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Determine the Usage of Mobile Applications Among University Students

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Abstract: Net Generation people have grown up with new technologies such as Internet, high powered computers and mobile phones. They like to multi-task and prefer to collect and learn information through multimedia such as pictures, audios, animations etc. more than text. In other words, they are able to engage with multiple sources of information at the same time. But traditional teaching methods are not enough to keep them occupied, so it is necessity in order to ensure Web 2.0 learning tools and mobile applications in the education arena. The main aim of this study is to determine the usage of mobile applications among university students. 144 voluntary university students attended the study. Data was collected by questionnaire and descriptive statistics, paired t-test, frequency, and percentage methods were used. The results of the research showed that students frequently use Whatsapp, Facebook, and YouTube through other mobile applications.

Keywords: Mobile applications, technology enhanced learning, Whatsapp, Facebook, YouTube

Introduction

Fast developments and recent changes in the technology have affected the society and resulted in the formation of the "digital age". These new changes have also shaped the characteristics of individuals. Tapscott (2009) stated that the Net Generation had begun in January 1977 and ended in December 1997. Palfrey and Gasser (2010) defined that the Digital Natives came into view later than 1980. The Millenials can be grouped as those born in or later than 1982 (Oblinger, 2003). In summary, since the people who were born after the year 1982 are part of this new generation,

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the terms like Digital Native, Net Generation and Millenial can be used for this generation. Net Generation people have grown up with new technologies such as Internet, high powered computers and mobile phones (Duffy, 2007). Under the sway of new technologies, they have advanced skills in the use of information and communication technologies (Kennedy et al., 2010), supposed to be tech-savvy (knowledgeable) and immersed digital technologies (Bennett & Maton, 2010). Helsper and Eynon (2010) mentioned that they speak digital language of computers and the Internet. They learn differently from traditional learning methods (Roodt et al., 2009) and they prefer learning activities in blogs, virtual worlds (social networking sites such as Facebook, Twitter, Google+ etc), video (YouTube) (Jones et al., 2010) because they respond and expect feedback immediately (Duffy, 2007, p.119). On the other hand, they like multi-task and they prefer collect and learn information though multimedia such as pictures, audios, animations etc. more than text (Helsper & Eynon, 2010). In other words, they are able to engage with multiple sources of information at the same time. But traditional teaching methods are not enough to keep, so traditional teaching methods must be supplemented by engaging learning methodologies and interactive learning tools. It means that it is necessity in order to ensure Web 2.0 learning tools and mobile applications in the education arena because of their potential as contemporary education technologies. For this, it is indispensable to determine usage of mobile applications among university students.

The Aim of the Study

The main aim of this study is to determine the usage of mobile applications among university students. To reach this aim, the authors search answers of the following questions:

1. How are the mobile usage conditions of students?
2. Does the mobile usage condition of students show differences according to their gender?
3. What is the budget of students for mobile applications?
4. What are the quotas of students for Internet usage?

Method

Participants

The research has been conducted at the Near East University during the spring of academic year 2013-2014. The aim of the study was announced at the university web site and a link was given where interested volunteering students could reach to participate in the survey. Of the 144 volunteered participants, 54.2 % (n=78) were females and 45.8 % (n=66) were males. Students from different departments have participated in the research. The distribution of participants based on their departments was as follows: 18.8% (n=27) students from Department of Pre-School Teaching, 27.1% (n=39) students from Department of Nursery, 14.6% (n=21) students from Department of Divinity, 8.3% (n=12) students from Department of Psychological Counselling and Guidance, 12.5% (n=18) students from Department of Interior Design, 6.3% (n=9) students from Department of Computer Education and Educational Technology, 6.3% (n=9) students from Department of History Teaching, and 6.3% (n=9) students from Department of Law.

Data Collection Tools

The questionnaire named "Determine the Usage of Mobile Applications among University Students" was prepared by the authors after related literature was reviewed. Content and validity of items were investigated by 5 experts on technology and educational technologies, and were found to be satisfactory. Internal consistency of the questionnaire was calculated by using Cronbach Alpha and found .84. Cronbach Alpha is greater than .70, so that it can be concluded that the prepared questionnaire can be used during the study (Sipahi, Yurtkoru & Cinko, 2010). The questionnaire consisted of two sections: First section consisted of 9 personal items. The second section of the questionnaire consisted of twenty one items, and focused on gathering information about usage of mobile applications among university students. Students rate each item on a 1-3 Likert scale from "Frequently" (3), "Sometimes" (2) and "Don't use" (1).

Data Analysis

The developed questionnaire was used to collect data during the study. The collected data were used to make statistical analysis by SPSS 20.0. Paired Sample *t*-test, descriptive statistics, frequency, and percentage methods were used.

Results & Discussion

A-The Usage of Mobile Applications

It can be seen from Table 1 that the students use Whatsapp (M = 2.43, SD = .50), Facebook (M = 2.60, SD = .67), and YouTube (M = 2.62, SD = .56) frequently. It is very expensive for students to use traditional methods to communicate with their friends. We can say that they prefer mobile applications and Facebook for these purposes because using Whatsapp is free and user only needs Internet connection. Also, Facebook is the most popular social networking site (Ebner et al., 2010; Junco, Heiberger & Loken, 2011), so that they can meet with their friends easily and share pictures, videos etc. Students marked that they use YouTube frequently. The authors think that this is joyful result of the study. Because, Roodt and De Villiers (2011) underlined that using YouTube in the classroom is an innovative method of teaching. On the other hand, Harris (2011) stated that it has the ability to enrich course content and improve student engagement. We can say that if instructors use these tools in education, they can motivate their students.

On the other hand, students sometimes use Viber (M =2.10, SD = .74), Skype (M = 1.87, SD = .66), Instagram (M = 2.18, SD = .88), Twitter (M = 2.00, SD = .86), and Google+ (M = 2.27, SD = .78). Google+ is a social media that students and instructors can share their ideas and information on the Web. Circles, Handgout, Spaks, and Huddle are its main features that can be interesting for education. Erkollar and Onerer (2011) stressed that Google+ has the potential to improve students' collaboration between instructor and friends through circles. Also, researcher concluded that Twitter promoted both student engagement and grades (Johnson, 2011; Junco et al., 2011; Junco et al., 2013). Salomon (2013) pointed out that

Instagram is a mobile application that enables users to instantly share pictures and images with others on the network. Skype is another mobile application that can be used for videoconferencing and Viber is a free communication tool. It is understood that these mobile applications can be used for Net Generation students as a virtual learning environment because of their features.

The interesting result of the study is Line (M = 1.31, SD = .50), MessageMe (M = 1.27, SD = .56), Voxer (M = 1.06, SD = .24), Tango (M = 1.39, SD = .67), Talkatone (M = 1.04, SD = .20), Flickr (M = 1.14, SD = .45), Snapchat (M = 1.52, SD = .84), Eyem (M = 1.06, SD = .24), Path (M = 1.04, SD = .20), Snapfish (M = 1.02, SD = .14), Linkedin (M = 1.12, SD = .39), Classmates (M = 1.02, SD = .14), and Tumblr (M = 1.10, SD = .56) are not used by university students. Research stressed that Millenial usage of technology such as mobile applications is increasing day by day (Jones et al., 2010; Wesch, 2011). On the contrary, in this study, students stated that they did not use upper applications.

Mobile Applications	Mean	Std. Deviation	Usage
Line	1.31	.50	Don't use
Whatsapp	2.43	.76	Frequently
Viber	2.10	.74	Sometimes
MessageMe	1.27	.56	Don't use
Voxer	1.06	.24	Don't use
Tango	1.39	.67	Don't use
Talkatone	1.04	.20	Don't use
Skype	1.87	.66	Sometimes
Instagram	2.18	.88	Sometimes
Flickr	1.14	.45	Don't use
Snapchat	1.52	.84	Don't use
Eyem	1.06	.24	Don't use
Path	1.04	.20	Don't use
Snapfish	1.02	.14	Don't use
Facebook	2.60	.67	Frequently
Twitter	2.00	.86	Sometimes
Google+	2.27	.78	Sometimes
Linkedin	1.12	.39	Don't use
Classmates	1.02	.14	Don't use
YouTube	2.62	.56	Frequently
Tumblr	1.10	.36	Don't use

Table 1: Descriptive statistics results of the mobile applications usage

B- Gender

In order to find out whether or not there was any statistically significant difference between gender's usages of mobile applications among students, Paired Sample *t*-test was carried out and the results are shown in Table 2. According to Table 2, there is no statistically significant difference between genders ($p > .05$).

	F	%	Mean	Std. Deviation	t	P
Female	78	54.2	1.60	.18	2.72	.101
Male	66	45.8	1.66	.27		

Table 2: Paired sample t-test results

C- Budget for Mobile Applications

Table 3 consisted of frequency and percentage of budget for mobile applications. 37.5% (n=54) of students had allocated 0-50 TL budgets, and 12.5% (18) allocated 51-100 TL and, 6.5% (9) allocated 101 TL and more. It is very interesting to notice that 43.8% (63) of students underlined that they have not got budget for mobile applications. This means that they do not have Internet connection on their phones.

Budget for mobile applications	**F**	**%**
0-50 TL	54	37.5
51 – 100 TL	18	12.5
101 TL+	9	6.3
No Budget	63	43.8

Table 3: Frequency and percentage of budget for mobile applications

D- Mobile Internet Quota

Table 4 shows the frequency and percentage of mobile Internet quota of students. More than half of attended students 37.5% (n=54) have 500 Mb Internet quota. 16.7% (n=24) of students have 1GB, 12.5% (n=18) of students have 2Mb, 3Mb and 250Mb Internet quota. Only 8.3% (n=12) students underlined that they do not use Internet.

Mobile Internet quota	**F**	**%**
250Mb	18	12.5
500Mb	54	37.5
1Gb	24	16.7
2Gb	18	12.5
3Gb+	18	12.5
Don’t use	12	8.3

Table 4: Frequency and percentage of mobile Internet quota

Conclusions

Nowadays, everything that we do is digital. The use of computers and high-tech software and many other technological gadgets are being used by millions all over the world. In other words, we are in a digital era where everything is at your fingertips and thus information should be available at any place and at any time without any restrictions by students and instructors. It has now become a necessity to move forward from the traditional learning environment to a new and more efficient technological learning tradition. From another point of view, the integration of technological learning environments such as social networking sites, Web 2.0 tools with the traditional educational instructions will definitely help prepare millennial students in a much better manner for their future careers. Overall, by integrating mobile applications in educational instruction will aid student learning in many significant ways and will indeed help their education period be more beneficial.

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