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## Frequency and aim of web 2.0 tools usage by secondary school students and their awareness level of these tools

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### Abstract

Web 2.0 tools, such as wikis, blogs, social networks, photograph and video sharing sites, instant messaging, and podcasts provide easy applications to users without having knowledge on computer programming or computer systems. Moreover, Web 2.0 tools provide young users virtual environments, in which they have opportunities to become socially active, interact with their peers, and share, cooperate as well as create their own projects. This study focused on students' perceptions about Web 2.0 tools, and dealt with the frequency and aim of their usage. The working group consisted of 111 secondary school students from Ankara, Adana and Erzurum provinces of Turkey. The data were collected through a survey questionnaire. In data analysis, frequency distributions, percentages, mean and standard deviation scores were calculated. According to the results, social networks, instant messaging services and video sharing sites were most frequently used tools by students. Although most of the students were aware of Web 2.0 tools, only a small number of students used wikis and podcasts. Students who were using Internet in their daily life used it mostly for entertainment purposes. However, as frequency of the students who used Internet decreased their objectives for using it changed. In conclusion, when the frequency of students' Internet usage changed, Internet usage aim changed according to needs of students. The students preferred to use search engines and Facebook more than other tools. Besides, gender was an important factor in the usage of the Internet.

*Keywords:* : Internet usage, high school students, Web 2.0 tools

### 1. Introduction

Information and Communication Technologies (ICT) development is a global revolution. It has become a subject of great significance and concern to all mankind. Dynamic and constantly developing, ICT has provided the necessary environment for the development and use of Web 2.0 tools. Furthermore, the changes with the ICT in educational process lead to changes in teachers' and students' roles as well. Thus, in order to follow these changes and their related effects and emerging needs in education, frequency of use of web technologies in education has increased rapidly in recent years, and is still increasing. The rapid developments in web technologies leads people to move a new standing, by changing them from people, who are reading and getting the information passively, to people, who are producing information and sharing that information with others. In educational settings, web technologies increase the interaction between instructor and learner. This interaction should be used as a helpful way in order to create an effective teaching-learning process (Hartshorne & Ajjan, 2009). Web 2.0 technologies are one type of these developing technologies, which is also spreading in the educational environments. Web 2.0

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applications, widely known as just Web 2.0 are multi-participatory, which are giving wide authority to the user, providing environment to produce information instead of just consuming it passively. These applications also make the static structure dynamic. There are interactive learning environments where people can communicate, produce, edit and share in a social community in these applications. In the light of these functions it can be claimed that using Web 2.0 technologies, which promote the collaborative work, provide the social interaction among people in an electronic environment, and support sharing of information in different formats should be focus of attention in education (Deperlioğlu & Köse, 2010). In today's world, students are spending most of their out of school time with computers and especially on the Internet. Thus, with Web 2.0 applications which do not require one to have computer programming and computer systems knowledge, enjoyable, creative, effective and socially active environments can be provided. By using these applications, students can create their own products, interact with their peers, share their products and cooperate with other students. Contemporary approaches to learning about teaching, such as social constructivism, and the needs of today's society, such as information literacy, group work predisposition, analyzing the information and problem-solving skills, leads to the emergence of Web 2.0 applications and the importance of pedagogical potential of these applications (Karaman, Yıldırım & Kaban, 2008).

Web 2.0 tools not only create countless opportunities for interaction between teacher and students, but also create opportunities for interaction between knowledgeable people (i.e., parents, specialists and other students). Thus, it provides effective learning opportunities for students (Hartshorne & Ajjan, 2009). Computer games, e-mail, internet, mobile phones, instant messaging services, social network are nearly indispensable tools used by today's students. New generation students have become more capable than their teachers about using computers, instant messaging, sharing photo-video-music-files and surfing the Internet. Therefore, teachers must use these technologies properly in order to gain attention of students to their courses. Learning and teaching roles have changed by the effect of technology. People who are responsible with the teaching have gained a new role of integrating technology into the learning-teaching process (Göktaş, 2006). If an appropriate online activity process created by Web 2.0 technologies, which is combined with face to face training, it will create a strong and effective blending learning model (Deperlioğlu & Köse, 2010).

Students who do not use Web 2.0 technologies for getting information from web sites, use them for creating information and sharing it with other people (Maloney 2007; quoted by Hartshorne & Ajjan, 2009). In fact, the main aim of integrating Web 2.0 tools into teaching and learning process is improving students' ability of producing knowledge instead of getting passive knowledge from static web sites or books. It also leads them to criticize the existing knowledge found in a web page while sharing their knowledge with others through communication over the Web 2.0 tools such as forums, wikis, blogs and etc.

Most of today's students use Facebook, instant messaging, social interaction sites and searching engines and many others in their daily lives. However, in order to lead students using these applications more consciously through their learning process both in their school lives and in their life-long learning process, the educators should aim to integrate these applications into educational settings.

Web 2.0 technologies and social networks-especially MySpace and Facebook, have quite strong impact on the lives of students (Schroeder & Greenbowe, 2009). Many researchers are wondering about this impact, and wondered whether this impact is real or not. Then many of them questioned whether this possible impact has a real effect. Thus, they are agreed on the fact that social networks must be used in educational process (Joly, 2007). In Horizon Report, prepared by New Media Consortium and EDUCAUSE in 2008, the importance of this issue was emphasized and was suggested that strategies must be developed to take advantage of social networks for educational purpose (The New Media Consortium, 2008).

Today's students are using Web 2.0 tools like Facebook, MSN, blogs, forum web sites and etc. in their daily lives very frequently, and are exposed to development of ICT tools rapidly. These kids are surrounded with mobile phones, computers, tablets and the Internet. Therefore, research need to be conducted to find out frequencies of students' usage and their awareness level of these tools. Moreover, in a research about Web 2.0 usage conducted by Karaman, Yıldırım and Kaban (2008), it was found that most of the studies were concentrated at the undergraduate level. These researchers suggested that if educational institutions' promote the use of Web 2.0 tools in schools, students' awareness levels of these technologies would change accordingly. Thus, the purpose of this study is to

investigate the high school students' frequency of use of Web 2.0 applications, their levels of Web 2.0 application uses, their perceptions about Web 2.0 tools and their aim of using these tools.

## 2. Methods

### 2.1. Study Group

Participants were 111 high school students who enrolled at science high school, vocational high school, Anatolian vocational high school and a regular high school in Ankara, Adana and Erzurum. They were at 9<sup>th</sup> (n=21), 10<sup>th</sup> (n=6), 11<sup>th</sup> (n=54) and 12<sup>th</sup> (n=30) grades. Some of these students, the ones from Anatolian vocational high school, had enough technical knowledge about computer and Internet technologies, since their field of concentration was related to computers.

In terms of gender, participants of the study consisted of 36 male and 75 female students. There were 5 female and 1 male students in the 12-14 age group, 56 female and 20 male students in the 15-17 age group, and 14 female and 15 male students in the 18-20 age group (See Table 1).

**Table 1. Distribution of Demographic Profile of the Participants**

Gender	Age Level						Total	
	12-14		15-17		18-20		f	%
Female	5	4,5	56	50,5	14	12,6	75	67,6
Male	1	0,9	20	18,0	15	13,5	36	32,4
Total	6	5,4	76	68,5	29	26,1	111	100

### 2.2. Data Collection Instrument

The data were collected through a survey questionnaire developed by the researchers. Based on the literature review (Wikipedia, 2012; Horzum, 2010; O'Reilly, 2005), a number of questions and statements were developed by the researcher. Literature was studied for ideas about content and format.

For the pilot testing, the questionnaire was administered to 47 students. Students were asked to fill out the questionnaire, and make comments about both the statements themselves, and about the face validity of the instrument as a whole. The feedback received also included whether the questions were easy to understand, and whether they were clearly stated. On the basis of this feedback, necessary changes and revisions to the questionnaire were made. The questionnaire used in this study consisted mostly of closed-ended items. A few open-ended items were included to give the respondents opportunities to give additional information which was not covered in the questionnaire. The survey consisted of five sections. The first section included personal information about students such as gender, age, education level and socio-economic levels. The second section contained information about students' computer and the Internet access and usage level of computer and the Internet. In the third section the purpose of usage and frequency of Internet usage was revealed in 13 questions. The fourth section contained students' levels of awareness about the Internet tools and their frequencies of usage. This section consisted of two parts. In the first part students were asked whether they had heard about web tools such as search engines, Facebook, MSN, forum etc. In the second part students were asked how often they had used these tools. In the last section, the frequencies and the reasons of their computer and the Internet usage were asked. There were also two open-ended questions in the survey to determinate students' opinion about using the Internet for education and its' potential disadvantages.

### 2.3. Data Analysis

The data were collected by both electronic and face to face environments. Frequency distributions, percentages, mean and standard deviation scores were calculated using the MEAN procedure.

### 3. Results

According to data collected, 88% of students had computers and %72 of students had Internet access at home (See Table 2 and 3). Students had access to the Internet from different places such as home, school, internet cafe, school dormitory etc.

**Table 2. Distribution of Participants who Own Computers at Home by Gender (N=99)**

Owning Computers at Home	Gender				Total	
	Female		Male		f	%
	f	%	f	%		
Yes	65	58,5	33	29,7	98	88,3
No	10	9,1	3	2,7	13	11,7
Total	75	67,6	36	32,4	111	100

**Table 3. Distribution of Participants who Have Internet Access at Home by Gender (N=99)**

Having Internet Access at Home	Gender				Total	
	Female		Male		f	%
	f	%	f	%		
Yes	53	47,8	27	24,3	80	72,1
No	22	19,8	9	8,1	31	27,9
Total	75	67,6	36	32,4	111	100

Many of the participant students were at intermediate level in computer and internet usage (See Table 4 and Table 5). In terms of gender, 9 female students were at beginner, 45 female and 17 male students were at intermediate, and 12 female and 16 male students were at advanced level of the computer usage. Some students' averages are not included not to use computer.

**Table 4. Distribution of Computer Usage Level of Participants by Gender (N=99)**

Computer Usage Level	Gender				Total	
	Female		Male		f	%
	f	%	f	%		
Beginner	9	9,1	0	0	9	9,1
Intermediate	45	45,5	17	17,2	62	62,6
Advanced	12	12,1	16	16,1	28	28,3
Total	66	66,7	33	33,3	99	100

According to data presented in Table 5, 8 female and 1 male students were at beginner, 45 female and 11 male students were at intermediate, and 14 female and 20 male students were at advanced level of the Internet usage.

**Table 5. Distribution of Internet Usage Level of Participants (N=99)**

Internet Usage Level	Gender				Total	
	Female		Male		f	%
	f	%	f	%		
Beginner	8	8,1	1	1	9	9,1
Intermediate	45	45,5	11	11,1	56	56,6
Advanced	14	14,1	20	20,2	34	34,4
Total	67	67,7	32	32,3	99	100

Participant students learned to use computers from diverse places, such as at school, computer courses, by themselves or by getting help from others (relatives, friends, books and digital environments). The learning process for the Internet was similar.

Many of the students reported that they were using the Internet between 1-3 hours per day. 9,9% of students used the Internet between 4-6 hours. Some of them (32,4%) were not using the Internet on a daily basis. The others used it over 10 hours (See Table 6).

**Table 6. Distribution of Daily Internet Usage of Participants by Gender (N=111)**

Daily Internet Use	Gender				Total	
	Female		Male		f	%
	f	%	f	%		
Never	28	25,2	8	7,2	36	32,4
1-3 hours	41	37	21	18,9	62	55,9
4-6 hours	5	4,5	6	5,4	11	9,9
10+ hours	1	0,9	1	0,9	2	1,8
Total	75	67,6	36	32,4	111	100

Data presented in Table 7 show that there is a significant difference between computer usage levels and gender ( $p < .05$ ). Male students' level of computer usage was greater than female students' level. However, the age effect on the level of computer of usage was insignificant (See Table 8).

**Table 7. Computer Usage Test Results by Gender**

Gender	N	$\bar{X}$	S	sd	t	p
Female	66	2,05	0,567	97	3,76	.000
Male	33	2,48	0,508			

**Table 8. Anova Results of Computer Usage by Age**

Source of Variance	Sum of Squares	sd	Mean Square	F	p
Between Groups	0,563	2	0,281	0,824	,442
Within Groups	32,791	96	0,342		
Total	33,354	98			

In Table 9, the students' awareness level of Web 2.0 tools was presented. Although many of the students were aware of popular Web 2.0 tools such as video sharing sites, MSN, Facebook and search engines, fewer students heard about podcast and ftp. Since podcasts are newer Web 2.0 tools and have not being used in education as common, it might be a reason that the students heard about it less. However, since podcasts are also a developing area in educational environments, they might be used by students, as well. Despite known by the students, the Web 2.0 tools have not been used for electronic mail services, new groups, blogs and forums (See Table 9).

**Table 9. Distribution of Participants' Awareness about Web 2.0 Tools**

Tools		f	%	Tools		f	%
Search engines (google)	Heard	110	99	Electronic mail services	Heard	102	92
	Did not hear	1	1		Did not hear	9	8
Facebook	Heard	110	99	News groups	Heard	92	83
	Did not hear	1	1		Did not hear	19	17
MSN	Heard	111	100	Web sites	Heard	107	96
	Did not hear	0	0		Did not hear	4	4

Forums	Heard	89	80	Ftp	Heard	35	32
	Did not hear	22	20		Did not hear	76	68
Wikipedia	Heard	96	86	File transfer and sharing	Heard	84	76
	Did not hear	15	14		Did not hear	27	24
Blog	Heard	80	72	Podcast	Heard	31	28
	Did not hear	31	28		Did not hear	80	72
Video sharing sites	Heard	111	100				
	Did not hear	0	0				

In Table 10, the students’ use of Web 2.0 tools was presented which shows that students mostly used search engines, and Facebook daily. According to Facebook statistics published by Socialbaker in January 2012, Turkey was the sixth in the world in terms of the use of Facebook during “the last month” category (Socialbakers, 2012). Yet, the participants of this study stated that they never used podcast (73%), ftp (65%), electronic mail services (41%), and forums (40%). In this study, when comparing blog and wikipedia, it was clear that blogs were heard less than wikipedia by students. However, according to a study conducted by Uçak and Çakmak (2010) the level of students' awareness of blogs was found higher than wikipedia. This could be related to age and education level of students. Besides, use of blogs and wikipedia are not very common in primary and secondary schools in Turkey. While blogs could be used effectively in education with the increase of Internet technologies, its usage did not reach the desired level. The blogs were not used in primary schools for several reasons. First of all it was a new technological tool. In addition, “there were no Internet in every house, teachers are not aware of this new technology and students profile was not considered appropriate for the usage of this tool” were the other reasons listed in a research conducted by Şenel and Seferoğlu (2009).

**Table 10. Distribution of Frequencies of Web 2.0 Applications Usage**

Applications	Frequencies of Usage	f	%	Applications	Frequencies of Usage	f	%
<b>Search engines (Google)</b>	Everyday	65	59	<b>Blog</b>	Everyday	11	12
	Several times a week	31	28		Several times a week	12	13
	Once a week	9	8		Once a week	5	6
	Once a month	3	3		Once a month	5	6
	Once a year	1	1		Once a year	16	18
	Never	1	1		Never	31	45
	Total	110	100		Total	80	100
<b>Facebook</b>	Everyday	58	52	<b>Video sharing sites</b>	Everyday	22	20
	Several times a week	23	21		Several times a week	33	30
	Once a week	6	5		Once a week	16	15
	Once a month	2	2		Once a month	12	11
	Once a year	3	3		Once a year	10	9
	Never	18	17		Never	18	15
	Total	110	100		Total	111	100
<b>MSN</b>	Everyday	15	14	<b>Electronic mail services</b>	Everyday	9	8
	Several times a week	18	16		Several times a week	16	15
	Once a week	18	16		Once a week	13	12
	Once a month	16	14		Once a month	11	10
	Once a year	18	16		Once a year	15	14
	Never	26	24		Never	38	41
	Total	111	100		Total	102	100
<b>Forums</b>	Everyday	8	8	<b>News groups</b>	Everyday	12	12
	Several times a week	10	10		Several times a week	13	13
	Once a week	7	7		Once a week	15	15
	Once a month	19	20		Once a month	12	12
	Once a year	14	15		Once a year	12	12

	Never	31	40		Never	24	36
	Total	89	100		Total	88	100
<b>Wikipedia</b>	Everyday	11	11	<b>Web sites</b>	Everyday	29	27
	Several times a week	24	24		Several times a week	19	18
	Once a week	18	18		Once a week	20	19
	Once a month	16	16		Once a month	11	10
	Once a year	11	11		Once a year	5	5
	Never	16	20		Never	23	23
	Total	96	100		Total	107	102
<b>Ftp</b>	Everyday	1	2	<b>Podcast</b>	Everyday	3	4
	Several times a week	5	9		Several times a week	2	4
	Once a week	5	9		Once a week	5	9
	Once a month	5	9		Once a month	3	6
	Once a year	3	6		Once a year	2	4
	Never	16	65		Never	16	73
	Total	35	100		Total	31	100
<b>File transfer and sharing</b>	Everyday week	11	12				
	Several times a	9	10				
	Once a week	13	15				
	Once a month	14	16				
	Once a year	14	16				
	Never	23	31				
	Total	84	100				

The frequencies of awareness level of some of the Web 2.0 applications differed by the gender such as Facebook (p<0.05), MSN (p<0.05), forum (p <0.05), Wikipedia (p <0.05), blogs (p <0.05), video sharing sites (p <0.05), news groups (p <0.05), web sites (p <0.05), file transfer/sharing (p <0.05) and podcast (p <0.05) (See Table 11).

**Table 11. Distribution of Frequencies of Web 2.0 Tools Test Results by Gender**

Tools	Gender	N	$\bar{X}$	S	sd	t	p
Facebook	Female	75	4,19	2,011	109	2.232	.028
	Male	36	5,03	1,483			
MSN	Female	75	2,81	1,608	109	2.638	.010
	Male	36	3,67	1,568			
Forum	Female	63	2,02	1,157	94	4.381	.000
	Male	33	3,36	1,851			
Wikipedia	Female	67	3,00	1,279	96	2.890	.005
	Male	31	3,90	1,705			
Blogs	Female	61	2,16	1,594	88	3.354	.001
	Male	29	3,52	2,148			
Video sharing sites	Female	75	3,19	1,468	108	4.425	.000
	Male	36	4,54	1,559			
News groups	Female	64	2,48	1,533	96	2,396	.019
	Male	34	3,32	1,854			
Web sites	Female	61	2,16	1,594	88	3.354	.002
	Male	29	3,52	2,148			
File transfer /sharing sites	Female	72	3,25	1,674	106	3.425	.001
	Male	36	4,44	1,858			
Podcast	Female	30	1,20	0,551	52	3.450	.001
	Male	24	2,38	1,765			



According to the Anova results of frequency of use of the Internet tools by computer usage level, frequency of tools used on the Internet was different, in regard to students' computer usage level and frequency of use of the Internet tools. In particular, advanced users' use of some Internet tools, such as search engines, ( $p < 0.05$ ), Facebook ( $p < 0.05$ ), MSN ( $p < 0.05$ ), forum ( $p < 0.05$ ), blogs ( $p < 0.05$ ), video sharing sites ( $p < 0.05$ ), electronic email services ( $p < 0.05$ ), web sites ( $p < 0.05$ ), and file transfer/sharing ( $p < 0.05$ ) was more than other users' (See Table 12).

**Table 12. Distribution of Anova Results of Frequency of use of the Web 2.0 Tools by Computer Usage Level**

Tools	Source of Variance	Sum of Squares	sd	Mean Square	F	p
Search Engines	Between Groups	10,701	2	5,350	5,022	,008
	Within Groups	101,218	95	1,065		
	Total	111,918	97			
Facebook	Between Groups	27,124	2	13,562	4,356	,015
	Within Groups	298,896	96	3,114		
	Total	326,020	98			
MSN	Between Groups	1,054	2	17,554	7,728	,001
	Within Groups	1,631	96	2,271		
	Total	1,319	98			
Forum	Between Groups	30,486	2	15,243	6,979	,002
	Within Groups	190,003	87	2,184		
	Total	220,489	91			
Blogs	Between Groups	22,677	2	11,339	3,173	,047
	Within Groups	282,298	79	3,573		
	Total	304,976	81			
Video sharing sites	Between Groups	32,387	2	16,193	7,532	,001
	Within Groups	204,236	95	2,150		
	Total	236,622	97			
Electronic e-mail services	Between Groups	31,537	2	15,768	6,779	,002
	Within Groups	214,000	92	2,326		
	Total	245,537	94			
Web sites	Between Groups	38,417	2	19,209	7,030	,001
	Within Groups	256,861	94	2,733		
	Total	295,278	96			
File transfer/sharing	Between Groups	27,801	2	13,900	5,352	,007
	Within Groups	202,595	78	2,597		
	Total	230,385	80			

According to the Anova results of frequency of use of the Internet tools by Internet usage level, there was a significant difference between students' Internet usage level and frequency of use of the Internet tools. Advanced Internet user students use some of the Internet tools more frequently than other students except ftp and podcast (See Table 13).

**Table 13. Distribution of Anova Results of Frequency of use of the Web 2.0 Tools by Internet Usage Level**

Tools	Source of Variance	Sum of Squares	sd	Mean Square	F	p
Search Engines	Between Groups	13,951	2	6,976	6,824	,002
	Within Groups	97,110	95	1,022		
	Total	111,061	97			
Facebook	Between Groups	30,282	2	15,141	4,943	,009
	Within Groups	294,041	96	3,063		
	Total	324,323	98			



MSN	Between Groups	96,251	2	18,125	7,894	,001
	Within Groups	220,436	96	2,296		
	Total	256,687	98			
Forum	Between Groups	56,433	2	28,216	15,148	,000
	Within Groups	162,056	87	1,863		
	Total	218,489	89			
Wikipedia	Between Groups	20,578	2	10,289	5,038	,009
	Within Groups	175,624	86	2,042		
	Total	196,202	88			
Blogs	Between Groups	61,142	2	30,571	9,905	,000
	Within Groups	243,834	79	3,087		
	Total	304,976	81			
Video sharing sites	Between Groups	51,568	2	25,784	13,237	,000
	Within Groups	185,054	95	1,948		
	Total	236,622	97			
Electronic e-mail services	Between Groups	51,382	2	25,691	12,237	,000
	Within Groups	193,145	92	2,099		
	Total	244,526	94			
Newsgroups	Between Groups	30,634	2	15,317	5,790	,004
	Within Groups	222,216	84	2,645		
	Total	252,851	86			
Web sites	Between Groups	50,080	2	25,040	9,920	,000
	Within Groups	237,281	94	2,524		
	Total	287,361	96			
File transfer/sharing	Between Groups	20,236	2	10,118	3,755	,028
	Within Groups	210,159	78	2,694		
	Total	230,395	80			

Table 14 displays students' aims for the computer usage. Most of the students used search engines and Facebook daily. Some participants reported that they were not using MSN and video sharing sites daily. Internet was commonly used for communication, such as MSN and Facebook social media tools in comparison. Facebook was preferred to use daily by the participant students. This finding was echoed in a study conducted by Şener (2009). In Şener's study it was found that students use Facebook to communicate with their friends, find their friends, share videos/files. This could be related to different applications provided in Facebook. Moreover, students who visited the Internet on a daily basis were not aware of web site pages as a concept.

**Table 14. Distribution of Participants' Aim of Internet Usage (%)**

Aim of Internet usage	Everyday	Several times a week	Once a week	Once a month	Once a year	Never
To chat	31	32	19	4	3	22
To research	36	44	20	7	0	4
To access new information	27	45	20	13	4	2
To download the file	18	28	15	21	3	26
To read news	20	21	19	21	3	27
To listen to music	42	28	12	11	4	14
To watch television / video	13	36	15	21	5	21
To play games	18	17	17	20	6	33
To surf	25	21	16	9	5	35
To make purchases on	2	5	6	12	8	78

To design Web page / site	11	4	2	8	13	73
To do homework and other things about lessons	21	35	22	13	6	14
To share information and resource	15	28	19	15	9	25

Students preferred to use the Internet to listen to music, do research and chat daily, whereas shopping, web site design and video / television watching were less preferred. Findings of this study revealed that 78% of students did not prefer shopping on the Internet. This finding was echoed by findings of a study conducted by TUIK (2009). Findings of TUIK's study indicated that a large majority of participants in different age groups (85%) did not shopping on the Internet. Participants of this study claimed that they do not buy things that they do not need. They also added that they preferred shopping in the marketplace where they could have face to face relationship with the shopkeeper. Participants stated that they don't have sufficient information about shopping on Internet. They also think that shopping on the Internet was too expensive.

Students using the Internet several times a week preferred to access to new information, do research and watch television, but did not prefer to design web page or web site and make purchases. Internet usage for chatting, downloading file, watching television/video, surfing, playing games, varied by the gender. Especially males used the Internet for these purposes more than girls ( $p < 0.05$  for all). (See Table 15).

**Table 15. Distribution of Participants' Aim of Internet Usage by Gender**

Aim	Gender	f	$\bar{X}$	S	sd	t	p
To chat	Female	75	3,59	1,771	109	2.56	.012
	Male	36	4,47	1,558			
To download a file	Female	75	2,97	1,542	109	4.00	.000
	Male	36	4,22	1,533			
To watch television / video	Female	75	3,13	1,388	109	2.68	.008
	Male	36	3,92	1,538			
To play games	Female	75	2,56	1,500	109	5.83	.000
	Male	36	4,36	1,570			
To surf	Female	75	2,95	1,815	109	3.23	.002
	Male	36	4,14	1,823			

Students usually preferred to use the Internet and computer to play games, listen to music, watch movies, download and installation images and videos (26%). However, some of the students (20%) never used these activities at all. The other group of students did not use the Internet for these purposes regularly. According to a study conducted by Turkish Statistical Institute (TUIK) (2011) people use Internet to communicate (send e-mail, chat) and search for information. Some online services, such as reading newspapers, downloading news articles, downloading games, image and music, accessing information about goods and services were most popular among users. In this study students did not prefer to read news daily. This finding could be related to their ages, since today's high school students read less and play with electronic more. Although students reported that they preferred to watch video on the Internet, their usage of video sharing sites is low. This could be explained by the fact that Facebook is preferred more than Youtube when it comes to watch video (Şen, 2011).

Students preferred to search for information that would be beneficial for them. According to the students, the Internet was important for especially quick access to information. They believed that the Internet would not be harmful for the Internet users unless it is used for illegal activities or for some activities which may promote bad habits; such as gambling. Participants also declared that the Internet might be unsafe for children because of unwanted contents.

#### 4. Conclusions

Conclusions which could be drawn from the findings of this study could be summarized as follows:

- Male high school students' Internet usage level is higher than female students.

- Many students indicated that they heard about popular Web 2.0 tools such as video sharing sites, MSN, Facebook and search engines. On the other hand podcast and ftp was known by fewer students.
- Search engines and Facebook are the most popular tools among students. Those tools also are used daily by the participants. However, students do not prefer to use other tools daily such as electronic mail services, new groups, blogs and forums.
- Students use MSN and Facebook commonly. However, they use Facebook more frequently than MSN. Availability of different application in Facebook could be related with this finding.
- Students generally use Internet to listen to music, do research and chat. However, they do not prefer it for shopping, web site design and watching video/television.
- Many participants of this study do not have technical knowledge of some concepts such as web site. Participants stated that they use Internet to chat, to do research, to download files etc. However, they do not know that the platform they are using those tools are called web sites. They indicated that they used it fewer than Facebook, search engines, etc.
- Finally, as the frequency of students' Internet usage decrease, their Internet usage aim change according to their needs.

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