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# The perceptions of teachers on using e-mail, chat & discussion groups for educational purposes

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**Abstract**

The purpose of this study is to obtain general information from high school teachers who have different branches about using e-mail, chat & discussion groups at internet for educational purposes. For this study quantitative approach was used. Sample size was 523 (301 female – 222 male). The sample comprised high school teachers from North Cyprus. We classified the teachers according to their branches. So these groups are Social Sciences (n=160), Arts (n=110), Language Literature (n=128), and Science and Mathematic (n=125). In this study we used a scale designed to get "The opinions of teachers about using e-mail, chat and discussion groups on the internet for educational purposes" and demographic information forms. This study showed that, the teachers use MSN and e-mail the most and discussion forums the least. According to the results of this study teachers exhibited above medium levels of perception towards using internet tools in education. And teachers who use the internet everyday have higher perception about the use of discussion groups than the other teachers.

*Keywords:* e-mail, discussion groups, chat, teachers

## 1. Introduction

With the expansion of the internet, changes have occurred in social lives of all individuals who use internet (Ceyhan, Ceyhan and Gürcan 2007). According to the data updated and published by the Internet World Stats website in 2010, 28.70% of the world population uses internet.

Internet and web technologies have evolved tremendously in the last five years, and today, we live in what Internet technologists era. Internet technologies and services provide educators and learners with new and cost effective ways to work, search and manage content, access specialised communities and resources, and create content (Bhullar, 2010; Uzunboylu & Ozdamli, 2006).

Moreover, computers and information technology have increased opportunities in education and paved the way for new educational methods for teachers (Severino & Messina, 2010). 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.

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With the rapid developing, instructional technologies have entered into all branches. The subjects are mathematics, science and foreign language (Limniou & Whitehead, 2010). Akkoyunlu (2002) stated that th frequent users were computer and teachers of natural science; they were followed by mathematics, social s and foreign language teachers. Also gender has an important social meaning in all societies (Sullivan, 2003) an impact on various areas such as interpersonal communication and technology (Haubner et al., 2009; Chu Li, 2005).

## 2. The Aim of the Research

The purpose of this study is to gather information about the use of e-mail, chat and discussion groups internet for educational purposes. In order to reach this purpose, the authors have sought answers to the fol questions:

1- Do teachers' perceptions of using e-mail, chat and discussion groups in education differ in accord their branches?
2- Do teachers' perceptions of using e-mail, chat and discussion groups in education differ in accord their genders?
3- Do teachers' perceptions of using e-mail, chat and discussion groups in education differ in accord their internet using frequency?

## 3. Method

This part describes the research model, participants, data collection instrument, and data analysis.

### 3.1 Model

The research was conducted with in the frame of general survey model and questionnaires. This stu designed to examine teachers' perceptions about the use of e-mail, chat and discussion groups on the inter educational purposes and to compare their responses based on branches, gender and using internet frequency.

### 3.2 Participant

This study was applied to a randomly selected sample of 523 teachers (301 female – 222 males) from th Schools in North Cyprus at the 1st term of 2010-2011 academic years. Teachers were classified by their br So these groups are Social Sciences (n=160), Arts (n=110), Language Literature (n=128), and Scien Mathematic (n=125).

### 3.3 Data collection instruments and application

Data were collected with the use of "The perceptions of teachers about internet tools" questionnai questionnaire consists two parts. First part includes personal information questions about teachers. Second p 33 total statements about using of e-mail, discussion groups and chat tools in education ('Strongly dis 'Disagree', 'Neutral', 'Agree', 'Strongly agree'). The alpha reliability for the entire questionnaire in this stu .93. Cronbach Alfa coefficients for email is (r=.89), for discussion groups is (r=.92), and for Chat is (r=.91).

The teachers' perceptions were assessed by the questionnaire. The questionnaires were applied to only vo teachers. Copies of the questionnaires were given teachers at their schools and they completed it in aproxima

questionnaire were statistically analyzed according to branches, gender, and using internet frequency. Frequency, t-test and ANOVA were used to analyze each item. In this process, an alpha level of 0.05 was set to test. Collected data was analyzed with SPSS 16.

## 4. Findings

In this part, the results obtained are discussed in the view of the fundamental aims of the research. Table 1 showed that general perceptions of teachers corresponding to scale mean were 3.62. So we can say that teachers have positive perceptions towards using internet tools in education.

**Table 1** General Means According Internet Tools

| Tools | N | Mean | SD |
|-------|---|------|-----|
| E-mail | 523 | 3.85 | .489 |
| Discussion groups | 523 | 3.40 | .654 |
| Chat | 523 | 3.62 | .595 |
| Total | 523 | 3.62 | .595 |

Table 1 shows teachers' perception mean $\overline{X}$ =3.85 according to using e-mail in education. These results indicate that teachers have positive perceptions according to using e-mail in education. Also, teachers perception mean $\overline{X}$ =3.40 according to using discussion gropus and $\overline{X}$ =3.62 according to using chat tools in education. So we can say that teachers have positive perceptions according to using disccussion groups and chat tool in education.

### 4.1. Teachers' perceptions according to branches

Research question one concerns teachers' perceptions of using internet tools. To test branch differences, Mulivariate one-way ANOVA (MANOVA) was applied. The obtained findings showed that no significant difference (Wilks' Lambda= 0.967, p>0.05 ) existed in teachers' different branches (see Table 2).

**Table 2** Results of the multivariate one-way ANOVA

| | Branches of teachers | | | | | | |
|---|---|---|---|---|---|---|---|
| | Mean | | | | | | |
| | Social Sciences n=160 | Arts n=110 | Language Literature n=128 | Science & Mathematic n=125 | F | p value | Parital eta square |
| *E-mail* | 3.82 | 3.85 | 3.83 | 3.87 | 2.036 | .110 | .109 |
| *Discussion groups* | 3.38 | 3.30 | 3.47 | 3.41 | 1.921 | .128 | .014 |
| *Chat* | 3.62 | 3.60 | 3.64 | 3.60 | .893 | .521 | .457 |

According to the findings, in all branches, the teachers' perceptions of using internet tools in education is positive.

### 4.2. Teachers' perceptions according to genders

A t-test was performed to find out whether or not there was a significant statistical difference between the gender for the perceptions of teachers towards using internet tools. The results of perceptions according to gender are shown in table 3

**Table 3** Results of the t-test according to gender

| Gender | N | Mean | Std. Deviation | *t* | P | Explanation |
|--------|---|------|----------------|-----|---|-------------|
| Female | 301 | 3.52 | .553 | 2.668 | 0.008 | P<.05 |
| Male | 222 | 3.72 | .493 | | | |

Using internet tools is significantly different between male and female teachers (male: $\overline{X}$ =3.52, female: $\overline{X}$ =3.72), indicating that male respondents were better in using internet tools, as compared to the female respondents (t=2.668, p<0.05).

### 4.3. Teachers' perceptions according to using internet frequency

One-way analysis of covariance (ANOVA) used to find out whether or not there was a significant relationship between the using internet frequency. Table 4 gives the data for the perceptions of the teachers according to their internet using frequency.

**Table 4** Results of the Anova according to internet using frequency

|  | N | Mean | Std. Deviation | F | P | Exp. |
|---|---|---|---|---|---|---|
| One day in a week | 130 | 3.50 | 3.876 |  |  |  |
| 2-3 times in a week | 120 | 3.55 | 3.666 |  |  |  |
| 4-6 times in a week | 133 | 3.65 | 4.566 | 3.76 | 0.006 | p<.05 |
| Everyday | 140 | 3.76 | 4.165 |  |  |  |
| Total | 523 | 3.62 | 4.110 |  |  |  |

According to One Way Anova test results that were done for teachers' internet using frequency, values were smaller than the standard value of alpha= 0.05 (F= 3,46, p=.019, p<0.05). The results showed that teachers who are using internet every day have more positive perceptions about using internet tools than other teachers.

## 5. Discussion & Conclusion

In this part suggestions are made as a result of the research. According to the results, teachers have positive perceptions according to using the internet tools. According to study results, e-mail most popular tools according to teachers. Cavus and Bicen (2009) indicated that electronic mail is the most frequently used service on the internet because it has a lot of benefitical features for ex. sending message anytime, anywhere, multiple recipents, attachment of digital files and etc.

Also there is not any significant difference in teachers' perceptions according to branches. But the results show that the gender and internet using frequency of teachers create a significant difference on perceptions of using internet tools. These findings were consistent with past studies that did find significant gender differences in perceptions towards internet tools (Haubner et al., 2009; Chu, 2010; Li, 2005; King, Bond & Blandford, 2002; North & Noyes, 2002; Whitley,1997; Alkharusi, H., 2010).

As in every study, some limitations are present in this research. One limitation is that teachers, high schools' teachers were included in the research. In future research, primary and secondary school teachers should be used as participants. More research needs to focus on teachers' genders and research on solves differences in using internet tools. Also, researchers should research students and administrators' perceptions towards using internet tools.

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