department of Informatics & Distance Education Center  
Ankara- Turkey  
E-mail: gulbahar@ankara.edu.tr

## 1. Introduction

Social Media is very common nowadays. It is expanding exponentially, connecting more and more people together from all over the world. Social media can be defined as “interactive web platforms via which individuals and communities share, co-create, discuss, and modify user-generated content” (Kietzmann, Hermkens, McCarthy & Silvestre, 2011.). While not designed specifically for educational purposes, Web 2.0 applications, in other words social media, have a number of affordances that can make them useful in teaching and learning environments and are rooted in strong pedagogical underpinnings of constructivism (Ferdig, 2007). The increasingly ubiquitous access, ease of use, functionality, and flexibility of emerging Web 2.0 technologies have made them much more appealing as instructional tools (Boulos, Maramba, & Wheeler, 2006; Chen, Cannon, Gabrio, Leifer, & Bailey, 2005). Moreover, Web 2.0 applications can support pedagogical approaches such as active learning, social learning, and student publication, by providing environments and technologies that promote and foster these interactions (Ferdig, 2007). Web 2.0 applications provide venues with collaboration and sharing of information to support the networks necessary for social and active learning (Prensky,

2001). Ease of use, allowing for rapid updating, analysing and sharing continuously increasing information stemming from our daily life, establishing spontaneous relationships, supporting informal learning practices by means of interaction and communication, and facilitating the delivery of education are explained as the reasons why social networks such as Facebook, MySpace, Friendster, YouTube, and Flickr are adopted and accepted rapidly although they had originally emerged for sharing photos, personal information, videos, profiles and content (Ajjan & Hartshorne, 2008; Mejias, 2005). This is especially true to students who are considered “digital natives” of the world of the Internet and computers.

In addition, Lee and McLoughlin (2008) claim that social networks are pedagogical tools as people can use them for connectivity and social support, collaborative information discovery and sharing, content creation and knowledge and information aggregation and modification. Social network sites (SNS), as web-based services, allow users to create open or semi-open profiles within the systems they are part of, to see lists of other people in the group, and to see the interrelationships of people within different groups. The terminology and structure of such communication networks are different between different sites (Boyd & Ellison, 2007). In order to understand how to incorporate online social networking tools into an academic setting, one must understand how these tools are used to socialise, communicate, and to interact online (Miller, 2009). SNS represent an opportunity for administrators and faculty members to reach out in a way that is more relevant to students than traditional email or classroom conversation. Traditional online course software also may receive little attention from students; however social media such as Facebook for instance, is where students live out much of their lives. It is not uncommon for students to log onto Facebook nearly every hour. In fact, some students have recognised that they spend too much time using Facebook, to the detriment of other aspects of their social life (Hoffman, 2008).

### **1.1. What research says about social media usage for education in Turkey?**

When up-to-date research studies are investigated, it is seen that a new era is just beginning. Aksüt, Ateş, Balaban and Çelikkanat (2012) tried to determine whether primary and high school students have a Facebook account, why they use this account and how long they have had it. In addition, another aim of this study was to determine their attitudes towards Facebook. The findings indicated that primary school students overrated the visuality whereas high school students mentioned easy access to Internet and security as their major concerns. From another point of view, Avci and Askar (2012) investigated the use of blogs and wikis as constructive tools in the computer courses of prospective teachers. Researchers compared these Web 2.0 tools in terms of the variables of perceived usefulness, the perceived ease of use, intention, self-efficacy, and anxiety. The students showed a positive attitude towards the use of blogs and wikis, in favour of just wikis, in the teaching-learning process. The results revealed that perceived usefulness is the most important determinant, which influenced peoples’ intentions.

Having the idea that the process of belonging to a social network may start with a membership but then may turn into an addiction, Çam and İşbulan (2012) investigated the phenomenon of social networks’ addiction for teachers from a Facebook point of view through a scale. The results revealed a significant difference between gender and classes according to the Facebook addiction. It was concluded that Facebook addiction levels of males were higher than those of females, and seniors were higher than juniors, sophomores and freshmen.

In order to understand the use of social media outside of the classroom environment, Erkoç and Erkoç (2011) used the Facebook platform in order to educate the human values of the students, such as love, respect, helping, and responsibility. Within the scope of the study, students were expected to share poems, proverbs, idioms, anecdotes, pictures and videos, about affective values. The aim of this activity was to promote student-student interactions and enhance the valuing of each other’s opinions. Based on their findings, researchers concluded that Web 2.0 technologies can be used as either classroom learning environments or learning tools, or as a communication tool outside of the classroom.

İşbulan (2011) tried to investigate the influence of personality of higher education students on Facebook use. The researcher reported a parallel finding with the literature and concluded that personality variables were associated with some aspects of social network use. Moreover, university graduates with extravert personality characteristics expressed that Facebook is

important for them and they use this tool every day for communication, spending time and sharing their status. On the other hand, Kayri and Çakır (2010) examined educational perceptions of university students about Facebook. For this purpose, they investigated the use of Facebook according to socio-demographic features, levels of Facebook acceptance and intended use of Facebook levels of educational use of Facebook. The researchers concluded that “Facebook media not only makes lesson enjoyable but also provides lots of electronic material. Building social network with Facebook provides collaboration in group” (p. 56).

In their study, Mazman and Usluel (2010) tested a structural equation model to explain the educational use of Facebook. Through this model, three dimensions of Facebook’s uses, namely communication, collaboration, and resource sharing, were investigated. The researchers tried to explain the constructs related to Facebook usage as perceived by its users. They concluded that “Facebook adoption processes could explain 86% of all user purposes” (p. 444) and suggested adding different constructs or dimensions of adoption to their proposed model other than usefulness, ease of use, social influence, facilitating conditions and community identity. Hence, there are both positive and negative effects of widespread use of social media. In order to bring out this effectiveness, Koç and Karabatak (2011) constructed a questionnaire and applied it to higher education students. Based on their opinions, several rules were constructed depending on the association rules as a data mining technique.

In general, the role and the skills of teachers toward technology integration affect the students’ technology use and attitudes. Oktay and Çakır (2012) try to explain the relationship between the technology use of elementary school teachers and their attitudes towards technology. According to the results of their study, more than half of the teachers use internet in order to read news and communicate in social networks. Furthermore, it is found that the attitude of the teachers toward technology is high enough and the usage of their technology is a bit more than moderate.

Tiryakioğlu and Erzurum (2011), tried to reveal whether Facebook was used as an educational tool or not. In order to do this, a questionnaire was applied to all faculty members. It was questioned whether faculty members use social networks or not. If they do, which social network was used, with what purpose and how was it used as an educational tool? In addition to this, in the questionnaire it was asked whether faculty members add their students in their friends list on social networks that they use and was it used in order to communicate with them or not. Similarly, Tođay and others (2013), evaluate the usability of social media as a learning supportive environment and discuss the benefits of social media applications in higher education. After providing social media and a multimedia learning supportive environment throughout one semester, a questionnaire was given to 60 students. Based on the opinions of the participants, supporting the learning process with social media has been considered to be effective.

Although some students can easily access a computer and other technologies, they may not prefer to use social media. In order to clarify this, Turan and Gökaş (2011) asked twelve students who do not use Facebook their reasons for resistance. It was concluded that, according to the students “... Facebook is a waste of time and dependency leads to internet addiction, confidentiality and reliability problems and asocial personality” (p. 191). In parallel with this idea, Uçak and Çakmak (2010) investigated how and for what purposes students are using Web 2.0 in higher education. The study revealed that there are many factors which influence students’ acceptance of Web 2.0 tools and educational use of these tools are important for students for creating a medium of communication including their instructors and colleagues. The researchers also concluded that “... students have only incomplete information about using Web 2.0 tools for professional purposes and most of them need training on this subject” (p. 44).

Up to now, the studies were mainly based on research about learning characteristics. Furthermore, there are also many studies about education technology. For example, Baran and Cagiltay (2010) conducted a study in order to reveal how well online communities of practice help teachers share explicit knowledge and bring their tacit knowledge to the surface. For this purpose, an Internet based platform called “The Professional Development Circle” (The PDC) was developed. Hence, the dynamics of the relationship between community members and the process of knowledge sharing and creation in two communities were examined through experiences and perceptions. The researchers concluded with four main reasons to benefit from online communities as; 1) adaptation to real-life situations, 2) creating discussion environments,

3) changing teachers' beliefs about practice, and 4) uncovering new teaching topics.

On the other hand, Gülbahar, Kalelioğlu and Madran (2010) delivered a compilation about the use of social networks which forms an evidence for the effective use of social networks in an educational context. The researchers also provided suggestions for various usages of social networks like Facebook, Twitter and Flickr for educational purposes. Another study conducted by Kalafat and Gökteş (2011) about the usage of social networks in higher education reveals the effectiveness of Facebook profile pages and the use of Facebook groups in the learning-teaching process. The findings showed that students attended similar Facebook groups previously and added similar profile pages. Based on the findings it was obvious that students had a positive attitude towards the social network environment and they mentioned that Facebook can be used as an educational platform.

Since social media is perceived as a learning environment, their characteristics should be analysed. Owing to this fact, in order to bring out the optimum requirements, Karademir and Alper (2011) suggested some standards for social media to be used effectively as a learning environment. The study discussed the advantages and disadvantages of the social networks sites and usefulness as a learning environment, and lists the standards for the social networks.

Independence of time and space in Web 2.0 applications, in particular the information generated by the knowledge communities has led to an increase in interaction. Increasing interaction between knowledge communities means the renewal and consumption of knowledge. Considering the rapidly changing information, Web 2.0 tools facilitate our life, Odabaşı and others (2012) discuss the importance of Twitter and explain dissemination of Twitter in the education system.

Nowadays Weblog and Blog are used increasingly widely all over the world. As with other internet technologies, blogs are expected to provide many benefits to the education system. Şenel and Seferoglu (2009) discuss the usage of blogs in education and its constructional advantages. They developed some activities depending on the objectives of the computer course and made some suggestions about the arrangement and applications of the blogs for courses. Another researcher Tınmaz (2013) also compiled possible uses of social networks in educational environments and stated that we are at the beginning of a new era and should conduct more research studies to reveal the effects and effectiveness of these social media for in-teaching-learning processes. Yükseltürk and Top (2013) investigated the usage of Web 2.0 tools in teacher training. They discussed the possible advantages and disadvantages of having use of these tools. The researchers concluded that benefiting from these tools might contribute to the effectiveness of the process.

There are few studies about instructional design. On this issue, Keleş and Demirel (2011) tried to display the usability of Facebook in formal education as a social network. The aim of their study was to conduct a sample application of Facebook as a social network with undergraduate students in formal education. The researchers concluded that "... Facebook assisted course facilitation in aspects like sharing and cooperation; access to the lecturer; and visualising the course content for some students." (p. 156).

In his study, Genç (2010) presented reviews related to some innovations of Web 2.0 applications like weblogs, podcasts and video casts, wikis, virtual worlds, social networks, bookmarks, tagging and photo sharing. The researcher provided a detailed example of the educational uses of Facebook for three undergraduate courses and one graduate course, and concluded that students showed a positive attitude towards the application and adopted this social network tool not only as a communication tool but also as a learning tool.

One last study looked at the issue of interaction and communication in learning communities. For revealing the effectiveness of usage of social networks through educational activities from collaboration and interaction aspects, Ekici and Kıyıcı (2012) examined the effects of social networks on learning outcomes with an application that runs on Facebook. The results showed that the experimental group students were found to be more successful when compared to the control group, which points to the contribution of social networks to learning outcomes.

In order to explore the current state of research on social media usage in education, a categorisation based on Zawack-Richter's (2009) research areas in distance education was used. The researcher classified research areas under three main headings; as Macro level, Meso level and Micro level. Macro level dealt with distance education systems and theories

and pointed out some issues of access, equity, ethics, globalisation, cross-cultural aspects, systems, institution, theories and models together with research methods. Meso level focused on management and organisation, costs and benefits, educational technology, innovation and change, professional development, faculty support and quality assurance. On the Micro level, there were issues like instructional design, interaction and communication in learning communities and learner characteristics. Hence, for the Turkish case the research studies among 25 articles show that 13 were about learner characteristics, 2 were about instructional design and 1 was about Interaction and communication in learning communities. There were also 9 articles found on the subject of educational technology. Hence, most of the studies were at the Micro level, less than half were at the Meso level, and there was no research at the Meso level. This finding can be interpreted as; research is in its preliminary stage and researchers are trying to explore what is going on at the individual level.

Hence, based on these facts the main purpose of this research study was to reveal the patterns and implications of social media usage by higher education institutions in both face-to-face and online teaching environments, namely for blended learning and e-learning. After a detailed literature review, research findings for two universities selected as cases, were presented in order to provide an in-depth view.

## **2. Methodology**

The descriptive case study approach was preferred in this research, as it is used to describe an intervention or phenomenon and the real-life context in which it occurred (Yin, 2003). Case study approach has the potential to deepen the phenomenon and makes it possible to answer questions of “how” and “why”. Moreover, how a phenomenon is influenced by the context within which it is situated can also be investigated by this approach (Baxter & Jack, 2008). Hence, since the aim of this research study was to explore usage patterns, experiences and perceptions about using social media in education, data was gathered from a variety of sources and converged for enlightening the case. This research aimed to answer the following questions:

1. To what extent has social media entered into the daily and academic lives of participants?
2. What are participants’ perceptions about using social media in education in terms of;
  - a. Self-regulated experiences
  - b. Instructional strategies and teaching styles, and
  - c. Organisational issues.
3. What are participants’ visions about implementing a social media strategy at university?
4. To what extent is social media useful for migrant academic staff?

### **2.1. Sample**

Ankara University (AU) and Middle East Technical University (METU) were selected as cases. Ankara University is the institution that led this research and METU is one of the leading technologically innovative universities in Turkey. The decision to select these two universities was to achieve purposeful sampling, since in terms of the numbers of instructors and students; the two universities have possibly the highest capacity of instructors who use social media in an educational context. After that, snowball sampling was used to select instructors and students of theirs who make use of social media in their courses, and who voluntarily accepted to contribute to this research. Data was then collected from 6 AU instructors (3 female, 3 male) and 22 AU students (12 female, 10 male), and 6 METU instructors (4 female, 2 male) and 20 METU students (5 female, 15 male). One point useful to emphasise here is that AU has fully online official teaching programmes, so all their instructors and students have experience in both e-Learning and blended learning, whereas METU uses social media and Web 2.0 tools to support traditional instruction, using blended learning rather than fully online.

### **2.2. Data Collection and Data Collection Instruments**

Data collection was quite time consuming since it was difficult to find the right people and get access to them. The sampling process was like snowball sampling, since the first access point was the instructors and then only after that were we able to reach out to their students. Hence,

although our first aim was to conduct structural individual interviews with instructors and focus group interviews with students, this aim was only partially achieved. In the cases where an individual meeting could not be set up with the participant, answers to open-ended questions were solicited via e-mail. Focus group meetings encountered problems as the participants' answers were gathered either by conducting individual interviews (both face-to-face and online) or via requests through e-mail. Hence, of the 12 instructors, 6 were interviewed face to face, 3 were interviewed online (through Skype and Hangout) and 3 were contacted through e-mail. The duration for both type of interviews with instructors lasted between 20 – 40 minutes. For students, individual and focus group interviews together with e-mail contact was used to gather data. Thus, 6 focus groups with sizes ranging between 2-5 were conducted and the rest of the data was either obtained by way of individual interviews or through e-mail. Overall, 34 students were talked to face to face and 8 students' opinions were taken via e-mail. Focus group interviews lasted between 16 – 40 minutes whereas individual interviews for students lasted 12 – 26 minutes.

In order to collect in-depth perceptions from the instructors, 15 open-ended questions were prepared to guide the interview process. The questions in the interview's guide aimed to reveal instructors existing usage, intentions and thoughts on the phenomenon, and are presented in Appendix I. Similarly, 11 questions were prepared for students to solicit their ideas on the same issues in order to provide a different point of view, and these are shown in Appendix II.

### **2.3. Data Analysis**

The qualitative data was analysed inductively through content analysis. The interviews were recorded and transcribed by researchers and then analysed inductively with emerging themes. The aim of the content analysis was to discover the concepts and relations that may explain the data. Therefore it was necessary to find themes that define the data, and to conceptualise and organise them in a logical manner (Yıldırım & Şimşek, 2000). The inductive approach was used for determining the concepts and relations that explain the data.

Regarding all of these facts, the data was analysed in 4 phases: (1) coding data, (2) discovering themes, (3) organising and defining data according to themes, and (4) interpreting results (Yıldırım & Şimşek, 2000). The content was separately coded and the data labelled inductively by two researchers, then these codes are converted into emerging themes, and finally similar themes were grouped under a general heading. Very slight calibrations were needed to agree on the general themes at the stage of merging the results of the two researchers for reaching the final themes. In addition, the data was changed into figures for the purpose of theme comparison in the analysis of the qualitative data (Yıldırım & Şimşek, 2000). The themes were analysed according to their significance levels.

## **3. Results**

### **3.1. Perceptions of Experts and Instructors**

#### **3.1.1. Daily Usage**

Almost all of the instructors stated that they use social media for communication purposes. Out of 12 instructors, 8 stated that they use social media for knowledge sharing. Some of them stated the importance of accessing up-to-date knowledge whereas others named social media as the information source. Hence, the main aim for usage was for both social and academic purposes, where social communication was given a high priority.

#### **3.1.2. The Reasons for Social Media Usage**

Of the 12 instructors, 8 stated that they are using social media for the sharing of course materials, knowledge and daily summaries; whereas 4 instructors said that they use it for communication purposes. On this issue, one instructor stated that "I can catch all my students at once, very quickly, and wherever they are". Other instructors had diverse reasons like; it increases the communication between students, gets more comments from students, increases motivation, reveals how a learning environment can be enriched, tracking of homework, conducting discussions and introducing students to new technologies.

### **3.1.3. Use of Social Media in Education**

In terms of preferences about Web 2.0 tools used for educational purposes, the top tools for instructors were Facebook (6 instructors), followed by learning management systems such as Moodle and METU-Online (4 instructors). Blogs, forums, YouTube and Dropbox tools were pointed out by 2 instructors. Google mail groups, Scoop.it, Glogster, Geogebra and Animoto were also stated by instructors as the tools most used to support instructional processes. One of the instructors said that “Facebook is a powerful communication tool; an environment that everybody can allocate time for on a daily basis”.

### **3.1.4. Use of Social Media for Research**

The preferences of instructors in terms of research purposes were found to vary widely. Out of the 12 instructors, 8 stated that they use the search engines of Google, Google Scholar, Library Online databases etc. which are the usual ways of performing searches. YouTube was stated as the tool that is also used for research by 4 instructors and Twitter was pointed out by 3 instructors. Blogs and academia.edu was favoured by 2 instructors. Facebook, Wiki, Dropbox, Mendeley and Researchgate were other tools pointed out by instructors. However, not all the aforementioned tools are Web 2.0 or encourage users to be social. This finding might be an indicator that researchers had not fully integrated social media tools in their research processes. One of the instructors said that “First come the blogs and newspaper/journal articles that I reach through Twitter. I am archiving them by using Evernote software”. Another instructor explained that: “I have just discovered videos on YouTube about the new model that I will develop. I can also join weekly discussions on Twitter by using the related hashtag. I am getting advice from experts about my research, we share knowledge and these are sometimes turning into Skype meetings”.

### **3.1.5. Strategies for Coping with the Changes**

In order to explore possible ways that instructors prefer to cope with the quick and huge changes in technology, a question was posed. Answers provided a look at the coping strategies for technology changes, and revealed that everybody is searching for different ways to keep themselves up to date. Of the 12 instructors, 7 stated that they are following journals, searching and reading blogs, news and announcements, whereas 2 instructors were seeking support from their students, young researchers, and colleagues. Moreover, 3 instructors underlined the importance of continuous and regular action for coping with the changes, whereas the trial and error method was individually preferred by 2 instructors. Some other thoughts were attending courses and Massive Open Online Courses (MOOCs), favouring institutional support, learning when they felt the need, and giving up when their attempts failed, but trying to allocate time to handle the situation. Other than these thoughts, one instructor stated that he gave up if he failed, yet another was having difficulties but at least had an idea about it. Only one instructor stated that he was not having any difficulty. One of the instructors stated that “I attended a course last year and in the beginning of this year I attended a MOOC. Moreover, I am reading continuously to follow the changes”.

### **3.1.6. Perceptions of Students Use of Social Media in General**

Instructors were asked about their perceptions based on their observations of students' reasons of why they are using social media. Instructors thought that students were using social media for;

- Communication purposes (10 instructors)
- Having fun and playing games (6 instructors)
- Socialisation ( 5 instructors)
- Just for time killing (4 instructors)

It is obvious that students don't perceive social media environments as learning and research environments. On this topic, one instructor thought that “Students perceive this environment as a communication, fun and game medium, and they find it strange to use it for academic purposes, but after some time they get used to it”, whereas another instructor said that

“Students use social media, but I want to guide their technical success towards individual and social benefits”. Another instructor stated that “I am conducting research on this issue. It takes time to perceive social media as an education tool. However, retention of messages appearing on Facebook is higher than in a class setting. Based on this fact, I am posting weekly course summaries on Facebook”. From a research point of view, one instructor said that “Students are using social media for research purposes. We are encouraging them to find trusted resources and teach them how to provide references that they use from Google Scholar”.

### **3.1.7. Perceptions of Instructors about Students use of Social Media as a Support Tool in Education**

According to the instructors, students’ perceptions about social media as a support tool for education were mostly positive. Although resistance can be seen sometimes (1 instructor) and fair usage takes time (1 instructor), stages of adaptation are observed according to the findings. Out of the 12 instructors, 5 stated that students are ready and motivated, using social media for educational purposes like as an enhancement of what they have learned, asking questions, recovery and follow-up, whereas 2 instructors said that students have started to perceive it as an academic tool. Moreover, one instructor proposed that motivation increases upon awareness of possible usage while another instructor is said that “they like it and they want to do everything online”.

Two other instructors said that students easily integrate social media as an educational tool; however they don’t understand the importance. One instructor stated that “This generation easily access, manipulate and integrate information. I found that this generation undertake searches and learn before coming to class”, while another stated “They learn to behave ethically and even warn each other to prevent misuse. They prefer to use it for enhancement mostly”. Hence, it can be concluded that we still have to wait for students to adopt this social environment into their academic world.

### **3.1.8. Features of Teaching Style**

When the instructors are asked about which dimensions, if any, of their teaching styles are appropriate for integrating Web 2.0 tools into their educational settings, it is seen that their beliefs about learning have shaped this process. Of 12 instructors, 6 were thinking in a constructivist manner that they feel a need for active engagement to the course and hands-on activities; they underlined the importance of student-centred problem-solving and guided discovery, together with group activities. Three instructors expressed their desire to have a friendly climate and good communication with students, whereas other 3 instructors stated that they overcame time limitations by providing extensions to learning time which can be used for enhancement. Two other instructors said that they use it for providing a rich learning environment to students, while 2 instructors had the aim of making students think and they preferred to get their personal comments. Based on these expressions, it is seen that both constructivist and cognitive dimensions of learning made instructors to use these environments to support what they cannot handle in class hours by also having the chance of communicating with students 24x7.

Moreover, one instructor thought that “The main reason is the lack of time for applications; for example, game planning. I cannot cover the topics in two hours. I am sharing videos and underline the points they could not follow in the class. They can watch and try. I use this environment in this way as a means of support”, another instructor commented “I want to make a connection with their future real life. I want to also teach affective dimension of the topics like health, family planning, violence etc. With the help of discussions supported with sample videos, they gain susceptibility in a rich environment”.

### **3.1.9. Preferred Teaching Methods**

When the instructors were asked about teaching methods that they implement in social media environments, the majority identified problem solving, guided discovery, discussion, collaborative work, individual learning, demonstration, research and case studies. Some instructors said that they are using brainstorming and methods to develop critical thinking



which points out they give importance to discussion once again. Only one instructor said that she is using social media just for communication purposes. Even this statement indicates that the instructor is trying to find ways for interacting more with their students. On this issue, one instructor declared that “I make students discuss a topic and I observe their comments while they are discussing. It is easier to assess their level of understanding this way”.

To conclude, the instructors are using student-centred models of interactive teaching, which are Cooperative Learning, Problem-Based Learning and Classroom Discussion as defined by Arends (2011) and shows that instructors possess a constructivist approach.

#### **3.1.10. Potential Online Resources for Students’ and Changes in Study Habits**

Based on instructors’ perceptions about potential online resources, it is difficult to find trusted content, especially in Turkish (2 instructors). Hence, instructors proposed that trusted resources, like forums and wikis, are important and should be compiled for students. They mentioned that visual media has great effect, and students prefer to use audio-visual content more (2 instructors). According to one instructor, easy and quick access to online materials attracts students more, so an e-Learning approach should be used more often. One another instructor said that “Students should use technology more often, they should continuously follow innovations, and hence daily technology usage should become part and parcel of their lifestyle” and another instructor mentioned that “collaborative learning gains more importance”. One instructor didn’t think that students use social media and online resources effectively and another declared that “There is a huge difference between the beginning and end of the semester. I encourage them to develop strong personalities. They use their own experiences to keep empathy as a role model. Visual media has a great effect”. Although there are lots of potential resources, effective and ethical usage together with trustworthy issues still needs attention.

#### **3.1.11. Current Situation of Universities in Terms of up-to-date Technologies**

With regard to universities usage of up-to-date technologies, the answers were diverse. Of the 12 instructors, 7 directly said “no”, that universities are not using the latest technologies, whereas 5 instructors thought that some universities are getting use of up-to-date technologies to some extent. On this manner, one instructor said that “Universities are the last implementers of all innovations. Even K-12 is better than higher education. The biggest barrier is the faculty members themselves. They don’t feel a need to promote these tools. Instead they expect students to learn by themselves”, whereas another instructor stated that “I think that general planning and continuous training is needed for the effective use of technology”. As a conclusion, universities have still much to do to achieve the intended goal of using up-to-date technologies in every day classes.

#### **3.1.12. Need for a Change in Teaching Processes and Skills**

When the instructors were asked if they use up-to-date technologies in their teaching and research processes, and is a change needed in terms of teaching processes and their skills, 11 instructors answered “yes”, whereas one instructor said “no”. Two instructors added that there is a resistance for this change. One instructor said that “They need serious skills that are more than an individual can learn by himself/herself. You either have to attend seminars or observe good models”, while another stated “We need creativity to improve the quality of teaching-learning. This can only be achieved through a top-down approach where all university members contribute voluntarily”.

Another instructor declared that “Perceptions should change and instructors should use technology in their courses on a regular basis. They should also integrate technology into their daily lives”, while one instructor said “We have to adopt our pedagogical insight and experiences in order to teach with technology. Technology can offer us the opportunity to shape content for delivery in a way that is more meaningful and in a quick and effective manner”. One other instructor stated that “New skills are needed to use new technologies. We have to change our habits and learn something different”. Hence, it is obvious that the instructors are aware of what is needed to make full use of emerging technologies, but they have concerns about resistance.

### 3.1.13. Existing Social Media Strategy for Universities

The instructors are asked if they knew about the social media strategy for their university or not, and 9 instructors stated that there was no such a strategy. The remaining 3 instructors had no idea. One instructor said that “ICT should be a part of daily life. It should appear automatically in our daily processes”. There was therefore either no strategy and/or not much opinion about such a strategy. This is an expected result since all implementations of social media in education are individual attempts of very few people.

### 3.1.14. Suggestions for a Social Media Strategy

Additionally, their suggestions for a social media strategy were questioned and 10 instructors had suggestions; quotations of which are as follows:

- We can use technology as a powerful network for knowledge sharing. In-service training opportunities are needed for all instructors.
- A top-down and step-by-step strategy should be implemented for academic usage.
- A general course can be provided to students about social media like computer literacy courses. A culture can be established in this way and users get used to it.
- Firstly, all instructors should become social media users. Moreover, I expect the university to develop non-commercial social media environments.
- I use social media to develop communication between students and alumni. There should be a social media for academic purposes used only by universities.
- Special interest groups or learning communities should be set up for social natural engineering. By sharing creative experiences, a cumulative know-how can be created. Hidden experiences can be transformed into informative and meaningful information.
- By using top-down and bottom-up approaches continuously and providing training opportunities through e-Learning, everybody can be armed with the necessary information and skills. But only by considering volunteers.
- There should be a systematic approach to support symposiums, conferences etc. to form databases and increase collaboration.
- First perceptions should change. It would be useful if a strategy of encouragement could be implemented, for instructors to share their experiences and thoughts, especially good examples and success stories.
- Everybody should use social media actively and regularly. Technical infrastructure should be enhanced and resources should be accessible from anytime and anyplace. For example, while doing my post-doctorate in a different country, I can search library from my smart phone through an application and libraries are open here 24x7 and full of people even at night.

Most of the suggestions are at an individual level rather than institutional. Although the question referred to an institutional strategy, the instructors were thinking about themselves and their own environment. According to Rogers (1995), people’s attitudes toward a new technology are the key element in its diffusion. Thus, suggestions provided by instructors are parallel with Rogers theory of diffusion of innovations. First attitudes and usage habits should change and use of social media should become a daily life activity, after that encouragement, other incentives should be implemented at the institutional level. Therefore, we should first start with individuals and then implement strategies at the institutional level.

### 3.1.15. Use of Potential of Immigrants

On the topic of universities’ potential communication with their migrant academic staff and students after they have returned to their places of origin, 4 instructors were positive, two instructors stated that this is an individual matter, and 4 instructors stated that it is not sufficient. On this topic, one instructor said that “There should be an academic environment like Facebook. This environment can help immigrant academicians to collaborate and communicate more easily”, where another stated “This is an individual matter. It can be easily done through Skype or social media”. One more instructor declared that “Social media is the most important tool for

cultural exchange. Visiting scholars and alumni all use these environments for communicating and culturing”, and another added “Projects can be carried and partners could collaborate through social media”. Hence, the instructors are seeing the potential for using social media but much is needed to achieve the goals and fill the gap.

### **3.2. Perceptions of Students**

#### **3.2.1. The Reasons for Social Media Usage in Daily Life**

The reasons identified for students to use social media, from the most favoured to least favoured are; communication, for academic purposes, getting the latest news about friends, sports, politics, knowledge sharing, entertainment, socialisation and playing games. Some of them stated that they started to use it in their courses this year, so they had a habit of checking it daily. They also mentioned that they mostly use Facebook and Twitter.

#### **3.2.2. Use of Social Media in Education**

The students are using social media in their courses for communication with classmates, sharing of instructional resources, providing summaries, asking questions, taking exams, contributing to discussions, collaborative work, file sharing, evaluation, and following announcements. They stated that even instructors don't offer any social environment to them, they have their own groups and they use it almost for all lessons to communicate all necessary details with each other. In most of the courses they use various social media environments for various purposes. They also stated their wish that they expect more instructors to use social media for academic reasons.

#### **3.2.3. Web 2.0 Tools used for Educational Purposes**

The students are using a great variety of social media in their courses for different academic purposes. The ones mentioned were; Facebook, Moodle, Blog, Wiki, YouTube, Slideshare, Blog, Forum, Tumblr, Google Earth, Google Maps, Dropbox, Ocw, Diigo, Twitter, Google Docs, Google Reader, Academia, Google Hangout, Linkedin, Pinterest, Prezi, Google Groups, and Lucid Chart. Their main reasons to use these networks are for collaboration and knowledge sharing.

#### **3.2.4. Strategies for Coping with the Changes**

It is seen that individual trial and error is the preferred way that students learn new technologies. This individual discovery is followed by some search strategies through search engines, following blogs and forums for special topics, tutorials, web sites and help buttons.

Some of the students prefer to ask more experienced friends and some of them stated that they are having no problems. One interesting point may be while there are some instructors who give up when they have problems, there were no students that even thought about giving up. They just listed the possible solutions one by one; and it seems that the number of solutions is endless.

#### **3.2.5. Perceptions of Students about Social Media as a support tool in Education**

All of the students have positive attitudes towards the use of social media as a support tool in education. They find it very useful and every student had different benefits from this environment. Some quotations were; “It can be used for enhancement”, “It is useful when used effectively”, “It provides a continuous method to follow the course”, “Students support each other and work in cooperation”, and “It supports repetition out of class”. Only two of the students stated that they although they perceive it as an effective tool for support, they don't use it in their daily routine. One of the students stated that “Social networks are the environments in which my age group spend most of their time. Due to that reason, this kind of support makes instruction better and more effective” and another student added that “It is a great idea to integrate what is frequently used in daily life, namely social networks, in to the academic world”.

#### **3.2.6. Features of Teaching Style of Instructor**

When students were asked about their instructors' teaching style in terms of the adaptation of social media into educational activities, they addressed almost the same issues as the instructors. Being active, visual learning, interaction, discussion, making practice and 24x7

teaching-learning were the points underlined by most of the students. Some quotations from students were; “interaction level is important”, “visual materials makes learning easier and the information becomes permanent”, “we can apply what we learn, and we can practice”, “independence from time and place is important”, “instructors should be open to communication”, “provides a friendly climate”, “variety of resources makes learning process rich”, “social media has become the lifestyle of the instructor” and “makes students active learners”. Hence, again it can be observed that facilitation, a high level of interaction and collaboration, and engaging in the learning process is favoured by students, which also addresses student-centred learning methodologies.

### **3.2.7. Preferred Teaching Methods**

Student statements revealed that they prefer student-centred teaching methods like innovative approaches, research, discussion, discovery, investigation, question and answer, demonstration, case studies, commenting on videos, inquiry, problem-based learning, project-based learning, group projects, collaborative and cooperative work. Hence, they expect a constructivist point of view from their instructors, which is the case found within this research study.

### **3.2.8. Students' Potential Online Resources and Change in Study Habits**

Some potential resources that are stated by students for use within their academic work are; TED Talks, Facebook Groups, Databases, Academia, all Google tools, YouTube, Wikipedia, Tutorials, Blogs, Online Forums, Slideshare, Sticky Notes, Endnote, Dropbox, podcasts, videocasts, Twitter, and social media. Some students thought that individual applications are more effective, one student commented on this issue that “Smartphones, internet and social media makes you search everything whenever and wherever you need, which arouses our curiosity more than ever - we are using technology more effectively every day with the help of more professional and easy to use tools”.

In terms of study habits, some students said that “We are accessing huge amounts of resources more quickly, we spend more time in front of the computer, we can communicate quickly and easily via the internet; but we can be prone to headaches, sight problems and boredom due to long hours sat down”, whereas some other students stated that “There is no longer a need for note-taking and writing in the class, thanks to slides. The density of information is increasing, courses are passing quicker, but unfortunately learning becomes more difficult. Mining of trusted information among hundreds of resources is also getting to be a difficult problem”. Another student declared that “We are doing everything online”, another added that “Most of the study processes are transforming to digital environments”. Moreover, one student said that “I have quick access to information, but I think I learn less”. It seems that students are aware of the ongoing changes in their academic life, but they are not so happy with it. Maybe they are having difficulties coping with all of these tools, networks, software and information.

### **3.2.9. Current Situation of Universities in Terms of up-to-date Technologies**

Most of the students answers to this question were “no”. They stated the reasons for not using up-to-date technologies as: (a) a lack of technical infrastructure; (b) the inefficiency of instructors and; (c) a lack of support provided by the university. On the other hand, one student stated that “Some universities are providing good technical infrastructure, but technology integration is not finished yet”, and another student said “METU is using the latest up-to-date technology, but other universities are not”. Another comment one student said was that “I don't think that universities are using the latest technologies, only to some extent”. Since METU is the one of leading universities of Turkey in terms of technology, students of METU perceive the use of technology better than other at universities. However, the findings revealed that in terms of social media usage and technology integration, METU also needs to go one step further.

### **3.2.10. Need for a Change in Teaching Processes and Skills**

Almost all students stated that instructors' teaching processes and their skills have to change if they are to make use of up-to-date technologies in their teaching and research processes. One student said that “Definitely a change is needed. Following the latest news about technology, the effective use of technology, transforming technology into educational processes and implementations are expected from all instructors”, while another student stated “Yes, because

instructors should be in harmony with these changes, the curriculum should be aligned with technology, and instructors should introduce new technologies to their students”.

Another student declared that “For example, older instructors don’t use computers or social media. They need to revise themselves according to the expectations of youth and the information age. Just learning and using is not enough, they should improve themselves by teaching through them. They need various professional development activities to improve themselves”, whereas one other student underlined that “Yes, it is needed, but most of the instructors should align themselves according to constructivist approaches though they were born and grew up with a behaviourist point of view. They should make up their minds about new technologies, and equip themselves with the necessary knowledge and skills. Unfortunately, the Faculty itself is not a social environment, so one cannot expect to move this community to online environments.”

### **3.2.11. Use of Potential of Immigrants**

Most of the students had no idea or were not sure about the potential of migrant students and their possible interaction after they returned to their places of origin and some of them stated their ideas as this could be provided. Some students provided examples from their environments as: “A friend of mine from Russia is keeping in contact with us. But this is an individual phenomenon and there are not so many examples”, “Some students from ERASMUS are still in touch with their friends in other countries, they are undertaking collaborative projects” and “A student from Iraq still communicates with his instructor. But it is difficult for everyone to achieve this”. It is noted that students do not understand the potential of social networks for keeping communication channels open or for doing innovative projects.

## **4. Discussion and Conclusion**

This research study revealed the existing patterns and implications of social media usage by higher education institutions for blended learning and e-learning. Although this study is limited with only two universities and social media tools used by the participants, the results indicate the current state of social media usage in higher education in Turkey, since these two universities are the leading ones for technological implementations all over the country, together with the presentation of current literature on the issue.

Since the younger generation continues to grow in Turkey, the initial resistance to technology adaptation has left the state primarily focussing on motivated students who already want to use latest technologies and are willing to learn using them. This brings us to the point that educators are very lucky in their implementations of adaptation of social media into educational settings and this environment promises much more than expected (Tınmaz, 2013, Odabađı, et. al., 2012, Mazman & Usluel, 2010). Although most students initially perceive social media as an informal environment for communication and fun, they actually found it turned out to provide value to what they were doing over time. It is pleasant to see that most instructors and students achieved more than what they had expected to and were willing to use it in the future with modifications based on their experiences. On the other hand, these promising results are based on and limited to the participants of this study. There are not many instructors and students who are willing to use new technologies and social media in educational settings, and that was why it was really difficult to find and access the right people for this research.

One of the main findings of this research was although social media is perceived as an informal environment; it is mainly used for knowledge sharing, as an information source and has a great capability for communication. All these keywords form the basis of an effective implementation of these environments when used for teaching-learning purposes. Hence, the findings revealed the potential for effective teaching and communication throughout the teaching-learning process. Both instructors and students valued social media for the contributions as a support tool to traditional instruction (Avci & Askar, 2012; Ekici & Kıyıcı, 2012). Moreover, they realised gains in terms of pedagogical aspects and provided us with their experiences for effective usage, especially in the constructivist context. It was obvious that connecting informal and formal learning through social learning theories is the best way of using social media for educational purposes (Chen & Bryer, 2012).

Another finding was that both instructors and students are unaware of the potential tools and resources that they can benefit from in their educational and research activities (Blazer,

2012; İşbulan, 2011; Genç, 2010). Their existing knowledge is too limited and there is more to be learned and applied. Thus, students can be offered opportunities to explore various resources in their courses and even a stand-alone course about social media can be offered at undergraduate level. However a much quicker way of meeting students social media usage needs for their academic career, is the integration of this technology into existing curricula.

The participants were also aware of the need for a change in both perceptions and skills acquisition of individuals in order to cope with these technological innovations. From a technological point of view, most of the participants were trying to cope with the changes at an individual level and the institutional support or strategy was lacking. It seems that it is easier for students to learn and adopt new technologies, compared to instructors. From an instructor's point of view, the ones who believe in and adopt a constructivist paradigm can be said to be more successful since they value interaction, communication and being social for their students which is the main premise of social media networks. Hence, more and widespread training opportunities together with an institutional strategy are needed for effective implementation.

This research study exposed that social media for higher education is used and implemented only by individual attempts through a limited know-how in terms of potentials that social media can bring to an educational context. As also underlined by Blazer (2012), institutional support and strategy is needed to bring to light the potential benefits and directing this potential to support student success through learning activities, as well as informing users about risks. Overall Implications

As a conclusion, this research study revealed that social media can have promising contributions as an educational tool and environment. Connectedness and socialization dimensions encourage knowledge sharing and communication of users and are a powerful aspect that fosters learning in a collaborative way through discussion and sharing. Hence, having these advantages in mind, educators can really benefit from social media as a support to their instructional processes. The next step may be to review successful implementations and to reveal those successful strategies for dissemination.

Hence, further research studies could focus on the following suggestions:

- Different social media tools can be considered as vehicles for delivering instructional messages; and so effectiveness studies can be carried out for various social media categories;
- Social media strategies can be developed and implemented at the higher education level;
- Social media environments can be specifically designed to be used exclusively use for teaching and research purposes;
- Investigation of social media for research purposes can be deepened for graduate students;
- The change in learner behaviours in terms of study habits, instructional material preferences, adaptation to interactive technology, being ubiquitous and learners having 24x7 access to both instructors and fellow students, can be explored in more detail; and,
- As a last suggestion, technologies' contribution to collaboration can be examined from a socialization point of view.

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## **Appendix I - Interview Guide for Instructors**

1. In your daily life, do you use social media and for what purposes?
2. How do you make use of social media/Web 2.0 in your courses?
3. Which Web 2.0 tools do you prefer to use in your courses? Why?
4. Which Web 2.0 tools do you prefer to use in your research process? Why?
5. How do you cope with changes in technologies when dealing with teaching and research?
6. How do you think that your students perceive social media?
7. In your opinion, how do your students perceive the use of social media as a support tool to your courses? How do they behave towards and within that environment?
8. Do you think that your teaching style is suitable for the integration of social media into your courses? In what ways do you foresee that overlap?
9. Which teaching methods do you generally prefer when using social media?
10. In your opinion, what are students' potential online resources and tools for gaining knowledge? Do you think that their study habits and behaviour changed?
11. Do you think that universities make full use of up-to-date technologies? If yes, how?
12. In your opinion, if universities make use of up-to-date technologies in their teaching and research processes, do instructors' teaching processes and their skills require changing?
13. Do you think that your university has a social media strategy or proposed adaptation model?  
PROBE (if appropriate): Do these strategies reflect the potential as well as the needs of diaspora migrants?
14. If you were given a chance to suggest and develop a strategy, what would you propose?
15. Do you think that universities use the potential of their migrant academic staff and students after they have returned to their places of origin (university of origin or destination)?

## **Appendix II - Interview Guide for Students**

1. In your daily life, do you use social media and if so, for what purposes?
2. In which course(s) do you use SoMe?
3. Which Web 2.0 tools do you make use of in your courses? Why?
4. How do you cope with changes in technologies when dealing with learning and research?
5. How do you perceive the use of social media as a support tool to your courses?
6. Do you think that your instructors' teaching style is suitable for the integration of social media into your courses? In what ways do you foresee that overlap?
7. Which teaching methods do you generally prefer when using social media?
8. What are your potential online resources and tools for gaining knowledge? Do you think that your study habits and behaviour has changed?
9. Do you think that universities make full use of up-to-date technologies and social media software/tools? If yes, how?
10. In your opinion, if universities make use of up-to-date technologies in their teaching and research processes, do instructors' teaching processes and their skills require some sort of change?
11. Do you think that universities use the potential of their migrant students after they have returned to their places of origin (university of origin or destination)?