

Behavior of Varaždin Secondary Level Education Students on Facebook

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Abstract. *We are facing a great impact of social networks on our daily functioning. Part of that is the influence of social networks on our education systems.*

This paper gives an overview of Facebook impact as a social network in specific, as well as the results of the study we carried out in Varaždin. The aim of the study and this paper was to find out for what purposes students at the second level of education (high schools) use Facebook when it comes to their school obligations.

The results that are shown in this paper can be easily used throughout institutions that are responsible for education systems (especially schools) in order for them to adopt curriculums and information sharing in a way that is most suitable for their students. Future research studies can as well be carried out based on this paper.

Keywords. Facebook, education, student attitudes

1 Introduction

1.1 Social networking sites

The Internet in general and social networks in particular have been gaining an increasing importance and presence in the lives of their users, as well as the business activity of a large number of companies. It is owing to this function of the Internet that social networks have become a trend in the first place, as without the Internet there would be no social networks. Interactive media, particularly the Internet, allow an easy flow of information, because of which users can participate in, and modify the form and content of the information they receive in real time. Traditional media (such as TV, radio, newspaper) are a one-way media, as companies are not aware of the response to it. On the other hand, the new media allow users to perform a variety of functions (receive information, make inquiries, respond to questions and make purchases). Traditional media need to adapt to

demands of new audiences. Instead of passive consumers, new types of users appear, active creators of forms and content of new media. [12] Digital technology is the key to major technological changes in the media image of the 21st century.

Initially, the Internet was seen as an opportunity for marketers to interact with customers and to connect with them. Eventually, it has become clear that consumers are using the Internet to interact with each other and it dramatically facilitates consumer interconnections [9]. So the Internet becomes more than an information vehicle and with the help of new information technology it provides a new opportunity for consumers to share their evaluations online in the same way as they do offline. According to research conducted in 2011 Internet users use different platforms to share online content with different groups of people, and social networks are the top method for sharing content with friends (92% of users do so), while email is the most popular way to share with family (86% of examinees says so). In sharing online content with the general public, consumers prefer to use message boards (in 51%) or blogs (41%) [5]. From this research we can see that social networking sites have an important role in sharing content, opinions and so on.

The growth of Internet and information technology as well as the emergence of online social networking sites has profoundly changed the way information is transmitted [3]. And social networking sites become places "...where actual and potential customers are interacting, and it shapes how they think" [8] because these sites have many attractive features where users can connect, such as wall posting (of news or links to news, stories, etc.), photo/video tagging, status updating, commenting and sharing information, liking or disliking posts, photos, users can participate in surveys, in comments and many more, and what is important is that users discuss, and they share their opinions in real time. This is why social networking sites are often the first to break important news [10].

Social networking sites as an Internet tool are one of the largest Internet developments in the 21 century.

They represent one of three cyber communities (beside blogs and chat systems). Its main purpose is making new friendships or maintaining those that already exist. [16] They support interaction and communication between family and friends in a virtual environment, while at the same time they help users to find other people by using key words and descriptions. A social networking site connects people based on data about them, stored in user profiles. These user profiles determine the way in which users present themselves to other users [13]. So nowadays, owing to a dynamic lifestyle, people seem to reject traditional ways of communication. Under the pressure of their commitments, they do not have as much time as they used to and they are forced to use different social networks to communicate if they want to have an active private and business life.

Over 300 different active social networks exist today. Each has its own specific characteristics, beginning with the ideas of connecting the dominant target group, the possibility of interaction and visual identity [14]. The first social network with similar characteristics as ones that exist today was created in 1997 [2] and since 2004, when they first became widely known in today's familiar form, social networking sites have dramatically changed the functionality of the Internet. Social network allows individuals to present themselves, to articulate their social needs, to establish or maintain connections with others. [4, 1]. "The main motivation for using social networks is a consequence of social influence and desire for belonging to a particular community" [18].

Social networking sites enable users to be part of a large, international community and to share information, opinion and content with other members of the network and they allow them to present themselves, to articulate their social needs, to establish or maintain connections with others [3] Social networks represent relationships between individuals and groups of people within a community. In practice, a social network creates family, friendly, professional and organizational relationships. The theory of social networking has developed successful techniques in many fields, including sociology, anthropology, psychology and organization. Analyses of social networks are used as analysis of the organizational structure of staff, identification of individuals or as a proposal of structural changes to improve efficiency [19]

The goal of a social network, as the word itself implies, is networking of users so that they can exchange information, pictures, music, experiences and everything that interests them as individuals. Social networks represent relationships between individuals and groups of people within a community. Each person needs to have a sense of belonging somewhere, and their social network, or rather their profile on a social network enables that. There are numerous ways in which users may use a social network; starting from creating their own profile and

adding personal facts, areas of interest and preferences, searching for old friends and meeting new ones, exchanging music, photos and videos. Also social networking sites are instruments for building social networks, for individuals with similar education, lifestyles, interests, or activities [1] Online social network tools may be useful for individuals who have difficulties to form and maintain relationships [4, 3].

1.2 Facebook

Facebook is one of the most popular social networks. According to Facebook website it is "a social utility that helps people communicate more efficiently with their friends, family and coworkers. The company develops technologies that facilitate the sharing of information through the social graph, the digital mapping of people's real-world social connections" [6].

It came to existence in 2004 as an on-line database of Harvard students and was recognized as a source for finding people. Although the initial popularity of social networks was related to younger groups of Internet users, with the growth of active social network users, the demographic picture has changed significantly and it increasingly attracts more mature population. For example, until August 2006 more than two thirds of users were above 25, with more than 40% of them being in the age group 35-40. [14] In 2007 Facebook became the first social network browser. In the same year, Facebook was included among the 20 largest search engines and became the number one people search engine. Facebook represents a new trend in search engines, the one that allows people to find individuals or groups of people [15]. Today Facebook has more than 901 million monthly active users [7] and about 1,5 milion of them are Croatian users.[17]

The aim of social networks, including Facebook, is to attract advertisers of leading brands and create appropriate strategies so that they can find their customers more efficiently. Such strategy is the three-dimensional advertising on Facebook, which consists of [11, 15]:

1. Branded profile page - marketers and brand owners can create a specific page on which the network users can sign up/register to express confidence in certain brand (show their allegiance to the brand),
2. Social advertisements - this step extends involvement of users, by allowing them to take actions such as evaluating the brand and sending messages to their friends. Advertisers pay users of such actions,
3. Beacon - using this mechanism Facebook monitors behavior of members anywhere and utilizes the information to provide relevant advertisements to them during future site visits.

The growth of Facebook has been truly astonishing since from its establishment only 8 years has past. This site has many attractive features such as wall posting, photo/video tagging, status updating, commenting and sharing information, liking or disliking posts, comments, photos and many more. Because so many people are online in connected into one network, Facebook attracted advertisers from all round the world. Facebook allowed companies to create appropriate marketing strategies, adjusted to network users by age, gender, habits, like/dislikes etc. Companies could find their costumers more efficiently. For businesses Facebook offers opportunities to promote their products, services and brands to their fans using services such as Facebook Pages and Facebook Ads. Trough Facebook Pages fans have the opportunity to engage and communicate with a business and its brands in a variety of ways like write on the wall, chat, like/dislike, participate in surveys etc. Whereas Facebook Ads is way to advertise about products and services to segregated groups of users and it can tell you about how ads can be targeted at very specific groups of users.

While we have a good amount of literature that talks about Facebook usage, we have conducted our own study. The aim was to find out what Facebook features and for what purposes students in Varazdin use with regard to their school obligations and activities.

2 Methodology

2.1 Measurement

In order to execute the study, questionnaire was designed with 42 items altogether. It was administrated among high school students in City of Varaždin, Croatia. Students from different school types participated in the study. First question was used to define if the respondent has a Facebook account/uses Facebook or not. Other questions were divided in four groups. First group (6 items) was used to measure some general facts about respondents' usage of Facebook (e.g. number of friends, functionalities they use, usage of mobile version). Likert system was used in the second group of items (10 items) in order to measure how often students different functionalities of Facebook. Part three consisted of questions about attitudes towards functions and activities that students use on Facebook which are connected to school obligations and information (19 items). 12 items out of 19 in group three used a Likert-type scale where estimates were from "1 = strongly disagree" to "5 = strongly agree". Part four consisted of demographic questions (6 items). The alpha coefficient of reliability (α) was 0.78 for 22 Likert-type items of the survey.

2.2 Respondents

The target population consisted of secondary level students (high school students). Convenience non-probability sampling technique was used to carry out the study. Around 300 questionnaires were administrated, out of which 252 students responded (84,00%). 51,00% of respondents were female (N=128) and 49,00% were male (N=123).

3 Results and interpretation

In this study we attempted to find out how high school students are using Facebook as social network when it comes to their various activities related to school – such as studying, writing homework, exchanging materials and similar activities. For that purpose we asked students about their habits and on which activities they spend their time during usage of Facebook.

The following results have been obtained: most of students that participated in the study were first (45.2%, N=114) and third graders (31.7%, N=80). Most of them (94.4%, N=238) are Facebook users where 79.0% (N=199) of them are using Facebook on their mobile phones. According to that, we may assume that this part of high school population is using Facebook even when they are in class which calls for additional questions about effects of such use on students' performance in school.

3.1 Mobile usage

As the majority of respondents use Facebook on their mobile devices and not just on a home computer, it was important to know which features they use on a computer and which on their mobile devices. Figure 1 presents differences in respondents percentages for 10 features (9 plus "other") that were given to respondents in order for them to choose which Facebook tools/features they use on home computers and which on their mobile devices. Only those respondents that use both computer and mobile devices were taken into consideration in this figure. It can be seen from the figure that all of the features are more used on home computer. Only four Facebook features are used by more than half of the respondents on mobile devices: messages, status updates, comments and like options. X-Axis presents system features that could have been chosen by the respondents, while Y-Axis presents the percentage of respondents that use the feature/tool.

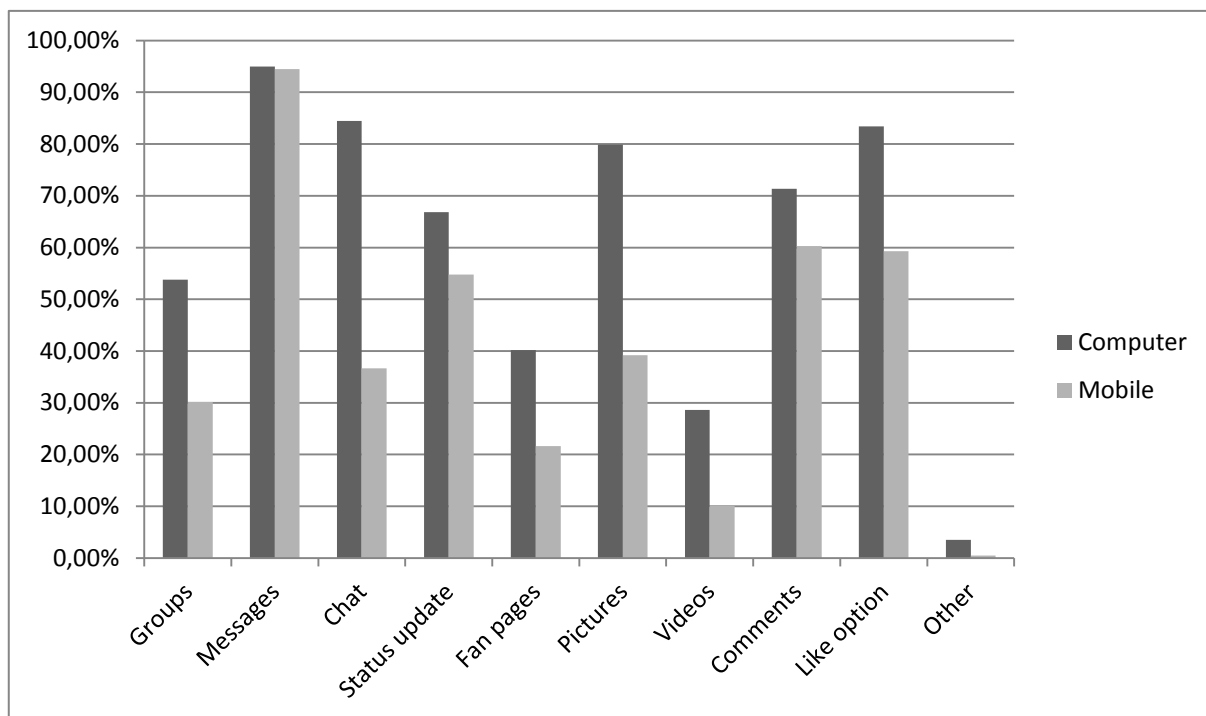


Figure 1. Comparison of Facebook features usage between home computer and mobile devices

3.2 Differences based on gender

T-test was used in order to find out if differences existed between answers based on gender. All Likert-type questions were taken into consideration out of which statistically significant differences were found for just three items. In first, respondents were asked about how often they use Facebook for communication with their friends. Female students do it more often ($M=4,636$, $SD=0,718$) than their male colleagues ($M=4,396$, $SD=0,811$); $t=-2,410$, $p<0,05$, $df=235$.

Second item was about using Facebook for avoiding boredom. Similarly to the previous, female respondents use it more often for the mentioned ($M=3,553$, $SD=1,139$) than male students do ($M=3,215$, $SD=1,290$); $t=-2,140$, $p<0,05$, $df=235$. When it comes to gathering information about school obligations, female students also use it more for that purpose ($M=3,619$, $SD=0,915$) than their male colleagues ($M=3,353$, $SD=0,997$); $t=-2,143$, $p<0,05$, $df=235$.

3.4 Differences based on grades

Additionally, ANOVA analysis was used to find differences in usage of Facebook among different grades in school. Several statistically significant differences were found. Usage of applications on Facebook varies between different grades ($F=3,115$, $df=3$, $p<0,05$). Interesting finding is that statistically significant difference exists among students from different grades in their homework exchange

($F=7,824$, $df=3$, $p<0,001$). Other differences exist in exchange of learning materials ($F=9,128$, $df=3$, $p<0,001$), exchange of information regarding school obligations ($F=4,050$, $df=3$, $p<0,01$), other activities ($F=3,047$, $df=3$, $p<0,05$) and in attitude towards whether schools should have their official "Fan Pages" ($F=2,746$, $df=3$, $p<0,05$).

3.3 Differences regarding grade averages

Another ANOVA analysis was executed to search if differences exist in usage of Facebook regarding grade averages of high school students. A statistically significant difference exist among respondents with different grade averages when it comes to communication with friends on Facebook ($F=7,659$, $df=4$, $p<0,001$), exchange of homework assignments ($F=2,815$, $df=4$, $p<0,05$) and exchange of learning materials ($F=4,197$, $df=4$, $p<0,01$). There is also a statistically significant difference when it comes to exchange of information about school obligations ($F=3,978$, $df=4$, $p<0,01$), answering on questions regarding school obligations and learning curriculum ($F=2,708$, $df=4$, $p<0,05$). Statistically significant difference also exists between attitudes towards whether schools should provide more information than they are providing now ($F=3,128$, $df=4$, $p<0,05$) and if it is a good thing to have teachers among Facebook friends ($F=2,667$, $df=4$, $p<0,05$). Although differences based on grade averages exist, it should not in any way be concluded that mentioned Facebook features influence student grades.

4 Conclusions

Since we are facing that Facebook is becoming a part of almost every teenager's life these days, it seemed necessary to research how high school students are using it when it comes to managing their obligations in school. Through this study, we grasped the small portion of ways in which high school students are utilizing Facebook from which we adopted some potentially useful results.

We may say that Facebook is becoming additional communication channel, which high school students are using in order to make their learning experience and results better. Knowing that, using Facebook and its capabilities can be seen as an additional opportunity in improving teaching methods and sharing information in a different way than currently is.

Some results can raise additional questions that may have not been answered in this paper. For example, how students would like schools to communicate with them over Facebook, how exchange of materials impact the grades of students and which age groups are more likely to utilize Facebook as a tool and in which ways. We plan to study those questions in our future research as well as we plan to expand our research on different cities in Croatia and compare results between different groups of respondents.

Results from this paper can be used for curriculum adaptations, as well as for changing ways of communication between education institutions and students. One school in particular asked for the results of this study in order for them to learn more about their students' activities.

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