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Being Digital Citizen

Aytekin ISMAN[a*], Ozlem CANAN GUNGOREN[b]

[a]*Sakarya University, Faculty of Education 54300, "Sakarya", Turkey*
[b]*Sakarya University, Faculty of Education 54300, "Sakarya", Turkey*

Abstract

Digital citizenship can be defined as "the norms of appropriate, responsible behavior with regard to technology use" (Ribble & Bailey, 2007). Based on this definition, this study is aimed to determine whose students are digital citizens and whose are not. Within the scope of this research, face-to-face learning students and blended learning students were compared with of the fact that being digital citizen. In order to make this comparison, Digital Citizenship Survey was used.

Keywords: digital age, digital citizen, digital citizenship

1. INTRODUCTION

One of the emerging concepts with ICT is the concept of digital citizenship. Along with this concept, individual, social and cultural properties have changed. Digital citizenship can be defined as "the norms of appropriate, responsible behavior with regard to technology use" (Ribble & Bailey, 2007) or "the characteristic of a genuine digital city" (Schuler, 2002) or "those who use the Internet regularly and effectively" (Mossberger, Tolbert & McNeal, 2011).

Three key features are identified for digital citizens. While these features whose digital citizens must have are defined as educate, empower and protect (Common Sense Media White Paper, 2011), by Ribble & Bailey (2007) respect(etiquette, access, law), educate(communication, literacy, commerce) and protect(rights and responsibility, safety/security, health and welfare) are described as these three features. Ribble & Bailey (2007) made these identifications based on some researches (Ribble, Bailey & Ross, 2004, Ribble & Bailey, 2004, Ribble & Bailey, 2005) and adapted features to the students.

* Corresponding author. Tel.: +90 264 614 10 33; fax: +90 264 614 10 34.
E-mail address: isman@sakarya.edu.tr

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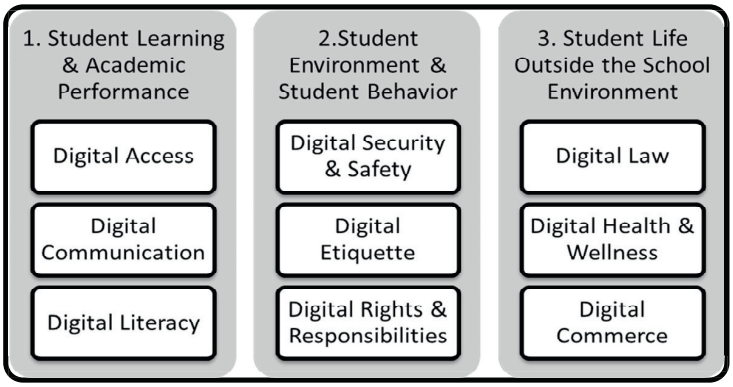

Fig. 1. Digital Citizenship Touchpoints (Ribble & Bailey, 2007)

- Student Learning & Academic Performance

1. Digital Access: full electronic participation in society.
2. Digital Communication: electronic exchange of information.
3. Digital Literacy: process of teaching and learning about technology and the use of technology.

- Student Environment & Student Behavior

4. Digital Security (self-protection): electronic precautions to guarantee safety.
5. Digital Etiquette: electronic standards of conduct or procedure.
6. Digital Rights & Responsibilities: those freedoms extended to everyone in a digital world.

- Student Life Outside the School Environment

7. Digital Law: electronic responsibility for actions and deeds
8. Digital Health & Wellness: physical and psychological well-being in a digital technology world.
9. Digital Commerce: electronic buying and selling of goods.

With these touchpoints, the features which students must have as digital citizenship was identified. Based on these features, in this study the levels of university students' digital citizenship was investigated.

2. Method

2.1. Population

The population of this study constitute of students of the Faculty of Education of Sakarya University in the 2012-2013 academic year. The population consists of a total of 4395 students. Participation in the study was on a voluntary basis. Convenience sampling method was used in the study. 246 students have applied the scale. 7 students are identified not to complete the scale correctly. Their data have been excluded the study. Totally 239 students data have been evaluated.

2.2. Data Gathering Tool

Comparing the students' level of digital citizenship is the aim of this study. For gaining this goal, the Digital Citizenship Scale (DCS) (İşman &C. Güngören, 2013) was used. This scale was developed by İşman & C. Güngören(2013) and was based on Ribble & Bailey(2007)' s digital citizenship nine touchpoints. DCS has 33-items and it is five-point Likert-type scale. The students answered the items by selecting one of the "Strongly Agree", "Agree", "Neutral", "Disagree", "Strongly Disagree" options.

Gender, class, education, having computer, using computer hours per day, taking computer training, using the Internet, using the Internet hours per day, purposes for using the Internet, the device used to connect to the Internet, thinking the Internet safe, membership of social network sharing sites, using which social network sharing sites were used as descriptive statistics of the research. According to these descriptive statistics, students' level of digital citizenship were compared.

2.3. Data Analysis

SPSS 21 statistical software was used for performing analyses. For analyzing to compare the students' level of digital citizenship, Independent Sample t-Test and One Way ANOVA was used.

3. Findings

3.1. Demographic Characteristics

For comparing the students' level of digital citizenship, students' demographic characteristics were collected in this research. According these data, 141 male and 98 female, 31 1st class, 65 2nd class, 72 3rd class and 67 4th class, 104 1st education, 59 2nd education and 73 blended education students attended the research. 230 students have computer, 7 students not. 9 students use a computer 0-1 hour per day, 48 students use a computer 1-3 hours per day, 99 students use a computer 3-6 hours per day, 52 students use a computer 6-9 hours per day, 30 students use a computer more than 9 hours per day. 222 students took computer training, 16 students not. 236 students use the Internet, 2 students not. 30 students use the Internet 0-1 hour per day, 62 students use the Internet 1-3 hours per day, 93 students use the Internet 3-6 hours per day, 32 students use the Internet 6-9 hours per day, 21 students use the Internet more than 9 hours per day.

Students use the Internet for different purposes. 202 students for sending and receiving e-mail, 171 students for reading newspaper/book, 176 students for listening radio/music, 167 students for watching TV/video, 121 students for playing games, 181 students for chatting, 75 students for banking transactions, 134 students for shopping, 210 students for doing homework/course work, 64 students for improving foreign language, 200 students for communicating with friends, 190 students for entering the social network sharing sites, 53 students for meeting people use the Internet. 226 students with laptop, 60 students with PC, 24 students with tablet, 116 students with mobile phone connect to the Internet. 146 students think the Internet safe, 88 students not.

229 students are members of social network sharing sites, 7 students not. Students use different social network sharing sites but generally Facebook, Twitter and Google+ are used. 230 students use Facebook, 160 students use Twitter and 130 students use Google+ in our study.

3.2. Findings

The data of the scale was assumed to have a normal distribution. Therefore, Independent Sample t-Test and One Way ANOVA parametric analyses were made for this study. For comparing students' the levels of digital citizenship by gender, having computer, taking computer training, using the Internet, purposes for using the

Internet, the device used to connect to the Internet, thinking the Internet safe, membership of social network sharing sites, using which social network sharing sites were used Independent Sample t-Test. For comparing students' the levels of digital citizenship by class and education were used One Way ANOVA.

Students by gender between the levels of digital citizenship were not found a significant difference (t(237)=.785, p=.433).

Students by class between the levels of digital citizenship were not found a significant difference (F(3,235)=1.817, p=.145).

Students by education level between the levels of digital citizenship were not found a significant difference (F(2,233)=2.189, p=.115).

Students by having computer between the levels of digital citizenship were not found a significant difference (t(237)=.785, p=.433).

Students by using computer hours per day between the levels of digital citizenship were not found a significant difference (F(4,233)=1.518, p=.198).

Students by taking computer training between the levels of digital citizenship were not found a significant difference (t(236)=1.626, p=.105).

Students by using the Internet between the levels of digital citizenship were not found a significant difference (t(236)=.994, p=.321).

Students by using the Internet hours per day between the levels of digital citizenship were found a significant difference (F(4,233)=3.061, p=.017). As a result of the Scheffe test to find significant difference, students using the Internet between 0 -1 hour per day(X0-1hour=118,30) and 3-6 hours per day(X3-6hours=128,84) were found significant difference. Students using the Internet 3-6 hours per day have the higher level of digital citizenship than students using the Internet 0 -1 hour per day.

Relationship between students' purposes for using the Internet and the level of digital citizenship were took a look at one by one. Students by using the Internet for sending and receiving e-mail (t(236)=-1.410, p=.160), listening radio/music (t(237)=.057, p=.954), watching TV/video (t(237)=-.966, p=.335), playing games (t(237)=.444, p=.658), chatting (t(237)=.053, p=.958), doing homework/course work (t(237)=-1.537, p=.126), improving foreign language (t(237)=-1.411, p=.160), communicating with friends (t(237)=-1.457, p=.146), entering the social network sharing sites (t(237)=.287, p=.774), meeting people (t(237)=-1.283, p=.201) between the levels of digital citizenship were not found a significant difference. Students by using the Internet for reading newspaper/book (t(237)=-2.521, p=.012), banking transactions (t(237)=-2.239, p=.026), shopping (t(237)=-3.373, p=.001) between the levels of digital citizenship were found a significant difference. As a result of these tests, students using the Internet for reading newspaper/book (Xreading newspaper/book=127,86), banking transactions(X banking transactions =129,58) and shopping(X shopping =129,22) have the higher level of digital citizenship than students not using the Internet for these purposes (Xnotreading newspaper/book=122,30, X notbanking transactions =124,77, X notshopping =122,53).

Relationship between the devices for students to use to connect to the Internet and the level of digital citizenship were took a look at one by one. Students by using laptop(t(237)=-1.726, p=.086) and PC(t(237)=-1.491, p=.137) to connect to the Internet between the levels of digital citizenship were not found a significant difference. On the other hand, students by using tablet (t(237)=-4.183, p=.000) and mobile phone (t(237)=-3.386, p=.001) between the levels of digital citizenship were found a significant difference. As a result of these tests, students using tablet(Xtablet=138,45) and mobile phone(Xmobilephone=129,71) have the higher level of digital citizenship than students not using tablet(Xnottablet=124,92) and mobile phone(Xnotmobilephone=123,04) .

Students by thinking the Internet safe between the levels of digital citizenship were not found a significant difference (t(232)=1.597, p=.112).

Students by being members of social network sharing sites between the levels of digital citizenship were not found a significant difference (t(234)=1.713, p=.088).

Relationship between students using different social network sharing sites and the level of digital citizenship were took a look at one by one. Students by using Facebook (t(236)=-1.941, p=.053) and the other social network sharing sites (t(236)=.716, p=.475) between the levels of digital citizenship were not found a significant difference. On the other hand, students by using Twitter (t(236)=-2.556, p=.011) and Google+ (t(236)=-3.559, p=.000) between the levels of digital citizenship were found a significant difference. As a result of these tests, students using Twitter (X Twitter =128,10) and Google+(X Google+ =129,51) have the higher level of digital citizenship than students not using Twitter (X notTwitter =122,66) and Google+(X notGoogle+ =122,47) .

4. Conclusion

In this study, Digital Citizenship Survey(DCS) was used and students' level of digital citizenship were compared. 239 students from Faculty of Education of Sakarya University in the 2012-2013 academic year have applied the scale. Within the scope of this study gender, class, education, having computer, using computer hours per day, taking computer training, using the Internet, using the Internet hours per day, purposes for using the Internet, the device used to connect to the Internet, thinking the Internet safe, membership of social network sharing sites, using which social network sharing sites were compared with the students' level of digital citizenship.

As a result of these analyzes variables of gender, class, education, having computer, using computer hours per day, taking computer training, using the Internet, thinking the Internet safe, membership of social network sharing sites between the levels of digital citizenship were not found a significant difference. Using the Internet hours per day, purposes for using the Internet, the device used to connect to the Internet, using which social network sharing sites between the levels of digital citizenship were found a significant difference.

Students using the Internet 3-6 hours per day have the higher level of digital citizenship than students using the Internet 0 -1 hour per day. Students using the Internet for reading newspaper/book, banking transactions and shopping have the higher level of digital citizenship than students not using the Internet for these purposes. Students using tablet and mobile phone have the higher level of digital citizenship than students not using tablet and mobile phone. Students using Twitter and Google+ have the higher level of digital citizenship than students not using Twitter and Google+.

In conclusion, students who use the Internet 3-6 hours per day for reading newspaper/book, banking transactions and shopping with tablet and mobile phone and use Twitter and Google+ have more digital citizen's features. Looking at the results of analysis, this study will repeat for different groups or different variables in future studies.

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