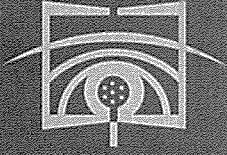




— ANADOLU UNIVERSITY —

Eskişehir, Turkey



# 2<sup>nd</sup> INTERNATIONAL OPEN AND DISTANCE LEARNING (IODL) SYMPOSIUM

## “Lifelong Open & Flexible Learning in the Globalized World”

September

15  
2006

# PROCEEDINGS

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Bilgi Sistemleri

ENGAGING AND SUPPORTING PROBLEM SOLVING ONLINE .....	65
Prof. Dr. David H. JONASSEN	
ADVANCING THE RESEARCH AGENDA IN OPEN AND FLEXIBLE LIFELONG LEARNING .....	77
Prof. Dr. Colin LATCHEM	
<b>PAPERS</b> .....	<b>89</b>
PERSPECTIVES OF DISCIPLINE FOR DISTANCE EDUCATION .....	91
Assist.Prof.Dr. Antonis LIONARAKIS	
THE EFFECTS OF DISTANCE LEARNING ON MOTIVATION .....	99
Dr. Ayfer ALPER Lecturer Özlem ÇAKIR BALTA	
PDK-12: A PROPOSAL FOR MIXED-MODE PROFESSIONAL DEVELOPMENT IN ICT FOR TURKISH K-12 TEACHERS AND MANAGERS .....	109
Prof.Dr. Ferhan H. ODABAŞI Prof.Dr. Colin LATCHEM Assist. Prof.Dr. Işıl KABAKÇI	
USABILITY ISSUES IN ONLINE COURSES; USER TESTS OF WEB COURSE TOOLS .....	121
Lecturer Miraç Banu GÜNDOĞAN	
ONLINE TRAINING MODULES FOR CLASSROOM ASSESMENT SCORING SYSTEM .....	133
İlknur AKYILDIZ	
COMMUNICATION AND LEARNING IN ON-LINE COURSES .....	137
Assoc.Prof.Dr. İordanis KAVATHATZOPOULOS	
THE EXPERIMENT OF ALQUDS OPEN UNIVERSITY (QOU) IN OPEN DISTANCE LEARNING (ODL) USING NEW TECHNOLOGIES .....	145
Dr. Yousef ABUZİR	
AN ONLINE EXAMINATION SYSTEM FOR MEASUREMENT AND EVALUATION IN EDUCATION .....	159
Assist.Prof.Dr. Hasan KARAL Lecturer Zeynep ÇELİK	
MODELING TECHNOLOGY USE IN TEACHER TRAINING PROGRAMS: A CASE OF A FACULTY OF EDUCATION .....	173
Research Assitant Engin KURŞUN Research Assitant Ayşegül BAKAR Research Assitant Melih Derya GÜRER	
SUPPLEMENTARY DISTANCE LEARNING IN SECONDARY EDUCATION .....	189
Panagiotis CHATZIPLIS Paraskevi VASSALA Assist.Prof.Dr. Antonis LIONARAKIS	

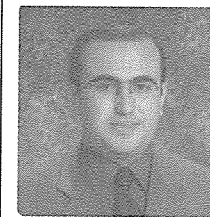
PISTES - EDUCATIONAL CONSTRUCTION SITE-EDUCATIONAL GAME CENTER: THREE WEBSITES INTERTWINE TO ENHANCE TEACHER'S COLLABORATIVE TEAMWORK TO CREATE ACTIVITIES AND GAMES FOR ELEMENTARY AND SECONDARY PUPILS .....	203
Prof. Margot KASZAP Prof. Louise GUILBERT	
INVESTIGATING PRIMARY SCHOOL CHILDREN'S PERCEPTIONS OF WEB SITES DESIGNED FOR ART EDUCATION .....	217
Assist.Prof.Dr. Hakan PEHLİVAN	
THE MANAGEMENT OF OPEN LEARNING - FEDERATED STRUCTURES FOR THE INTEGRATION OF RURAL STUDENTS IN THE GLOBAL COMMUNITY.....	225
Prof. Ken STEVENS	
GLOBALIZATION OF EDUCATION WITH E-LEARNING .....	235
Dr. Tarkan GÜRBÜZ	
A RADICAL APPROACH TO E-LEARNING IN 21st CENTURY.....	245
Lecturer Memduh ER Lecturer Emre SEVİNÇ	
OVERCOMING THE "NO SIGNIFICANT DIFFERENCE" PHENOMENON IN DISTANCE EDUCATION BY INTERNET .....	253
Research Assistant Mehmet Can ŞAHİN	
FROM NATIONAL CHALLENGES TO A GLOBAL COMMUNITY: ESTABLISHING AND IMPLEMENTING A LOW-COST LEARNING OBJECT REPOSITORY FOR EGYPTIAN TEACHERS .....	265
Dr. Alaa SADIK	
CONSTRUCTION OF ODL EDUCATIONAL MULTIMEDIA MATERIAL USING THE CLASSICAL HOLLYWOOD MODE OF NARRATION .....	283
Lecturer Siakas Th. SPYROS Lecturer Spanaka K. ADAMANTIA	
THE IMPACT OF CONTEMPORARY INTERNET UTILIZATION ON PRESERVICE TEACHERS' TERTIARY EDUCATION: A PRELIMINARY STUDY FROM "COMPUTER EDUCATION AND INSTRUCTIONAL TECHNOLOGY" DEPARTMENTS .....	299
Lecturer Hasan TINMAZ Lecturer İlker YAKIN	
CULTURE COLLABORATION AND MEDIATED COMMUNICATION: A CASE STUDY OF TURKISH AND JAPANESE' PERCEPTIONS ABOUT CROSS-CULTURAL ONLINE COLLABORATION .....	315
Assoc.Prof.Dr. Kumiko AOKI Assoc.Prof.Dr. Cengiz Hakan AYDIN	
EFFECTS OF INTER-UNIVERSITY MULTI-SITE COLLABORATION BY SATELLITE .....	327
Prof.Dr. Kimio KONDO	

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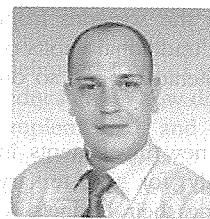
**THE IMPACT OF CONTEMPORARY INTERNET UTILIZATION  
ON PRESERVICE TEACHERS' TERTIARY EDUCATION:  
A PRELIMINARY STUDY FROM "COMPUTER EDUCATION AND  
INSTRUCTIONAL TECHNOLOGY" DEPARTMENTS**

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## ABSTRACT

Both private and public universities of Turkey have provided their students with opportunities about ICT and related technologies. The basic underlying reason for investing on ICT, specifically on the Internet, is that technology will influence their students' learning positively. The aim of this study is to explore the impact of contemporary Internet utilization in university education among preservice teachers from "Computer Education and Instructional Technology (CEIT)" departments' perspectives. The sample of the study included third grade preservice teachers of Computer Education and Instructional Technology from three different universities; (a) Baskent University (N=23), (b) Canakkale Onsekiz Mart University (N=37), and (c) Middle East Technical University (N=51) and totally included 72 males and 39 females. A questionnaire translated from the study of Cheung and Huang (2005) was scrutinized and used for the study. The study showed that students learn the Internet with the support of their universities and utilize it especially for out-of school activities. They are somewhat aware of the advantages of the Internet on their school learning and prospective occupational opportunities. In the light of the study results, some suggestions are made for both implication and further studies.

## INTRODUCTION

Many different uses of Internet including commercial, military and educational aspects have been developed by the United States Department of Defense during the 1970s. In the 1980s, along with the widespread use of personal computers, the bandwidth and speed of the Internet got higher and faster. This yielded a high amount of information communication. Subsequent to the development of hypertext technology and web browsing, it has become possible to share resources easily and exchange information all around the world since 1990s. As a result of these technological innovations, 2000s is the age of humankind and the Internet interaction. More specifically, the Internet has a power over the societies from different aspects of our daily lives. The Internet has altered our traditional habits of commerce, education, communication, entertainment, social interaction and so on (Cheung & Huang, 2005).

Reflections on the broad usage of the Internet bring about new investments in information and communication technology area. Especially for the tertiary education of most countries, universities have been spending their budgets to produce online instructional materials to support and foster learning. As Glahn and Gen (2002) noted the Internet has altered the inner dynamics of teaching and learning process so that each component of education have been re-shaped. Therefore, it is possible to assert that the technological advances should be provided to achieve these new aims. Thus, it is vital both to scrutinize new technologies associated to teaching/learning and to recognize how the Internet is utilized in

teaching/learning. As universities expand their investments about the Internet technologies and promote their use, how students benefit from the Internet and how they are supported in their activities are gaining importance. As Cheung and Huang (2005) pointed out only when students are making use of the Internet for their learning, investments might be justified in terms of university's resources.

Improving the quality of education via the Internet technologies is one of the priorities of universities in Turkey. All universities have been attempting to become highly computerized and most of the scholars are getting to use the Internet technologies for their instruction. Students get accustomed to using the Internet not only for their own school learning but also for their out-of-school activities and their professional developments.

To serve the aim of computerizing the faculties, education faculties have a special importance due to their reflections on daily life. If we furnish our preservice and inservice teachers with the Internet knowledge, they will be able to utilize the Internet for their courses. Distinctively, Departments of Computer Education and Instructional Technology (CEIT) in Turkey have a unique value in terms of technology usage within the faculties of education.

Because the CEIT departments aim to equip their students with the latest technological knowledge and practical skills required for K12 computer teachers, preservice teachers are getting used to utilizing the Internet in their projects and courses much quicker than the other departments in education faculties. Therefore, due the major scope of CEIT departments, it is a good endeavor to depict CEIT preservice teachers' Internet use. Hence, the aim of this study is to find out the impact of contemporary Internet utilization on tertiary education among preservice teachers from CEIT departments' perspectives.

## METHOD

### Participants

This study included 111 third grade preservice teachers (23 of them from Baskent University, 37 of them from Canakkale Onsekiz Mart University and 51 from Middle East Technical University) of CEIT departments. The study focused on one private university (Baskent University) and two public universities (Canakkale Onsekiz Mart University and Middle East Technical University) from Turkey. The study is delimited to third grade preservice teachers of CEIT for two reasons; (a) they are educated on how distance teaching/learning environments are designed, developed, implemented and evaluated, and (b) preservice teachers are instructed on fundamentals and functions of the Internet including common the Internet applications used in education as www, e-mail, ftp and the principles of using the Internet applications in education. Demographics of participants are depicted in Table 1 in detail.

Table 1: Demographics of Participants

		Baskent University	Canakkale Onsekiz Mart University	Middle East Technical University	Total
Gender	Male	10	25	37	72
	Female	13	12	14	39
Having a PC	Yes	23	36	48	107
	No	0	1	3	4
Having an Internet Connection	Yes	22	17	42	81
	No	1	19	5	25
The connection type to the Internet	ADSL	21	17	20	58
	Dial-Up	0	0	2	2
	Other	1	0	20	21
Years of computer use	Less than 1 year	0	0	0	0
	1-3 years	0	12	2	14
	3-5 years	6	8	9	23
	More than 5 years	17	17	40	74

**Instrumentation**

A questionnaire which was translated from the study of Cheung and Huang (2005) was scrutinized and adapted to the Turkish language. Before statistical analyses, four items were recoded due to their negative meanings. The reliability coefficient for initial solution was calculated as 0.89 showing that instrument was quite reliable. Moreover, the questionnaire was analyzed for its constructs by principal component factor analysis method. For the first analyses, 11 factors were identified where the reliability of three constructs were very low.

Cheung and Huang complained about the same problems on low-level reliability coefficient. Thus, researchers decided to combine some factors and diminished the numbers of factors one by one until each construct had a high level reliability coefficient within the entire questionnaire. In that process, two items (20 and 29) were eliminated from the questionnaire. Finally, the instrument had five constructs as shown in Table 2. The final questionnaire included forty items on a five-point scale from strongly disagree to strongly agree. Five factors explained the 51.7% of total variance in the instrument. The questionnaire and the results of factor analysis are given in Appendix A and B, respectively.

Table 2: The factors of the instrument and the statistics

Constructs	Name of constructs	Reliability Coefficient	Number of items	Min	Max	M	SD
Factor 1	The benefits of the Internet on out-of-school activities	0,89	12	2,92	5,00	4,26	0,51
Factor 2	The benefits of the Internet on school learning	0,84	11	2,45	5,00	4,26	0,53
Factor 3	The use of the Internet	0,85	8	2,00	5,00	4,19	0,73
Factor 4	The benefits of the Internet on personal development	0,71	5	2,92	5,00	3,68	0,71
Factor 5	The support of university on learning the Internet	0,61	4	1,00	5,00	3,60	0,86
Entire instrument		0,90	40	2,45	4,95	4,00	0,44

**Overall Design and Procedure**

Since the study aimed to obtain data to determine specific characteristics of a group, a none-experimental survey research design was employed. The survey included six independent variables (university, gender, having a computer, having an Internet connection, the Internet connection type, and the years of computer experience) and one dependent variable (item scores). The questionnaire was administered to the CEIT students of three different universities and data were obtained from different class sections on voluntarily basis.

**MAJOR FINDINGS AND DISCUSSIONS**

First of all, the factors were analyzed with respect to their correlations. The correlation results were tabulated in Table 3.

Table 3: The correlations among factors

Factors	1	2	3	4	5	Entire instrument
Factor 1: The benefits of the Internet on out-of-school activities	1	0,68**	0,31**	0,38**	0,91*	0,70**
Factor 2: The benefits of the Internet on school learning		1	0,27**	0,38**	0,16	0,68**
Factor 3: The use of the Internet			1	0,21*	0,35**	0,68**
Factor 4: The benefits of the Internet on personal development				1	0,09	0,61**
Factor 5: The support of university on learning the Internet					1	0,63**
Entire instrument						1

\*\* : correlation is significant at the level 0.01  
\* : correlation is significant at the level 0.05

From the Table 3, we can conclude that “the benefits of the Internet on out-of-school-activities” is strongly high correlated with “the support of university on learning the Internet”. This means that students learn the Internet in the universities and use it out of universities. Moreover, the benefits of Internet on out-of-school activities and benefits of the Internet on school learning are also strongly correlated implying that school learning plays a great role in out-of-school activities.

Secondly, the differences in perspectives between gender in relation the factors and instrument were statistically checked by independent samples t-test for each factor. Analyses demonstrated that there were no significant differences among factors in associated to genders (Table 4).

**Table 4:** Differences between genders in relation to factors

Factor	Gender	N	M	SD	t	p
1	Male	72	4,28	0,50	0,407	0,609
	Female	39	4,24	0,53		
2	Male	72	4,30	0,48	1,296	0,609
	Female	39	4,17	0,60		
3	Male	72	4,20	0,74	0,010	0,635
	Female	39	4,20	0,71		
4	Male	72	3,68	0,70	-0,103	0,820
	Female	39	3,69	0,72		
5	Male	72	3,65	0,88	0,792	0,307
	Female	38	3,51	0,82		
Entire instrument	Male	72	4,02	0,42	0,629	0,530
	Female	39	3,97	0,47		

Thirdly, the differences in perspectives between having a personal computer (PC) in relation the factors and instrument were statistically checked by independent samples t-test for each factor. Analyses demonstrated that there were no significant differences among factors associated to having a personal computer (Table 5).

**Table 5:** Differences between having a PC or not in relation to factors Differences between genders in relation to factors

Factor	Having a PC	N	M	SD	t	p
1	PC	107	4,29	0,49	2,80	0,102
	No PC	4	3,58	0,28		
2	PC	107	4,27	0,52	1,25	0,466
	No PC	4	3,93	0,48		
3	PC	107	4,21	0,73	0,72	0,102
	No PC	4	3,94	0,68		
4	PC	107	3,68	0,72	0,09	0,108
	No PC	4	3,65	0,30		
5	PC	106	3,58	0,87	-1,39	0,274
	No PC	4	4,19	0,59		
Entire instrument	PC	107	4,01	0,44	0,67	0,064
	No PC	4	3,86	0,14		

Fourthly, the differences in perspectives between having an Internet connection in relation the factors and instrument were statistically checked by independent samples t-test for each factor. Analyses demonstrated that there were no significant differences among factors associated to having an Internet connection except factor 3 (Table 6). Students having a connection had higher scores (M=4.47) than students without a connection (M=3.34) in factor 3 which refers to the use of the Internet.

**Table 6:** Differences between having an Internet connection or not in relation to factors

Factor	Having an Internet Connection	N	M	SD	t	p
1	Internet Connection	81	4,30	0,50	0,719	0,734
	No Internet Connection	25	4,220	0,49		
2	Internet Connection	81	4,27	0,55	0,241	0,498
	No Internet Connection	25	4,24	0,47		
3	Internet Connection	81	4,47	0,47	8,956	0,000
	No Internet Connection	25	3,34	0,77		
4	Internet Connection	81	3,67	0,67	-0,277	0,089
	No Internet Connection	25	3,72	0,89		
5	Internet Connection	80	3,63	0,90	1,199	0,490
	No Internet Connection	25	3,39	0,74		
Entire instrument	Internet Connection	81	4,07	0,43	2,960	0,556
	No Internet Connection	25	3,78	0,43		

As a fifth item, the differences in perspectives between universities in relation the factors and instruments were statistically checked by one-way analysis of variances (ANOVA) test for each factor.

**Table 7:** Differences between universities in relation to factors

Factor	Universities	N	M	SD	Test of Homogeneity of Variances	F	p
1	Baskent University	23	4,42	0,49	0,475	1,746	0,179
	Canakkale Onsekiz Mart University	37	4,17	0,49			
	Middle East Technical University	51	4,26	0,52			
2	Baskent University	23	4,31	0,53	0,919	0,692	0,503
	Canakkale Onsekiz Mart University	37	4,31	0,53			
	Middle East Technical University	51	4,19	0,52			
3	Baskent University	23	4,42	0,39	0,000	28,814	0,000
	Canakkale Onsekiz Mart University	37	3,59	0,83			
	Middle East Technical University	51	4,53	0,45			
4	Baskent University	23	4,09	0,58	0,475	5,276	0,007
	Canakkale Onsekiz Mart University	37	3,53	0,77			
	Middle East Technical University	51	3,61	0,66			
5	Baskent University	23	3,09	0,68	0,086	27,002	0,000
	Canakkale Onsekiz Mart University	36	3,18	0,84			
	Middle East Technical University	51	4,14	0,62			
Entire instrument	Baskent University	23	4,07	0,39	0,911	9,925	0,000
	Canakkale Onsekiz Mart University	37	3,76	0,45			
	Middle East Technical University	51	4,15	0,38			

As the one-way ANOVA results in Table 7 indicated, there were significant differences between universities in the factors 3, 4, 5 and the entire instrument. Follow-up tests were performed on three universities to find out which level(s) differs significantly among the group. A result of the test of homogeneity was significant only for factor 3. This meant that group variances of the factor 3 were not homogeneous. Thus, we have to assume unequal variances among groups and use Dunnett's C test as a follow-up test. For the factors 4, 5 and the entire instrument we might use Scheffé test as a post-hoc test.

**Table 8:** Differences among universities in Factor 3 (The use of the Internet)

Universities	N	M	SD	1	2	3
1. Baskent University	23	4,42	0,39	---		
2. Canakkale Onsekiz Mart University	37	3,59	0,83	*	---	
3. Middle East Technical University	51	4,53	0,45	NS	*	---

**Note.** Dashes indicate that cell value was zero. NS= non-significant differences between pairs of means, while an asterisk (\*) = The significance of using the Dunnett's C procedure.

The differences could be interpreted as the students in capital city (Ankara) universities use the Internet more than Canakkale which is a relatively small city when compared with Ankara.

**Table 9:** Differences among universities in Factor 4 (The benefits of the Internet on personal development)

Universities	N	M	SD	1	2	3
1. Baskent University	23	4,09	0,58	---		
2. Canakkale Onsekiz Mart University	37	3,53	0,77	0,01	---	
3. Middle East Technical University	51	3,61	0,66	0,02	NS	---

**Note.** NS= non-significant differences between pairs of means

This implies that students in a private university (Baskent University) value the Internet for their personal development much more than public universities (Canakkale Onsekiz Mart University and Middle East Technical University)

**Table 10:** Differences among universities in Factor 5 (The support of university on learning the Internet)

Universities	N	M	SD	1	2	3
1. Baskent University	23	3,09	0,68	---		
2. Canakkale Onsekiz Mart University	36	3,18	0,84	NS	---	
3. Middle East Technical University	51	4,14	0,62	0,00	0,00	---

**Note.** NS= non-significant differences between pairs of means

From the Table 10, it can be concluded that Middle East Technical University supports its students in their learning Internet more than the other two universities.

**Table 11:** Differences among universities in the Entire Instrument

Universities	N	M	SD	1	2	3
1. Baskent University	23	4,07	0,39	---		
2. Canakkale Onsekiz Mart University	37	3,76	0,45	0,02	---	
3. Middle East Technical University	51	4,15	0,38	NS	0,00	---

**Note.** NS= non-significant differences between pairs of means

From the Table 11, it is interpreted that "Canakkale Onsekiz Mart University" differs from Middle East Technical and Baskent universities due to its geographical location.

As a sixth item, the differences in perspectives between the ways of connecting Internet in relation the factors and instrument were statistically checked by one-way analysis of variances (ANOVA) test for each factor.

**Table 12:** Differences between the ways of connecting to the Internet

Factor	Universities	N	M	SD	Test of Homogeneity of Variances	F	p
1	ADSL	58	4,31	0,48	0,058	0,770	0,466
	Dial-Up	2	4,71	0,17			
	Other	21	4,25	0,57			
2	ADSL	58	4,27	0,54	0,258	0,356	0,702
	Dial-Up	2	3,96	0,06			
	Other	21	4,29	0,58			
3	ADSL	58	4,41	0,46	0,290	2,128	0,126
	Dial-Up	2	4,94	0,08			
	Other	21	4,58	0,47			
4	ADSL	58	3,66	0,62	0,149	0,633	0,534
	Dial-Up	2	4,20	0,28			
	Other	21	3,66	0,80			
5	ADSL	57	3,37	0,87	0,263	10,282	0,000
	Dial-Up	2	4,63	0,53			
	Other	21	4,24	0,60			
Entire instrument	ADSL	58	4,01	0,41	0,489	2,711	0,073
	Dial-Up	2	4,49	0,16			
	Other	21	4,20	0,42			

As the one-way ANOVA results in the Table 12 indicated, there was a significant difference between the ways of connecting to Internet in factor 5. A follow-up test was performed on three ways of connection to find out which level(s) differs significantly among the group. A result of the test of homogeneity was not significant in factor 5. This means that group variances of the factor 5 was homogeneous. Thus, we have to assume equal variances among groups and use Dunnett's C test as a follow-up test.

**Table 13:** Differences among the ways of Internet connection in Factor 5

The ways of Internet connection	N	M	SD	1	2	3
1. ADSL	57	3,37	0,87	---		
2. Dial-Up	2	4,63	0,53	NS	---	
3. Other	21	4,24	0,60	*	NS	---

**Note.** NS= non-significant differences between pairs of means

All the students coming from Middle East Technical University checked the "other" option where exists a wireless connection (see Table 1). Thus the "other" option differs from ADSL option.

As a seventh item, the differences in perspectives between the ways of connecting Internet in relation the factors and instrument were statistically checked by one-way analysis of variances (ANOVA) test for each factor.

**Table 14:** Differences between the years of computer use

Factor	Years	N	M	SD	Test of Homogeneity of Variances	F	p
1	1-3 years	14	4,24	0,48	0,013	0,591	0,555
	3-5 years	23	4,16	0,39			
	More than 5 years	74	4,29	0,54			
2	1-3 years	14	4,37	0,41	0,695	0,445	0,642
	3-5 years	23	4,21	0,53			
	More than 5 years	74	4,24	0,54			
3	1-3 years	14	3,48	0,66	0,817	12,664	0,000
	3-5 years	23	3,99	0,68			
	More than 5 years	74	4,39	0,65			
4	1-3 years	14	3,53	0,85	0,201	0,433	0,650
	3-5 years	23	3,75	0,62			
	More than 5 years	74	3,69	0,70			
5	1-3 years	14	3,19	0,75	0,812	5,414	0,006
	3-5 years	23	3,27	0,73			
	More than 5 years	73	3,79	0,86			
Entire instrument	1-3 years	14	3,76	0,41	0,279	4,711	0,011
	3-5 years	23	3,88	0,32			
	More than 5 years	74	4,09	0,44			

Since no one stated less than one year computer experience, the first choice (less than 1 year) was eliminated. As the one-way ANOVA results in Table 14 indicated, there were significant differences between the years of experiences in factors 3, 5 and the entire instrument. Follow-up tests were performed to find out which level(s) differs significantly among the group. Results of the test of homogeneity were not significant in factor 3, 5 and the entire instrument. This means that group variances of the factors were homogeneous. Thus, we have to assume equal variances among groups and use Scheffé test as a post-hoc test.

**Table 15:** Differences among the years of experiences in Factor 3 (The use of the Internet)

Years	N	M	SD	1	2	3
1. 1-3 years	14	3,48	0,66	---		
2. 3-5 years	23	3,99	0,68	NS	---	
3. More than 5 years	74	4,39	0,65	0.00	0.04	---

**Note.** NS= non-significant differences between pairs of means

**Table 16:** Differences among the years of experiences in Factor 5 (The support of university on learning the Internet)

Years	N	M	SD	1	2	3
1. 1-3 years	14	3,19	0,75	---		
2. 3-5 years	23	3,27	0,73	NS	---	
3. More than 5 years	73	3,79	0,86	0.04	0.04	---

**Note.** NS= non-significant differences between pairs of means

Table 15 and Table 16 make it clear that experience makes a difference on the use of the Internet and expecting the support of university on learning the Internet. For the entire instrument (Table 17), the years of experience makes a difference after five years. It can be concluded that beginner Internet users differ from experienced Internet users.

**Table 17:** Differences among the years of experiences in the Entire Instrument

Years	N	M	SD	1	2	3
1. 1-3 years	14	3,76	0,41	---		
2. 3-5 years	23	3,88	0,32	NS	---	
3. More than 5 years	74	4,09	0,44	0.04	NS	---

**Note.** NS= non-significant differences between pairs of means

If we check the items in general, we realize that students often use the Internet for in-school and out-of-school activities. They also believe that the Internet makes learning more interesting (arousal of motivation) and that surfing on the Internet is joyful. Moreover, they also stated that they are not forced to be an expert in the Internet technologies as they use the Internet. On the other hand, students were not quite sure about whether the Internet assists them to decrease the time elapsed for their school works.

As a conclusion, students learn the Internet with the support of their universities and utilize it especially for out-of school activities. They are somewhat aware of the advantages of the Internet on their school learning and prospective occupational opportunities. Gender and having a computer do not make any differences for the Internet use. If we realize the fact that the Internet is getting widespread in Turkey, especially with the help of Internet Cafes and wireless connections, we can say that students can access the Internet and make use of it. Nevertheless, having an Internet connection definitely influences the use of Internet among students and students mostly use ADSL type the Internet connection. Geographical location of universities also affects the Internet use among their students. The concept of "digital divide" also appears in that long discussion. It appeared that students in Ankara, either public or private, tended to use the Internet more than their peers in Canakkale. Lastly, the years of experience on using the Internet is a critical factor on students' usage of the Internet.

## RECOMMENDATIONS

- Students can be prompted about the benefits of the Internet not only for their in-school and out-of-school activities but also for their personal development. This could be achieved by seminars, workshops or by the integration of the Internet into all courses.
- Students can be informed about the effective use of the Internet, especially about the advantages on time-management.
- Instructors can be a model for their students and recommend them to use the Internet for their own cognitive and affective development. If needed, the instructors of students can also be familiarized with the Internet including different side-effects.
- Universities should support their students in the Internet usage by providing them with opportunities to connect to the Internet via different technologies, especially via wireless connection.
- Students can be directed towards e-learning settings which are furnished with the full capacity of multimedia technologies.



- Some cautions can be produced to diminish the gap with the help of digital divide concept.
- This study is limited to groups selected. By including different departments from the faculty of education or adding all the faculties, the same study can be replicated for further investigation.
- As a further study, the same study can be replicated within the society to identify how people use the Internet in their daily lives.

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#### APPENDIXES

#### APPENDIX A: The Questionnaire

*Üniversite Öğrencileri Arasında İnternet Nasıl Kullanılıyor?*

**Yönerge:** Biraz sonra dolduracağınız anket, sizlerin üniversite bünyesinde ve üniversite ile ilgili öğrenmelerinizde İnternet'i nasıl kullandığınıza dair görüşlerinizi toplamayı amaçlamaktadır. Elde edilen veriler akademik değerlendirme amacıyla, yalnızca araştırmacılar tarafından kullanılacaktır ve gizli tutulacaktır. Bilimsel bir çalışmaya yapacağınız katkılardan ve yanıtlarken göstereceğiniz duyarlılıktan dolayı şimdiden teşekkür ederiz.

**(1) Cinsiyetiniz:**

- a. Erkek  b. Kadın

**(2) Kendinize ait bilgisayarınız var mı?**

- Evet  Hayır

**(3) Eğer 2. soruya evet cevabı vermişseniz, bilgisayarınız ile İnternet'e bağlanabiliyor musunuz?**

- Evet  Hayır

**(4) Eğer 3. soruya evet cevabı vermişseniz, evinizden/yurdundan İnternet'e nasıl bağlanıyorsunuz?**

- ADSL  Dial-Up  Diğer: .....

**(5) Kaç yıldır bilgisayar kullanıyorsunuz:**

- 1 yıldan az  1-3 yıl  3-5 yıl  5 yıldan fazla

**Yönerge:** Aşağıda sizlerin üniversite bünyesinde ve üniversite ile ilgili öğrenmelerinizde İnternet'i nasıl kullandığınıza dair görüşlerinizi içeren cümleler bulunmaktadır. Lütfen okuduğunuz cümleleri bir **üniversite öğrencisi gözüyle yanıtlayınız.** İfadelerin tanımladığı özellikler sizi yansıtıyorsa aşağıdaki ölçeği göz önünde bulundurarak yanındaki kutucuktan 1 ile 5 arasında sizi en iyi tanımlayan değeri işaretleyiniz. 1 KESİNLİKLE KATILMADIĞINIZ durumlarda sizi en iyi yansıtan ve 5 KESİNLİKLE KATILDIĞINIZ durumlarda sizi en iyi yansıtan durumun GÖSTERGESİDİR. Eğer kendinizi 1 ile 5 arasında bir yerde görüyorsanız 2, 3 ya da 4 sayılarından birini işaretleyiniz

					1 Kesinlikle Katılmıyor um	2 Katılmıyor um	3 Kararsız ım	4 Katılıyor m	5 Kesinlikle Katılıyor m
1	2	3	4	5	1. Uzun zamandan beri internet kullanıyorum.				
1	2	3	4	5	2. Genel olarak, interneti kullanım becerimin çok iyi olduğunu düşünüyorum.				
1	2	3	4	5	3. İnternet öğrenmeyi daha ilginç bir hale getirir.				
1	2	3	4	5	4. İnternet ile ders çalışmak eğlencelidir.				
1	2	3	4	5	5. Genel olarak internette dolaşmak eğlencelidir.				
1	2	3	4	5	6. Birçok arkadaşım düzenli olarak interneti kendi çalışmalarında kullanmam gerektiğini düşünüyor.				
1	2	3	4	5	7. Öğretim elemanlarım, beni ödevlerimde internet kullanmam konusunda teşvik ederler.				
1	2	3	4	5	8. Ne zaman internet kullanmaya ihtiyaç duysam, internete erişimde herhangi bir sorun yaşamam.				
1	2	3	4	5	9. Genel olarak üniversitem internet kullanımını destekler.				
1	2	3	4	5	10. Üniversite içerisinde, internet ile yaşanabilecek sorunlarda bana yardımcı olabilecek kişi(ler) bulunmaktadır.				
1	2	3	4	5	11. Üniversite içerisinde, internet kullanımı ile ilgili özel bir eğitim alma imkânım bulunmaktadır.				
1	2	3	4	5	12. Genel olarak, internet kullanımı eğitim aldığım üniversite tarafından desteklenir.				
1	2	3	4	5	13. İnterneti oldukça fazla bir şekilde (günde 2 saatten fazla) kullanırım.				
1	2	3	4	5	14. İnterneti sık sık (günde birkaç defa) kullanırım.				
1	2	3	4	5	15. İnterneti değişik amaçlar için kullanırım (raporlar, grup projeleri, kişisel ödevlerim vs.).				
1	2	3	4	5	16. Çalışmalarında internet üzerinde var olan çeşitli araçları kullanırım (elektronik posta, MS-Explorer, arama motorları, çevrim içi tartışma ortamları vs.).				
1	2	3	4	5	17. İnternet ile çalışmak oldukça karışıktır, yani neler olduğunu anlamak oldukça zordur.				
1	2	3	4	5	18. İnterneti kullanmayı öğrenmek çok zaman alıcı bir süreçtir.				
1	2	3	4	5	19. İnternet kullanmamın, çalışmalarındaki başarımda herhangi bir etkisi olmayacaktır.				
1	2	3	4	5	20. İnterneti kullanmam okul çalışmalarım için gereken zamanı azaltır.				
1	2	3	4	5	21. İnterneti kullanmam okul çalışmalarımın kalitesini arttıracaktır.				
1	2	3	4	5	22. İnterneti kullanmam okul performansımın arttıracaktır.				
1	2	3	4	5	23. İnternet kullanımı sayesinde, harcadığım zamana göre daha fazla ürün ortaya koyabilirim.				
1	2	3	4	5	24. Tüm çalışmalarım düşünüldüğünde internet kullanımı öğrenmemi geliştirmekte yardımcı olur.				
1	2	3	4	5	25. İnternet daha önce görmediğim konuları keşfetmemde bana yardımcı olur.				
1	2	3	4	5	26. İnternet içerdiği çoklu ortam kapasitesinden dolayı etkili bir öğrenme aracıdır.				
1	2	3	4	5	27. İnternetteki tartışma grupları beni yeni ve yaratıcı fikirler üretmeye teşvik eder.				
1	2	3	4	5	28. İnternet öğretim elemanlarının programlarını, işlerini ve projelerini daha kolay yapmasına yardımcı olur.				
1	2	3	4	5	29. İnternet kullanımı beni internet teknolojilerinde uzman olmaya zorluyor.				
1	2	3	4	5	30. İnternet kullanımı, işbirliğine dayalı öğrenmelerimde sözel iletişim becerilerimi geliştirebilir.				

					1 Kesinlikle Katılmıyor um	2 Katılmıyor um	3 Kararsız ım	4 Katılıyor m	5 Kesinlikle Katılıyor m
1	2	3	4	5	31. İnternet kullanımı, işbirliğine dayalı öğrenmelerimde kişilerarası (interpersonal) becerilerimi geliştirebilir.				
1	2	3	4	5	32. İnternetin sahip olduğu uygulamalar, örneğin elektronik posta, dünyanın diğer coğrafyalarında bulunan öğrenciler ile iletişim kurmamı sağlayabilir.				
1	2	3	4	5	33. İnternet uzaktan eğitim için düşük maliyette bir ortam sağlar.				
1	2	3	4	5	34. İnternet çalışma alanım ile gerçek iş dünyası arasında yararlı ilişkiler kurmama yardımcı olabilir.				
1	2	3	4	5	35. İnternet bana iş dünyasında meydana gelen olayları takip ederek iş tecrübesi kazanma fırsatı sunar.				
1	2	3	4	5	36. İnternet kullanımı tercih edilebilecek iş olanaklarını arttıracaktır.				
1	2	3	4	5	37. İnternet kullanımı çalışabileceğim alanlarla ilgili çeşitliliği arttıracaktır.				
1	2	3	4	5	38. İnternet kullanımı, bana daha anlamlı gelen çalışma olanakları sunacaktır.				
1	2	3	4	5	39. İnternet kullanımı, iş değiştirmelerde esnekliği arttıracaktır.				
1	2	3	4	5	40. Genel olarak internet kullanımı bana sahip olduğum iş olanaklarında ve iş performansında yardımcı olacaktır.				
1	2	3	4	5	41. İnternet kullanım becerilerim iş bulmamda bana yardımcı olacaktır.				
1	2	3	4	5	42. İş bulma konusunda sahip olduğum internet kullanım becerilerim bir avantaj oluşturacaktır.				

APPENDIX B: Factors and Statistics

Factor No / Name	Item No	Eigenvalue	N	M	SD	
1 : The benefits of the Internet on out-of-school activities	40	,782	111	4,24	0,70	
	39	,713	110	4,00	0,83	
	36	,694	111	4,33	0,64	
	41	,663	111	4,11	0,80	
	5	,636	111	4,42	0,76	
	38	,630	111	4,31	0,74	
	42	,608	111	4,29	0,79	
	35	,591	111	4,22	0,73	
	37	,557	111	4,38	0,63	
	34	,468	111	4,32	0,62	
	3	,448	111	4,47	0,85	
	4	,443	110	4,04	1,04	
	2: The benefits of the Internet on school learning	21	,755	110	4,28	0,69
		22	,671	108	4,15	0,84
24		,637	110	4,26	0,70	
25		,622	110	4,56	0,62	
26		,600	110	4,40	0,79	
32		,580	111	4,52	0,75	
19		,564	110	4,13	1,04	
17		,512	110	3,69	1,19	
28		,473	109	4,34	0,66	
23		,469	110	4,06	1,00	
33		,436	111	4,37	0,80	
3: The use of the Internet	13	,844	110	4,00	1,33	
	14	,827	108	4,06	1,30	
	16	,714	110	4,61	0,81	
	2	,678	111	4,27	0,77	
	15	,620	110	4,69	0,50	
	9	,573	110	3,98	1,19	
	8	,560	110	3,64	1,12	
4: The benefits of the Internet personal development	1	,529	111	4,26	1,04	
	31	,801	111	3,54	1,13	
	30	,801	111	3,28	1,02	
	27	,505	111	3,65	1,08	
	7	,442	111	4,07	0,94	
	6	,381	111	3,87	1,04	
5: The support of university on learning the Internet	12	,766	110	3,84	1,16	
	10	,711	109	3,75	1,24	
	11	,584	110	3,12	1,51	
	18	,337	109	3,71	1,17	
	Omitted Item 20			110	3,11	1,31
Omitted Item 29			111	2,30	0,96	

CULTURE COLLABORATION AND MEDIATED COMMUNICATION: A CASE STUDY OF TURKISH AND JAPANESE' PERCEPTIONS ABOUT CROSS-CULTURAL ONLINE COLLABORATION

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ABSTRACT

This paper intended to reveal the Turkish learners' perceptions regarding online group process and development in a cross-national online collaborative learning project. The project involved bringing learners in the Kanda University of International Studies in Japan and Anadolu University of Turkey together to work collaboratively to accomplish their assignments. This study using survey and interview data revealed that Turkish learners showed great agreement with group development stages. Participant perceptions in general supported the results of Hofstede's study in which he has noted that Turkish culture has stronger uncertainty avoidance and societal norms in the country are collectivism and femininity. However participants in this study perceived low power distance conflicting with Hofstede's result. Participants also perceived high level of social presence in both CMC and videoconferencing environments. Moreover although they satisfied with the cross-cultural project, they indicated the shortage of language and internet skills as well as time limitations as problems.