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Akif Azak, Suleyman Alpaslan Sulak, Halil Erbil Güner

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## **Analysis of University Students' Views and Usage Levels of Web 2.0 Tools in Terms of Various Variables**

**Akif Azak, Suleyman Alpaslan Sulak**

Necmettin Erbakan University, Department of Curriculum and Instruction

Email: akifazak@hotmail.com, suleymansulak@gmail.com

**Halil Erbil Güner**

Private Jale Tezer Educational Institutions

Email: halilerbilguner@gmail.com

### **Abstract**

The aim of this study is to determine the university students' views on Web 2.0 tools and their level of use of Web 2.0 tools according to the variables of gender, Foreign Language Level, Computer usage level and frequency of access to the internet. The study group consists of 427 students who continue their studies at the Ahmet Keleşoğlu Faculty of Education of Necmettin Erbakan University in the academic year 2019-2020. The data in the study was taken with a three-part tool. In the first section, demographic characteristics of the students who participated in the research were determined. In the second section, the frequencies of use of Web 2.0 technologies were asked. In the third section, students were asked about their skills in using Web 2.0 tools. Data were analyzed by statistical package programs. T-test and variance analysis were used to determine whether the students' views on Web 2.0 tools differ according to gender, foreign language level, computer usage level and frequency of access to the internet. The Scheffe test was used to determine which group the differentiation originated from. In terms of the frequency of use of Web 2.0, men are significantly different from women, those who have computers and those who are connected to the internet for 7 hours and more than others. In terms of Web 2.0 skill level, men are significantly different from women, those who have computers, those who have 7 hours and more internet connections, compared to others.

**Keywords:** University Students, Technology Use, Web 2.0 Tools, Internet, Student Views.

### **Objectives**

The 21st century is called the age of information and technology. In the present century, internet and communication technologies are changing and developing at a stunning pace. People's social, economic and cultural life is changing. The internet which affect every aspect of our lives, also changes our habits. The internet usage rate of university students has passed 90% today (Atas & Celik,

2019). This ratio shows us that in a globalized world, university students are open to online socialization and education, and their expectations for this communication are quite high.

Modern technologies have great potential to provide students with rich learning opportunities and motivate them when they are carefully planned and integrated into educational environments. The development of the internet in the form of Web 0.0, Web 1.0, Web 2.0 and Web 3.0 has led to changes in people's communication preferences. Web 0.0 is called development of the internet, Web 1.0 is named static web, Web 2.0 is called the writing and participating web and Web 3.0 is called the semantic executing web (<https://flatworldbusiness.wordpress.com/flat-education/previously/web-1-0-vs-web-2-0-vs-web-3-0-a-bird-eye-on-the-definition/>). The development started with Web 0.0 and continued with Web 1.0, which is called "read-Only" web by experts. The lack of internet interaction during these years led to the birth of Web 2.0. This era empowered the common user with a few new concepts like Blogs, Social-Media & Video-Streaming. Publishing your content is only a few clicks away! Few remarkable developments of Web 2.0 are Twitter, YouTube, Flickr and Facebook. Many different applications of Web 2.0 have started to be developed and widely used. Today, people share their contents with anyone who has access to the internet via social media.

Some researchers use the concept of Web 2.0 as a synonym for the concept of social media (Berthon, Pitt, Plangger & Shapiro, 2012; Bennett, Bishop, Dalgarno, Waycott & Kennedy, 2012). Web 2.0 technologies are utilized in the field of Education. The most common the most widely used Web 2.0 technologies are blogs, viki, podcasts, video sharing sites, social networks, and Kahoot. (Bennett, Bishop, Dalgarno, Waycott & Kennedy, 2012; Sadaf, Newby & Ertmer, 2012; Hew & Cheung, 2013; Harris & Rea, 2019). There are general content studies on Web 2.0 in literature (Rodrigues, Sabino & Zhou, 2011) as well as studies on each technology (Gani, Hassim & Mohandas, 2016; Thackeray, Neiger, Hanson & McKenzie, 2008). Studies on a single technology focus mostly on social networks. Through a survey of Facebook users on their usage of various features of Facebook, and the comparison of these findings to predictions made on the usage of each of these features using Systems theory, conclusions are reached on how the absence of hierarchy in social media sites impacts the system (Mangal, 2013).

The study described is about a study to explore the factors influencing the acceptability and effectiveness of using Web 2.0 social networking tools as an aid to learning (Tulaboev & Oxley, 2012). Second generation web tools or social software (Murugesan, 2007) Web 2.0, as a concept, can be expressed as a whole of technologies that enable the creation of content by the user, as opposed to what Web 1.0 technologies offer to internet users, and that allow individuals communicating over the internet to interact with each other in the forefront. Web 2.0 is a term made popular following the collapse of the dot-com companies (O'Reilly, 2005; Andriole, 2010). With Web 2.0 applications, individuals can participate effectively in the process, publish their content without technical obstacles, benefit from services and applications that provide social interaction and cooperation, and have the opportunity to publish and store the information they reach (Petter, Reich & Scheuermann, 2005). Web 2.0 tools enable students to participate actively and interact with the content (AlJeraisy, Mohammad, Fayyumi & Alrashideh, 2015). Students participate in the educational environment with their sensory organs which allow them to acquire permanent information and it also enables them to develop cognitively (Cochrane, 2014). Web 2.0 technologies have encouraged a more flexible learning approach to take place across various "touch points", i.e. the classroom, off campus, within the workplace and virtually anywhere with internet access. This distance "blended" learning

approach initially occurred within the fields of executive education and lifelong learning within business schools. The approach has been widely praised by practitioners and has become more common across the traditional business education framework (Thomas & Thomas, 2012). Since Web 2.0 tools provide interactive environments, they enable students to collaborate with different environments for learning activities (Barbara & Linda, 2013). Web 1.0 is a one-sided interaction, while web 2.0 is a multi-sided interaction (Patel, 2013). The use of Web 2.0 tools in education offers opportunities to increase cooperation and participation in particular

Developments in technology and communication also have an impact on education. In constructivist education understanding, the competencies that students should have today are to become individuals who produce knowledge, use knowledge, learn to learn, and constantly renew themselves. The acceptance of young generations in society is related to the efficient and adequate use of technology. Individuals who are prone to technology will contribute to the development of society. The students' choice of different materials in education, the development of Web 2.0 tools will lead to a fundamental change in education. Web 2.0 is a potentially disruptive technology because of its potential to change the model of higher education from the traditional classroom framework to an asynchronous 24/7 mode (Thompson, J., 2007). Technology-oriented education, which allows unlimited access and repetition in every environment regardless of time and space and accelerates learning by running multiple sensory organs to work, will lead to more flexible behaviour of students by moving the education system of the future out of the classroom.

In E-learning, students, teachers and the content can be found in different places. One of the first theories in distance education, the theory of transactional distance emphasizes that distance between student and teacher is not a physical distance, but rather a pedagogical distance (Moore, 1993). The use of Web 2.0 technologies in the context of e-learning is expected to increase interaction between teachers and students (Coklar, 2012). Of Web 2.0 technologies, blogs, podcasts, wikis, social networking sites such as Facebook and Twitter, virtual worlds, video and photo sharing sites are frequently used by students. Using these technologies, which students use frequently in their daily lives, for educational purposes in a sense means carrying the technologies that they have already adapted to their classes.

The use of social networking sites by students of all ages and the fact that they take up a great deal of space in their daily lives has led educators to take an interest in this area. Social networking sites can be used easily and cheaply without much support from universities and can be easily integrated into educational processes for students.

As a result, as new technologies rapidly develop and spread, the importance of using social networking sites in the context of education increases, and nor can there be any mention of keeping educators out of this development process.

Web 2.0 presents both challenges and opportunities for education. As noted, for teacher education there is a twofold imperative, to prepare teachers to use Web 2.0 in their own classrooms and to take advantage of what it has to offer for immediate application in teacher education programs (Albion, 2008)

Especially considering that Turkey has a young population, the issue is even more important. Excessive internet use, which is very common in young people, negatively affects their psychological and physical development, social relations, and decreases their academic success (Heo, Oh, Subramanian, Kim, & Kawachi, 2014). From this point on, in this period when technology is rapidly

developing and becoming widespread, the biggest task in the development of society and adapting to innovations, as well as preventing the negative consequences that may arise, falls to educators.

### Literature Review

In the study, the opinions of prospective teachers about the use of Web 2.0 tools are highly positive. It is thought that students have the ability to create content, social interaction and support creativity in educational environments with active participation, and the results of the research show that teacher candidates report positive opinions. Web 2.0 tools are thought to have a positive impact on learning due to their rich content and can be useful in improving the communication capabilities of partner workspaces and teacher candidates. Therefore, it is anticipated that teachers' use of Web 2.0 tools in their lessons will contribute to the development of teacher candidates. In addition, it is thought that training by educators who play an important role in directing teacher candidates and guiding them for better education will allow prospective teachers to use Web 2.0 tools more frequently and efficiently (Caliskan, Guney, Sakhieva, Vasbieva & Zaitseva, 2019).

In the study, the findings revealed the current level of use of Web 2.0 tools among academics in higher education. 7% of academics at the Pearson Institute of Higher Education have made Web 2.0 tools for education and only 16% of academics in Monash South Africa have made Web 2.0 tools for education. Individual factors (barriers) are one of the main factors affecting the use of Web 2.0 tools in higher education; Organizational factors (training and support) are crucial for the successful use of Web 2.0 tools; academics agree on the different perceived usefulness that exists to develop and complement traditional learning; Perceived quality characteristic factors (ease of use) also contributed to the use of web 2.0 tools in teaching and learning (Moodley, 2019).

The study explores the impact of students' use of social media on the adoption of e-learning platforms at The British University in Dubai. A modified Technology Acceptance Model has been developed and verified for quantitative study involving data collected through an electronic survey from 410 graduate and master students. The findings suggest that information sharing, social media features and the motivation for using social media systems, including Facebook, YouTube and Twitter, positively affect perceived usefulness and perceived e-learning platforms, and this is the acceptance of e-learning platforms among students. (Alghizzawi, Habes, Salloum, United States, Ghani and Shaalan, 2019).

The aim of the study is to analyze the use of Web 2.0 for website development and for the top 300 higher education institutions (HEI) in India in terms of social media website. Institutions selected from the National Institutional Ranking Framework in India. In this research, Content analysis was used in terms of quantitative approach. All selected institutions have websites and one third of the institutions are on social media. One-fourth has unofficial accounts on social media. No orientation towards the use of Web 2.0 has been noticed in higher education institutions in India. This study is based entirely on publicly available data on website and social media presence. The results show that HEI is using Web 2.0 applications at a slow speed. This is the first research to draw an overview of Web 2.0 usage of top institutions in India. The study provides academics with useful information to effectively meet digital user needs by effectively applying digital strategies (Tripathi, 2018).

The aim of the study conducted by Horzum (2010), is to examine the awareness of the teachers about Web2.0 tools, frequency of their usage and the purposes of usage in terms of different variables. The data were collected from a survey developed by the researcher from 183 teachers who participated in the in-service training of the Ministry of Education. As a result of data analysis, it was determined

that teachers are not aware of Weblogs and Podcasts and that they are aware of Facebook, MSN and VSS. Teachers mainly use Facebook once a week, MSN every day, they use VSS several days a week, and they don't use Wikipedia, Weblogs and Podcasts. Teachers mostly use Facebook, MSN and VSS for entertainment and communication, and Wiki, Podcast and Weblogs to access information.

This article contributes to increased debate on social networking sites and education, and addresses the following question: What is the role of social networking sites in teacher education courses, given the challenges and continued increase in their use in school districts? On the one hand, the use of these sites encourages prospective teachers to be technologically "savvy" in the ways that are rarely seen among teachers in the past. On the other hand, the use of Facebook and MySpace causes problems and problems for schools. In the framework of the results of an ethnographic study, the article argues that Facebook has a place in teacher education. In particular, this article discusses two related but emerging issues related to professional and cultural expectations and teaching. These themes relate to the professionalism of teachers in Facebook and the US and beyond, and to professionalism embedded in a wider subject of teachers' use of Facebook (Saunders, 2008).

The study aimed to determine the current status of using Web 2.0 tools in university education by faculty members of the Faculty of Education of Sudan Science and Technology University. An explanatory analytical method based on the use of questionnaires and interviews was used in the study. The questionnaire was applied to a sample of 40 members randomly selected from the study population. The results showed that the level of using Web 2.0 tools in university teaching by the faculty is moderate and the highest level of use in scientific research is acceptable. The results also showed that there was no statistically significant difference in the use of Web 2.0 tools in university teaching in terms of the degree level, while the findings showed that there were statistically significant differences in the use of Web 2.0 tools in terms of the department specialization. The results also showed that using Web 2.0 in teaching caused some difficulties (Ahmed, AbdelAlmunem & Almabhough, 2016).

The aim of the study is to determine the level of technological pedagogical content knowledge (TPACK) self-efficacy of science teacher candidates regarding the variables in the use of Web 2.0 applications. In the 2017-2018 academic year, a survey of the senior candidate models of 344 science teachers was conducted at six state universities in Turkey. 'Personal information form', 'Web 2.0 applications usage status survey' and 'TPACK self-efficacy belief scale' were used. The results show that there is a significant relationship between TPACK self-efficacy belief levels and variables in science teacher candidates' use of Web 2.0 applications (Wright and Akgunduz, 2018).

### **Purpose of Research**

Literature that are given above shows that positive results have been obtained from the use of Web 2.0 technologies especially in university education. In the case of course-based or national-wide participation of these technologies, it is important to first investigate the use of these technologies by university students and follow a path according to the current situation. In addition, some of the most striking issues in studies on Web 2.0 technologies are privacy, security, gender, internet experience, computer anxiety, social values, and the use of computers is entertainment (Lewis & Ariyachandra, 2011). For this reason, the aim of this study is to determine the skill level and status of university students using Web 2.0 technologies and to examine whether these variables vary in terms of gender, foreign language, computer ownership and frequency of internet use.

In this context, the following questions will be answered.

- 1) Does the university students' use of Web 2.0 technologies differ significantly according to gender, foreign language, internet-connected computer ownership and weekly internet usage frequency?
- 2) Does the ability of university students to use different Web 2.0 technologies differ significantly according to gender, foreign language, internet-connected computer ownership and weekly internet usage frequency?

### Method

A survey model from quantitative research methods was used in the research. Survey model research is a quantitative research method conducted by researchers to explain the attitudes, opinions, behaviour or characteristic features of a sample or universe and is widely used in the field of Education (Creswell & Creswell, 2017).

General screening method was used in this research. Students taking the “introduction to education” course in the first grade of the University in the 2019-2020 school years were taken as research universe. 7 of the 14 course groups in the universe were taken as research samples. The students who make up the sample consist of all the teacher training programs in the faculty. It is assumed that all students taking the same course are uniformly distributed. As the course is a part of the common course and consists of the first year students, there has been no study of inter-departmental differentiation. The students were examined in terms of gender, foreign language knowledge, internet-connected computer/mobile phone ownership and weekly internet usage.

### Data Collection Tool

The data in the study was taken with a three-part tool. In the first part, questions about gender, foreign language level, computer/smart phone status connected to the internet and daily internet usage time were asked to determine the demographic characteristics of the students participating in the research. In the second section, the frequency of use of Web 2.0 technologies was asked. Students were asked how often they used 6 different Web 2.0 tools that were most used. Classification was made in the form of never, rarely, sometimes, often and always. In the third part, students were asked about their skills in using Web 2.0 tools. They were asked to evaluate their ability to use the designated Web 2.0 tools as a simple, intermediate or advanced level.

### Findings

Distribution of the students participating in the study by gender is given in Table-1. A total of 427 students participated in the study. 31% (f=132) of the students are male and 69% (f=295) are female.

Gender	F	%
Male	132	0,31
Female	295	0,69
Total	427	

Table - 1 Distribution of students by gender

The foreign language levels of the students participating in the study are shown in Table-2. As can be seen in the table, 23% (f=97) of the students stated that had a weak level of foreign language

knowledge, 27% (F=116) were moderate, 38% (F=163) were good, and 12% (F=51) were very fluent in foreign languages.

Level	f	%
Weak	97	0,23
Moderate	116	0,27
Good	163	0,38
Very good	51	0,12
Total	427	

Table-2 Distribution of students by foreign language levels

Table-3 shows the state of students owning a computer/smart phone connected to the internet. 93% of the students (f=397) said they had a computer/smart phone connected to the internet and 7% (F=28) said they had no computer/smart phone connected to the internet

Own	f	%
Yes	397	0,93
No	28	0,07
	428	

Table-3 Owning an internet-connected computer / smart phone

When students' daily internet usage times are examined, students who never enter the internet and students who enter less than 1 hour are considered in the same category. The ratio of students entering the internet for 1 hour or less was 10% (f=44), the ratio of students entering the internet for 1-3 hours was 43% (F=183), the ratio of students entering the internet for 3-7 hours was 29% (F=124) and the ratio of students entering the internet for more than 7 hours was 18% (F=76).

Hour	f	%
0-1	44	0,10
1-3	183	0,43
3-7	124	0,29
7-more	76	0,18
	427	

Table - 4 Daily internet usage time

### Web 2.0 technologies use cases

University students were asked about the frequency of use of web 2.0 tools such as, viki, podcasts, video sharing sites, instant messaging, social networking and other (kahoot, padlet etc.). The answers were classified as never, rarely, sometimes, often and always. The Web 2.0 technologies use frequencies of students are shown in Table 5.



	Viki		Podcast		Video sharing sites		Instant messaging		Social Networking		Other (Kahoot, padlet etc.)	
	f	%	f	%	f	%	f	%	f	%	f	%
Never	66	0,15	34	0,08	23	0,05	28	0,07	45	0,11	57	0,14
Rarely	87	0,20	95	0,22	51	0,12	5	0,01	22	0,05	45	0,11
Sometimes	94	0,22	103	0,24	82	0,19	97	0,23	83	0,19	82	0,20
Often	145	0,34	132	0,31	169	0,40	152	0,36	113	0,26	101	0,24
Always	35	0,08	63	0,15	102	0,24	145	0,34	164	0,38	132	0,32
Total	427	1,00	427	1,00	427	1,00	427	1,00	427	1,00	427	1,00
Mean	1,96		2,58		3,02		3,83		4,25		3,79	

Table 5 Frequency of Web 2.0 technologies use

When the frequency of use, percentage rate and mean scores are examined, it is observed that the least used web 2.0 tool is the wiki. The number of students who stated that they never used the Viki tool was 66, with a ratio of 15% and a mean score of 1.96 (rarely). It was found that social networking sites are the most widely used web 2.0 tools by students. 38% of students stated that they used social networking sites all the time. The number of these students was 164 and the mean score was found to be 4.25 (all times). Students using instant messaging ( $X=3.83$ ) and other applications ( $X=3.79$ ) stated that they often use these applications.

Independent samples t-test was conducted to assess whether the frequency of Web 2.0 technologies use has changed by gender. The mean scores of males ( $X=3.32$  and  $sd=.72$ ) were found to be significantly higher than those of females ( $X=3.07$  and  $sd=0.79$ ) ( $t(426)=-3.37$ ;  $p=.00$ ;  $d=.141$ ).

One-way variance analysis was conducted to measure whether the frequency of Web 2.0 tools use by foreign language level. According to the test result, there was no significant difference between the frequency of web 2.0 technologies use and foreign language levels.

Independent samples T-test was conducted to assess whether the frequency of Web 2.0 technologies use has changed according to the state of internet-connected computer ownership. Mean scores of students with internet ( $X=3.37$ ;  $sd=.74$ ) is observed to be significantly higher than those without ( $X=2.78$ ;  $sd=.84$ ) it ( $t(426)=16.76$ ;  $p=.00$ ;  $d=.79$ ).

The result of analysis conducted to determine whether the frequency of Web 2.0 technologies use has changed according to internet usage times was significant. According to the Scheffe test results, there was a significant difference between students with daily internet usage of 7 hours and above and students in other groups with daily internet usage of 7 hours and above ( $p<0.05$ ).

### Web 2.0 Skill level

The proficiency of university students to use web 2.0 tools is shown in Table-7. Students were asked to express their level of use of web 2.0 tools as insufficient, moderate and advanced. When students' responses were examined, Wiki was found to be at an insufficient level ( $X=1.79$ ;  $f=186$ ; 44%); social networking ( $X=2.51$ ;  $f=247$ ; 58%) and instant messaging ( $X=2.44$ ;  $f=234$ ; 55%) were found to be at an advanced level.

	Wiki		Podcast		Video sharing sites		Instant messaging		Social Networking		Other (Kahoot, padlet etc.)	
	f	%	f	%	f	%	f	%	f	%	f	%
Poor	186	0,44	91	0,21	67	0,16	48	0,11	31	0,07	117	0,27
Moderate	145	0,34	222	0,52	174	0,41	145	0,34	149	0,35	242	0,57
High	96	0,22	114	0,27	186	0,44	234	0,55	247	0,58	68	0,16
Total	427	1	427	1	427	1	427	1	427	1	427	1
Mean	1,79		2,05		2,28		2,44		2,51		1,89	

Table 7 Proficiency of using Web 2.0 tools

Independent samples t-test was conducted to assess whether the proficiency of using Web 2.0 technologies changed by gender. The mean scores of males ( $X=2.37$  and  $sd=.52$ ) were found to be significantly higher than females ( $X= 2.09$  and  $sd=0.54$ ) ( $t(426)= -2.07$ ;  $p=.00$ ;  $d=.07$ ).

One-way variance analysis was conducted to measure whether the proficiency of using Web 2.0 tools changed by the foreign language level. According to the test result, there was no significant difference between the competence of using web 2.0 technologies and foreign language levels.

Independents samples t-test was conducted to assess whether the proficiency of Web 2.0 technologies use changed according to the state of internet-connected computer ownership. It can be seen that mean scores of students with internet ( $X = 2.24$ ;  $sd= .54$ ) were found to be significantly higher than those without ( $X=1.89$ ;  $sd=.55$ ), ( $t(426) = 14.76$ ;  $p = .00$ ;  $d = .69$ ).

The result of the analysis to determine whether Web 2.0 technology usage proficiency changed according to internet usage times were significant. According to the Scheffe test results, there was a significant difference between students with daily internet usage of 7 hours and above and students in other groups with daily internet usage of 7 hours and above ( $p<0.05$ ).

### Result and Suggestions

Studies and research findings examined show that student-centered social media for students attending freshman year in college improves students' perceptions of social support (DeAndrea, Ellison, LaRose, Steinfield and Fiore, 2012). In addition, encouraging prospective teachers to use technology in lessons will turn their views on the use of technology into positive ones. In this regard, the major task is for teachers who will encourage the use of technology in their courses. In addition, students have a positive attitude towards these environments, can easily control the activities in the environment and can achieve goals such as asking questions, sharing resources in accordance with the course, forming groups and interacting with their classmates (Yuen & Yuen, 2008).

This study was conducted to examine university students' views and usage levels for web 2.0 tools in terms of various variables. It is thought that the findings of the study may help prospective teachers to use Web 2.0 technological tools.

With Web 2.0 tools, students will be able to make activities suitable for classroom learning environments. It is thought that students will become more social and active individuals with Web 2.0 tools. This study is to determine the university students' views on Web 2.0 tools and their level of

use of Web 2.0 tools according to the variables of gender, foreign language level, computer usage level and frequency of access to the internet.

According to the gender dimension, the majority of the students are female (69%). The ratio of male students is (31%). The reason for this difference is that female teacher candidates prefer the teaching profession more than male teacher candidates. Students' Foreign Language level is weak (23%), moderate (27%), Good (38%) and very good (12%). This is because students are expected to have a normal distribution of their English level when they start their first year of university. When the computer/smartphone connected to the internet was examined, yes (93%) and No (7%) were determined. This is because a large majority of students own a smartphone. Smartphones are no longer a luxury but an easily accessible technological tool. Daily internet usage was found to be 0-1 hours (10%), 1-3 hours (43%), 3-7 hours (29%) and 7-more hours (18%). When these data are examined, it is seen that nearly half of the students are connected to the internet for 3 hours a day and below. This can be seen as because students are not dependent on access to the internet or have difficulty accessing the internet.

When the frequency of use of Web 2.0 technologies is examined, it is observed that the least used tool is Viki ( $X=1.96$ ) and the most used tool is social sharing ( $X=4.25$ ). The reason for this is thought to be easy of use. More interactive interaction by social networks may have led students to turn to this tool. Wikis, however, are considered to be a tool that requires a little more work and may be used less.

Kiyici (2012) determined the science tools of the pre-service science teachers as wiki ( $X = 1.45$ ) and Social Network ( $X = 3.73$ ). The results of this study show that students use "Facebook" the most in their lives and plan to use "Webspiration" in their professional lives in the future. In addition, students prefer to use Prezi, Glogster, YouTube, Facebook, Blog / Wiki, Voki and Toondoo (Yucel, 2017). It was determined by a new study that only 14% of the young people in the USA use blogs, 73% use social networks and the most preferred social network is Facebook (Lenhart, Purcell, Smith, & Zickuhr, 2010). Sabeh, Baharudin & Abdullah found that 93.3% of 2018 students use facebook from social networks, while the least use among social networks is 6%.

The mean scores of men ( $X=3.32$ ) and women ( $x=3.07$ ) were found to be the difference between groups. The fact that men are more inclined to technological means may have been a factor in achieving this result. In their study by Huang, Hood and Yoo (2013), they found that women are more anxious and worried than men regarding the use and domination of Web 2.0 applications. The findings of this study showed that students expressed high perception about their social presence on Web 2.0 tool. Nevertheless, male students perceived higher social presence on Web 2.0 tool than female students. However, there were not significant differences in students' perception of social presence neither based on the gender difference nor on the number of the semester of the study (Tasir & Al-Dheleai, 2019). However, there is a significant differentiation in terms of gender differences in the use of Web 2.0 applications in Erbil. He states that male individuals using Twitter and Facebook are much more than female individuals (Sabeh, Baharudin & Abdullah, 2018).

There was no significant difference between the groups in terms of foreign language level. The reason for this can be cited as being that the foreign language levels of the students in the first year of the University are close together. Looking at the findings of having a computer/smartphone connected to the internet, it was found that I own ( $X=3.37$ ) and I do not own ( $X=2.78$ ). Students who have the internet are significantly different from others. This can be cited as the reason that students with the internet are prone to Web 2.0 tools. In the study, the vast majority of students (over two-

thirds) have access to a smartphone or tablet, and this data is consistent with reports on the use and ownership of teens in the UK and Australia, respectively. For this reason, teachers should trust their students for the use of mobile and similar devices in the classroom in a logical and specific framework (Lenhart, Purcell, Smith & Zickuhr, 2010) The aim of this study is to reach meaningful data by researching m-learning potential among university students and perceptions of students towards developing learning technology. Quantitative data was collected through a survey in which 320 undergraduate students enrolled in four academic disciplines. Considering the results, it shows that the student population in general shows a positive attitude towards m-learning; however, the perceptions of Art and Engineering students differed significantly from those of Medicine and Business students. The results of this study have practical implications for m-learning programs, politicians, educators and developers, especially in developing countries (Iqbal, 2017).

When we look at the daily Internet Access status, there is a significant difference between the students who enter the internet for 7-more hours per day. This is because it is thought that students who are more engaged with the daily internet will use more web 2.0 tools.

When the Web 2.0 skill states are examined, the results overlap with the Web 2.0 use states. The frequency with which students use the internet and web 2.0 tools will be similar to their ability to use these tools. We examined whether the students' Web 2.0 skill States led to significant differences between the groups. A significant difference was found in favor of men in terms of gender, in favor of those with an internet-connected computer/smartphone; and in terms of frequency of internet use compared to other groups in terms of those with a 7-hour internet connection.

The use of Web 2.0 tools in Education Faculties should be encouraged. In his study, Gani, Hassim & Mohandas (2016) found that web 2.0 tools increase focus during classroom education, they are fun and interactive and, both encourage students to learn and search by themselves.

According to the research results, the continuous development of Web 2.0 technologies in education faculties should be monitored and the use of Web 2.0 technologies in teaching and learning processes of teaching staff can be encouraged. Courses related to the use of Web 2.0 tools can be given to faculty lecturers through in-service trainings. By informing teachers and using these tools in their lessons, students can also become proficient in web 2.0 tools.

There are many innovative uses of Web 2.0 technologies in education. Web 2.0 technologies becoming a standard component of the classroom environment. Generation-Z (born in 3rd millennium) students will be use Web 2.0 technologies in classroom. So we recommend that teachers receive in-service training on the use of web 2.0 technologies. However, it will not be enough for teachers to simply embrace older technologies. We must continue to investigate about Web 2.0. The education we provide in the third millennium will not be enough for z-generation. Because the Z-generation is very well equipped with information systems, it comes to the education system. Our students are already savvy with the Technologies. We have to understand the advantages and disadvantages of the technologies and use them to our advantage. Students use social networks the most. This interest of students should be associated with education. The contribution of the use of Web 2.0 to education may be the subject of future research.

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