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A study to find out the preferred free e-mail services used by university students

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Abstract

The aim of this study is to investigate the free e-mail usage of students in the technology departments of the university, and also to learn which free e-mail service the participants prefer. The volunteer participants in this study consisted of 150 undergraduate students attending the Near East University in Northern Cyprus. 50 students from Department of Computer Information Systems (CIS), 50 students from Department of Computer Education and Instructional Technologies (CEIT), and 50 students from Department of Computer Engineering (COM.ENG). Data were collected using questionnaire. SPSS 16.0 was used to analyzed and interpret the collected data. Anova, frequency and percentage methods were used during the analysis process. According to the results indicate that it can be seen that a large majority of the students use the e-mail services and the majority of them chose to use the Hotmail.
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1. Introduction

Distance education fosters learning and teaching in a variety of ways. One of the many advantages of distance education is that it offers instructors and students a flexible learning setting in terms of time and location. Distance education is nowadays a good way to acquire knowledge separate from to the traditional methods of teaching by attending classrooms on a continuous basis (Schmidt & Gallegos, 2001). In distance education, learning is developed through sharing ideas and thoughts (Palloff & Pratt, 1999) and personal interactions between participants (Walker & Fraser, 2005).

Lacey (1999) discovered in her study that students, in-class and distance learning students, become more engaged in their own learning experience through web-based technologies such as e-mail. Miller and Melsen (2006) underlined electronic mail (or email or e-mail) is simply sending an electronic message to one or a number of people. It was one of the earliest Internet tools and is still one of the most popular one. Email accounts are available through educational institutions (like UT), Internet service providers (like Glasscity.net and America Online), or free on the web (Hotmail, Yahoo and Gmail). They briefly indicate that e-mail as asynchronous tool, in which a person sends a message to another person and the message can be read later.

Electronic mail is the most frequently used service on the Internet for many reasons:

- Send a message *any time*, *anywhere* and the recipient can read it at his or her convenience.
- Send the same message to *multiple recipients*.
- *Forward information* to people without retyping it.
- *E-mail is fast*, usually taking no more than a few minutes to be received.
- *Attach digital files* to your messages, including electronic documents, video clips, music and photos.
- *Send messages around the world* as easily as to someone down the block.

2. Free E-mail Services

The services providing mail to users free of charge on internet:

2.1. Gmail

Gmail is a free, search-based webmail service that combines the best features of traditional email with Google's search technology. Gmail makes locating messages so easy that the user never need to shuffle mail in his/her inbox again. Besides offering an entirely new way of reading and tracking messages, Gmail offers over 5 GB of storage space and more can be claimed if needed. Best of all, it is free. (http://mail.google.com/support/bin/answer.py?hl=en&answer=6554)

You can quickly find messages using Gmail's search feature powered by Google search technology. With Gmail, you will never see pop-ups or untargeted banner advertisements. Google claims that they are always working to increase the amount of free storage they offer in Gmail, and more space can be purchased if required. With all that space, the users can archive instead of deleting messages, so the messages will not clutter your inbox but will remain searchable in case you ever need them again. The days of needing your computer to get to your inbox are long gone. You can now use Gmail on your mobile device to access your email from anywhere. Gmail uses labels to help you organize with more flexibility. A conversation can have several labels, so you are not forced to choose one particular folder for messages. You can also create filters to automatically manage incoming mail. Starring messages is another way you can organize your inbox. Plus, it looks pretty. With just one click, you can chat in Gmail with the people you already email. You can even reply to an email by chat. And Gmail can archive all of your chats, making them searchable, so you never lose any valuable information. With Gmail, each message you send is grouped with all the responses you receive. This conversation view continues to grow as new replies arrive, so you can always see your messages in context. You can use Google search within Gmail to find the exact message you want, no matter when it was sent or received. You don't have to spend time sorting your email, just search for a message when you need it and it will be found. Don't waste time with junk mail and unwanted messages. Gmail blocks spam before it gets to your inbox. If an unwanted message ever finds its way through, you can fight back by reporting it and help make the spam filters even better.

2.2. Yahoo Mail

Yahoo mail is a free web-based e-mail (webmail) service from Yahoo!. With Yahoo! Mail you never have to worry about a full Inbox. Keep all those important e-mails in one easy-to-access location. There's no need to install anything extra on your computer. You can chat anywhere and you can sign into your Yahoo! Mail account! You can also text message friends and family who have SMS-enabled cell phones (http://mail.yahoo.com). Access e-mail from anywhere, enjoy unlimited storage space, and feel secure with award-winning spam protection.

Founded in 1994 by Stanford Ph.D. students David Filo and Jerry Yang, Yahoo! began as a hobby and has evolved into a leading global brand that has changed the way people communicate with each other, conduct transactions and access, share, and create

information. Today, led by an executive team that includes CEO and Chief Yahoo Jerry Yang, President Susan Decker, Chief Financial Officer Blake Jorgensen, and Co-Founder/Chief Yahoo David Filo, Yahoo! Inc. has become the world's largest global online network of integrated services with more than 500 million users worldwide. The company is headquartered in Sunnyvale, California, with a presence in more than 20 markets and regions around the globe. Yahoo! was incorporated in March of 1995. As of Q3 2008 Yahoo! had approximately 15,200 full-time employees (http://yhoo.client.shareholder.com/faq.cfm).

With more than 21 million unique users in the United State and 90 million worldwide, Yahoo! Answers is the largest knowledge-sharing community on the Web. It's an online community where anyone can ask and answer questions on any topic. Yahoo! Answers connects people to the information they're seeking with those who know it. Everyone has life experience and knowledge about something, and Yahoo! Answers provides a way for people to share their experience and insight (http://help.yahoo.com/l/us/yahoo/answers/overview/overview-55778.html).

2.3. Hotmail

Windows Live Hotmail, formerly known as MSN Hotmail and commonly referred to simply as Hotmail, is a free webmail service of the Windows Live brand provided by Microsoft. Windows Live Hotmail features 5 GB of free storage (http://mailcall.spaces.live.com/blog/cns!CC9301187A51FE33!43573.entry), patented security measures (http://imranq2.spaces.live.com/Blog/cns!1p-PlpF3YKhB08FZanM1iesA!649.entry), Ajax technology, and integration with Windows Live Messenger, Spaces, Calendar and Contacts. It has over 260 million users worldwide and is available in 35 different languages (http://wwww.hotmail.com).

Hotmail is the world's largest provider of free web-based e-mail. Hotmail is based on the premise that e-mail access should be easy and possible from any computer connected to the World Wide Web. By adhering to the universal Hypertext Transfer Protocol (HTTP) standard, Hotmail eliminates the disparities that exist between different e-mail programs. Sending and receiving e-mail from Hotmail is as easy as going to the Hotmail website at http://www.hotmail.com.

Advantages of using Hotmail:
- It is cheaper and easier than using traditional e-mail programs.
- E-mail provided by Internet service providers requires the use of a properly configured e-mail program. Hotmail does not, as it is based on open web-based technology. A member of Hotmail is not required to install any new software other than a web browser.
- It is free because it is advertiser supported.
- Hotmail can be used anywhere in the world from any computer that has a local connection to the World Wide Web.
- Hotmail has an address book.
- You can create a link to any web page or e-mail address by simply typing the complete address in the text box on the Compose page.
- You can send attachments with your e-mail messages and receive attachments at your Hotmail address.
- Hotmail has a number of tools that enable you to direct incoming mail into different folders and block mail you do not wish to receive. Block Sender, Filters and Inbox Protector are three tools that you can use to customise your mail handling to suit your needs. These tools are very useful in reducing the amount of junk e-mail that you receive.
- If you have a problem using Hotmail, there is a staff of Technical Support and Policy Enforcement Representatives to assist you (http://help.ninemsn.com.au/support/hotmail/signup.asp).

3. The Aim of the Research

The aim of this study is to investigate the free e-mail usage of students in the technology departments of the university (Departments CIS, CEIT and COM.ENG), and also to learn which free e-mail service the participants prefer. The study attempts to find answers to the following questions:
1. What are the e-mail usage habits of students?
2. What are the free e-mail preferences of students?
3. Are there differences of e-mail usage between different departments?
4. Are there any differences in opinions of students about free e-mail preferences between different departments?
5. Are there any differences in free e-mail preferences between classes?
6. Are there any differences in free e-mail preferences between different genders?
7. Are there any differences in free e-mail preferences between different nations?

4. Method

4.1. Participants

The volunteer participants in this study consisted of 150 undergraduate students attending the Near East University in Northern Cyprus. 50 students from Department of Computer Information Systems (CIS), 50 students from Department of Computer Education and Instructional Technologies (CEIT), and 50 students from Department of Computer Engineering (COM.ENG). The study was conducted during the 2008-2009 Fall term.

Joined the study from students of CIS are 44% female, 56% male, students of CEIT are 34% female, 66% male, and students of COM.ENG are 12% female, 88% male. As total, students of these three departments are 30% female, 70% male. (see Table 1).

Table 1. Distribution of gender

Gender	CIS		CEIT		COM.ENG		TOTAL	
	F	%	F	%	F	%	F	%
Male	28	56	33	66	44	88	105	70
Female	22	44	17	34	6	12	45	30

As indicated in Table 2, joined the study from students of CIS are 48% first year, 16% second year, 24% third year, and 12% fourth year. Students of CEIT are 20% first year, 48% second year, 20% third year, and 12% fourth year. Students of COM.ENG are 4% first year, 12% second year, 60% third year, and 24% fourth year. As total, students of these three departments are 24% first class, 25.3% second class, 34.7% third class, and 16% fourth classes.

.Table 2. Distribution of grade level (class)

Grade Level (Class)	CIS		CEIT		COM.ENG		TOTAL	
	F	%	F	%	F	%	F	%
1	24	48	10	20	2	4	36	24
2	8	16	24	48	6	12	38	25.3
3	12	24	10	20	30	60	52	34.7
4	6	12	6	12	12	24	24	16

Joined the study from students of CIS are 34% TRNC, 44% TR, 22% other nationalities. Students of CEIT are 70% TRNC, 30% TR. Students of COM.ENG are 16% TRNC, 62% TR, 22% other nationalities. As total, students of these three departments are 40% TRNC, 45.3% TR, and 14.7% other nationalities (see Table 3).

Table 3. Distribution of students' nationality

Gender	CIS		CEIT		COM.ENG		TOTAL	
	F	%	F	%	F	%	F	%
Turkish Republic of Northern Cyprus (TRNC)	17	34	35	70	8	16	60	40
Republic of Turkey (TR)	22	44	15	30	31	62	68	45.3
OTHER	11	22	0	0	11	22	22	14.7

4.2. Instruments

In addition to the information gathered via the questionnaire to find out the opinions of students about preferring free e-mail services. The questionnaire was developed by the researchers. Also literature survey was used to gathered general information about background of the study.

4.3. Data Analysis

Data were collected using questionnaire. After that SPSS 16.0 was used to analyzed and interpret the collected data. Anova, frequency and percentage methods were used during the analysis process.

5. Results

5.1. Departments

According to the Table 4, there is not statistically significant difference between departments ($p>.05$). This result is expected, because all three departments are technology based and as such they all have the same needs.

Table 4. Differences between departments

Department	N	Mean	SD	F	p
CIS	50	83.92	44.24		
CEIT	50	67.74	37.71	2.793	.064
COM.ENG	50	68.76	32.08		

5.2. Gender

As indicated in Table 5, there is a statistically significant difference between genders in this study ($p<.05$). This result shows that when making choice between the free e-mail services, males give more importance to the technical properties than the females. The reason for this could be because male's candidates seem to use the technology more effectively than the females.

Table 5. Differences between genders

Gender	N	Mean	SD	F	p
Male	105	77.26	40.43	4.120	0.44
Female	45	64.62	33.42		

5.3. Nationality

According to the Table 6, there is statistically significant difference between nationalities in the study ($p<.05$). The fact that there are different nationalities in the sections included in the research means that different cultures were present in the study. If one thinks that every culture is different from each other, then it is expected naturally that different nationalities would use the e-mail facilities differently, and this is why there seems to be a difference between different nationalities.

Table 6. Differences between nationalities

Nationality	N	Mean	SD	F	p
TR	60	63.64	35.29		
TRNC	68	73.01	35.45	17.840	.000
OTHER	22	132.09	29.88		

5.4. Grade level (class)

Table 7 shows there is not statistically significant difference between grade levels (classes) in the study (p>.05). Because all the sections that participated in the study are technologically based, it was a normal and also an expected result that their use of the free e-mail services was nearly equal. In general it can be seen from the table that the e-mail usage of all the students in the departments who participated in the study was high.

Table 7. Differences between grades level (class)

Grade Level (Class)	N	Mean	SD	F	p
1	36	80.47	41.96		
2	38	76.31	45.21	.939	.424
3	52	70.42	32.98		
4	24	65.08	34.40		

5.5. Preferred free e-mail service

As indicated in Table 8, all the three departments used hotmail free service. The other mostly used mail services in order were: Gmail, Yahoo, and others. When the departments are analyzed, the CIS department in order was using the Hotmail, Yahoo, Gmail, and other services. The CEIT department was using in order the Hotmail, Gmail, Yahoo, and other services. Finally, the department of COM.ENG was using mainly the Hotmail and Gmail equally, and the Yahoo on a lesser extend.

Table 8. Distribution of students' preference of free e-mail services according to departments

Free e-mail services	CIS		CEIT		COM.ENG		TOTAL	
	F	%	F	%	F	%	F	%
G-mail	21	23	20	24	36	43	77	30
Hotmail	46	49	50	60	36	43	132	51
Yahoo	23	25	10	12	11	14	44	17
Others	3	3	3	4	0	0	6	2

According to the Table 9, all the three departments used hotmail free e-mail service. The other services used most frequently were Gmail, Yahoo, and others. Hotmail is a product of the Microsoft Corporation which has a great potential in the world in the computer sector. If we think that the students who participated in the study are technologically based department students, it is not wrong to say that these students have good familiarities with computers. The Microsoft products are in general used in computers at the departments of our University. Because the Hotmail Live Messenger is distributed free of charge with these Microsoft products, it is expected for most of the students to choose the Hotmail naturally.

Table 9. Preferred free e-mail services

Free e-mail services	TOTAL	
	F	**%**
G-mail	77	30
Hotmail	132	51
Yahoo	44	17
Others	6	2

6. Conclusions

It can be said easily that because the departments of the students who participated in the study was technology based, these students knew that they had to learn how to use the technological tools. Results of the study indicate that it can be seen that a large majority of the students use the free e-mail services and the majority of them chose to use the Hotmail. It was an expected result by the researchers that the students chose the Hotmail because of the high potential of the Microsoft Corporation in the computer sector. The reason why Gmail was chosen as the second mostly used free e-mail service was because number of people using the Google search engine is increasing daily. Some researchers reported that the Google is the most popular in Lexis-Nexis (Bowen, 2003; Gaither, 2003; Keefe, 2003).

Since we are in the technology era it was expected that students have to use technological tools in the fields of communication between themselves, data sharing, and data searching. It is clearly visible from the study that the students are aware of this and they use one of the technologic tools, the e-mail. This is a joyful result for the researchers. This is a pleasant and joyful result for the researchers.

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