STUDENT EXPERIENCE IN BLOG USE
FOR SUPPLEMENTARY PURPOSES IN COURSES

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ABSTRACT

The purpose of this study is to determine the views of students about blog use for supplementary purposes in courses. Survey research method was applied for the quantitative dimension of the study, and the semi-structured interview technique was used for the qualitative dimension. Regarding the quantitative dimension of the study, the participants were 68 undergraduates at a university in Turkey; as for the qualitative dimension, the participants were nine students from the same group. The research results revealed that the students' interest in courses, the duration of their preparation for exams, and their socialization did not differ with respect to the variables such as their gender and the availability of the Internet connection. On the other hand, the results demonstrated that there was a significant difference in favour of female students in terms of the variable of achievement. Also, in the study, it was revealed that the students who had frequently followed the course blog and their personal blogs had higher levels of achievement and interest in the course.

Keywords: blog, blog use, higher education, ICT

INTRODUCTION

Rapid developments in information and communication technologies (ICT) in the 21st century have influenced many areas of our lives, such as education and communication. The use of ICTs in the teaching-learning processes has brought about a student-centered understanding. Developments in ICT provide both students and teachers with important opportunities to support the learning process and to establish social interaction in student-centered learning environments (Kuzu 2007). One of these developments is social software which allows both teachers and students to establish virtual learning societies, and this supports social processes in learning, enriches interaction and could be applied for learning purposes (Cuhadar 2008; Wang and Hsua 2008). One of the current applications of social software could be said to be blogs. Blogs, established through the combination of Web and log, are environments which enable all users to easily publish pages on the Web without having any Web-programming skills (Altun 2005). In other words, blogs are websites established by individuals who write down whatever they like without having any technical knowledge.

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Blogs are websites where the content sent regularly and shown in a reverse chronological order (text, image, audio etc.) is frequently updated and where the readers have the right to make related comments. That is, blogs are websites where written texts and comments are published in an order from the latest to the earliest; where generally, at the end of each entry, the author and submission date of that entry are given; and where depending on the permission of the publisher, readers can make comments on the written texts (Wikipedi 2009). In addition, blogs provide a flexible environment in which students can freely state and share their opinions, gain a critical view point thanks to the social interaction they establish with other individuals and can constantly receive feedback from their teachers and peers. Therefore, blogs are commonly used software (Cuhadar 2008). Godwin-Jones (2003) defines blogs as a second-generation web application that provides cooperation-based environments whose use is constantly increasing.

Blogs could be considered as a new way of personal communication since they allow a number of individuals to publish and change information and to establish new networks or relationships with the current blogs (Rosenbloom 2004). There are several factors that contribute to the frequent use of blogs such as considerable decrease in the use of paper and pencils in daily life due to the increase in electronic literacy, the increasing number of computers that have access to the Internet, the ability of blogs to provide a countless number of materials and feedback, and the availability of a flexible environment for different applications (Johnson and Kaye 2004). Blogs, with the opportunities they provide, are also used in education. According to Duber (2002), blogs can be used in education to establish links to the course-related Internet pages, to carry out cooperation-based studies, to keep records of all the written texts with respect to their submission dates, and to create a course blog with the help of multimedia elements. Du and Wagner (2007) believe that blogs contribute to students' learning in a way that blogs help write learning logs and help students organize their thoughts as well as determine the areas – through self-reflection activities - in which they need to develop themselves. In addition, blogs not only allow students to make comparisons among their peers and to distinguish between what is good and what is bad but also increase students' individual responsibility and enable teachers to contact with their students rapidly and to provide feedback.

Yang (2009) aimed to examine the use of blogs as a reflective platform in the teaching process of English as a foreign language. In the study, 43 students were involved in reflective learning processes in a blog environment developed by two educators. The results of the study conducted in a qualitative research design indicated that students discussed learning theories actively in the blog environment. In addition, the reports of the students at the end of the study revealed the blog environment developed their communication and reflection skills.

In another study, Churchill (2009) designed an experimental blog-based environment in which postgraduate students were able to reach course materials and write their reflections. The data were collected via observations, the analyses of the blog activities, teacher reflections, a questionnaire, and interviews held with the students. The results showed that 54% of the students reported they would receive higher marks thanks to the use of the blog environment and that 88% stated the blog environment helped them feel themselves as an important part of their class.

Based on the results of the study, it was concluded that blogs could be an effective educational technology. It was also revealed in the study that blog-based activities useful for learning were reading others' activities, being able to make related comments, and reading the feedback provided.

In another study, Felix (2008) aimed to determine how blogs were used for communicative and educational purposes and how blogs changed educational applications. For this purpose, the researcher applied an electronic questionnaire to K-12 teachers, held virtual interviews and examined the written texts in their blogs. In the study, it was found out that blogs developed students' writing skills and were used as a new way of establishing interaction between teachers and students. Moreover, it was considered important that as a part of effective pedagogy, teachers actively participate in blogs during the process. In addition, with the help of this study, the sharers were informed about the contribution of blogs to education in terms of supporting communication in class and increasing the learning of digital-age students.

In another qualitative study conducted by Tekinarslan (2008), who examined the activities of students using blogs in learning environments, the researcher collected the research data via observations, analyses of documents, and interviews. In the study, most of the students stated that the blog environment was user-friendly and that it was an appropriate tool for publishing and sharing their studies. Furthermore, it was concluded in the study that blog applications developed students' writing skills as well as their skills in searching for information. Also, it was found as a common problem that students copied the information in online sources without paying any attention to copyrights and pasted this information in their own blogs.

Lin and Hooft (2008), in their study, examined how blogs supported learning and social interaction in blended learning environments. The analysis of the qualitative and quantitative data obtained from 28 undergraduate students revealed the importance of interaction for student satisfaction in blended learning environments. Furthermore, in the study, it was found out that blogs were effective tools for student interaction outside the class that they increased information sharing, and contributed to the development of virtual communities.

In another study conducted by Goldman, Cohen and Sheahan (2008), who investigated what effects blogs had on student learning and on student participation, 60 students were divided into six blog groups. During the application process, the students shared all their homework through blogs and received comments from their peers. According to the results of the study, while 60% of the students reported a great increase in their learning thanks to the blogs, 34% reported a little increase. Apart from these, 6% reported no increase in their learning. In addition, when writing in a blog was compared with speaking in class, it was revealed that 60% of the students stated it was easier to write in a blog; 30% of them found no difference and 10% considered writing in a blog as more difficult. In the study, it was also found out that 65% of the students believed the use of blogs would be beneficial for their future studies. In another study which investigated the influence of blogs on individual learning environments, it was found out that the blog-performances of 31 undergraduate students taking the course of Information Systems were significant predictors of learning outcomes. In addition, the study revealed that blogs act as an information-construction tool and are beneficial in social learning environments (Du and Wagner 2007).

In another study, Dickey (2004) aimed to determine the effect of blog use in a Web-based learning environment. For this purpose, the researcher used blogs for discussion purposes in online courses. Moreover, in the study, the students compared Blackboard with blogs and stated that blogs were easier to use and were faster tools. The results of the study suggested that blogs helped students avoid such feelings as social alienation and isolation in distance learning environments and provided a structure that supported interaction among students.

In addition, it was found out in the study that similar problems experienced by their friends in the blog environment helped students avoid the feeling of loneliness and that cooperation-based activities contributed to peer learning.

Williams and Jacobs (2004) conducted a study on blog use as a learning environment in higher education, and collected the data from a total of 102 students via a questionnaire. In the study, the students who did not participate in the blogs were asked to state the reasons for this. 33% of all the students stated that blogs were not worth participating, and 33% of them believed that they were not sure of the benefits of blogs for them. 66% of the students who participated in the blog application mentioned that blogs contributed to their learning, and 23% of them were undecided about this. Moreover, 77% of the students reported that blogs increased interaction among students, while 69% of the students considered blogs as a reflective learning environment. Furthermore, 57% of all the students participating in the study stated that they wanted to use blogs as a learning/evaluation tool.

Stiler and Philleo (2003), in their study, investigated use of blogs as a Web-based blog tool. At the end of the study, which required students to use blogs as a reflective application tool, it was revealed that the blog environment developed students' reflective skills. It could be stated that in literature, there is a great deal of qualitative research conducted especially on the reflective skills of students via blogs, yet there is little quantitative research which employed blog use with different variables.

In this respect, the purpose of the study is to determine the views of learners about the use of blogs for supplementary purposes. In line with this basic purpose, the present study seeks answers to the following research questions.

1) Do students' achievements, their interest in the course, the duration of their preparation for the course exams and their socialization (in-class interaction) differ with respect to

> - gender
> - the availability of access to the Internet
> - the time of registration to the course blog
> - experience in blog
> - the frequency of participation in the course blog
> - the frequency of participation in personal blogs

2) Do students' achievements, their interest in the course and the duration of their preparation for the course exams differ with respect to the average study-hours they spend for the course exams?
3) Do students' achievements, their interest in the course, and the duration of their preparation for the course exams differ with respect to the types of sources they benefit from during their use of the course blog?
4) How do students scan and use the sources that they benefit from during their use of the course blog?

METHOD

In the study, quantitative and qualitative research techniques were used together. Regarding the quantitative aspect of the study, survey model was applied, while regarding the qualitative aspect of the study, semi-structured interviews were used.

Data Collection Tools

Regarding the quantitative aspect of the study, a questionnaire for determining learners' views about the blog use; and regarding the qualitative aspect, semi-structured interview forms were run.

The questionnaire for determining learners' views about the blog use: The quantitative data of the study were collected via a questionnaire to determine the learners' views about the blog use -which was developed by the researchers.

For the development of the data-collection tool, first, an item-pool was established, and eight field experts employed in the Department of Computer and Instructional Technologies (five of whom were expert in the field of educational technologies, two of whom were expert in the field of instructional design, and one of whom was expert in the field of quantitative research) were consulted for their views about the form and content validity of the items prepared.

In line with the suggestions of the experts, the questionnaire was finalized. 34-item data collection tool was made up of four sections as demographic information, participation in the course blog, use of the course blog for supplementary purposes, and frequency of the blog use.

Semi-structured interview form: The qualitative data in the study were collected via a semi-structured interview form formed by the researchers. For this purpose, a semi-structured interview form was developed by the researchers, and for the validity of the interview form, four field experts (three of whom were expert in the field of qualitative research and one of whom was expert in the field of Computer and Instructional Technologies) were consulted.

In line with the suggestions of the experts, the interview form was finalized and made ready for application.

Participants

The participants regarding the quantitative aspect of the study were 68 students (28 female, 40 male) attending the Department of Computer and Instructional Technologies at a university in Turkey in the Fall Term of 2008-2009 academic year. Participants were undergraduates in the age range 20−25. As for the participants regarding the qualitative aspect of the study, they were nine students (five of whom were male and four of whom were female) from the same group. Maximal variation sampling method which is a purposeful sampling strategy was used to select these nine students. The researcher samples cases or individuals that differ on some characteristic or trait in maximal variation sampling (Creswell, 2005).

In this study, nine students were selected according to their achievement scores. There were three levels of achievement scores: successful, intermediate and unsuccessful. Three successful, three intermediate and three unsuccessful students were selected.

Procedure

The procedure was as follows:

1) The content of the course was taught to the students by faculty members on face-to-face basis. In addition, a course blog was used for supplementary purposes.
2) Two blog environments were designed as "Personal blog" (Figure 1) and "course blog" (Figure: 2).
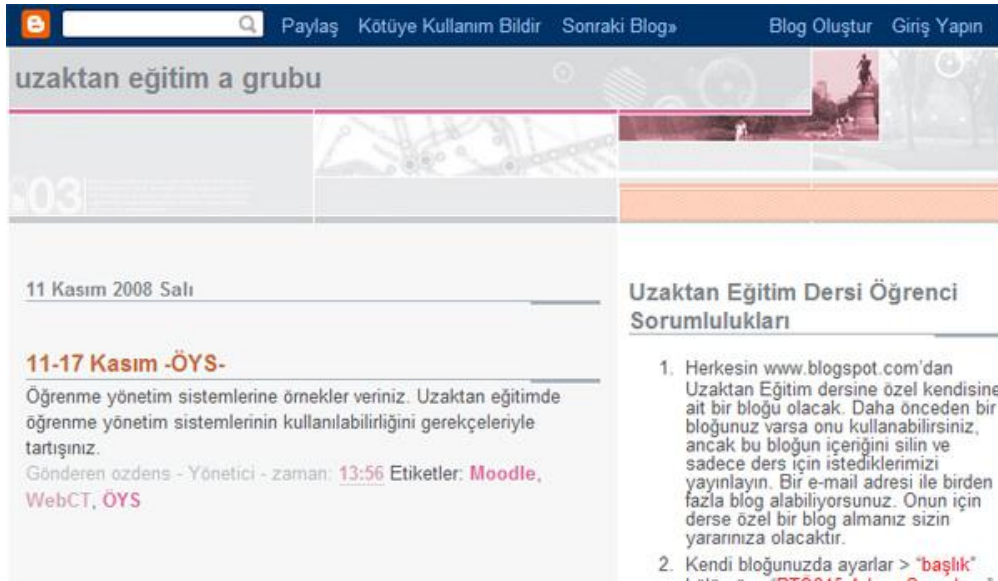
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Figure: 1
Personal blog samples

Figure: 2
Course blog

3) The students opened their own "personal blog", where they would write their reflections they structured in their minds regarding the course subjects of each week. The students were required to write the reflection of each subject of the related week until 9 p.m. the night before the course day of the week. The purpose for the personal blog use was to reinforce what was learnt through the reflections students wrote.

4) Every week, the course instructor attached a discussion question to the course blog regarding the subject of the following week. The students were asked to examine various sources while providing answers to the discussion questions and to respond to the questions by giving reference to these sources. The purpose of the use of the course blog was to have students come to the class with background knowledge about the subject of the course of the following week.

5) In order to determine the views of the students about the use of the course blog for supplementary purposes, 68 students were given the "questionnaire for determining learners' views about the blog use".

6) **At the end of the academic term, semi-structured interviews were held with nine students (five of whom were male and four of whom were female).**
7) **The quantitative data collected were analyzed through descriptive analyses; t-test and one way analysis of variance by running SPSS 15, and the qualitative data were analyzed via the inductive analysis technique.**

FINDINGS

The results of the analyses carried out to find answers to the sub-purposes of the present study are presented below in the order of the stated purposes. In order to see whether students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization differed with respect to their gender, t-test was run. The results obtained are seen in Table: 1.

Table.1
The t-test results regarding whether students' achievements,
their interest in the course, the duration of their preparation for the course exam,
and their socialization differed with respect to their gender

Variable	Group	n	$\overline{X}$	sd	t	p
Achievement	Male	36	3.35	.867	-	.014*
	Female	26	3.88	.733	2.530	
Interest	Male	37	3.29	.920	-	.111
	Female	26	3.64	.710	1.617	
Duration	Male	37	3.15	1.137	-	.144
	Female	26	3.57	1.089	1.481	
Socialization	Male	37	2.92	1.149	-.913	.365
	Female	26	3.17	.910		

*p<.05

As shown in Table 1, when all the variables are taken into consideration, it is seen that although the average values for female students were higher than those for male students, there was a significant difference only for the variable of achievement.

Table: 2
The t-test results regarding whether students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization differed with respect to the availability of their access to the Internet

Variable	Group	n	$\overline{X}$	sd	t	p
Achievement	Internet available	40	3.61	.891	.523	.603
	Internet unavailable	22	3.50	.782		
Interest	Internet available	41	3.39	.844	-.546	.587
	Internet unavailable	22	3.52	.894		
Duration	Internet available	41	3.38	1.131	.544	.608
	Internet unavailable	22	3.22	1.142		
Socialization	Internet available	41	2.97	1.069	-.536	.597
	Internet unavailable	22	3.12	1.051		

In other words, female students ($\overline{X}$=3.88) were more successful in the course than male students ($\overline{X}$=3.35). order to determine whether students' achievements, their

interest in the course, the duration of their preparation for the course exam, and their socialization differed with respect to the availability of their access to the Internet, t-test was applied. The results obtained are demonstrated in Table 2. As can be seen in Table: 2, regarding the variables in the question, there was no significant difference with respect to the availability of students' access to the Internet (p> .05). In other words, students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization did not differ with respect to whether they had Internet connection or not. For the purpose of determining whether there were significant differences between the time of students' registration to the course blog and their achievements, their interest in the course, the duration of their preparation for the course exam and their socialization, analysis of variance was applied.

In the case of any difference that might occur as a result of the analysis, Tukey test was run to see which group or groups caused the difference. The results obtained are seen in Table: 3.

Table: 3
The variance analysis results regarding whether students' achievements,
their interest in the course, the duration of their preparation for the course exam,
and their socialization differed with respect to the time of their registration
to the course blog

Variable	Source of Variance	Sum of Squares	df	Mean Square	F	p	Difference**
Achievement	Between groups	61.984	3	20.661	32.004	.000*	1-4 2-4 3-4
	Within groups	41.318	64	.646			
	Total	103.302	67				
Interest	Between groups	58.331	3	19.444	29.552	.000*	1-4 2-4 3-4
	Within groups	42.108	64	.658			
	Total	100.439	67				
Duration	Between groups	53.331	3	17.777	14.781	.000*	1-4 2-4 3-4
	Within groups	76.974	64	1.203			
	Total	130.306	67				
Socialization	Between groups	48.474	3	16.158	16.348	.000*	1-4 2-4 3-4
	Within groups	63.256	64	.988			
	Total	111.731	67				

*p<.05
**1: No participation in the course blog, 2: Participation after the first warning of the course director, 3: Participation after the warnings of the course director, 4: Participation after learning that it would influence assessment

The results of the analyses revealed that students' achievements ($F_{(3,64)}=32.004$, p<.05), their interest in the course ($F_{(3,64)}=29.552$, p<.05), the duration of their

preparation for the course exam (F(3,64)=14.781, p<.05), and their socialization (F(3,64)=16.348, p<.05) differed significantly with respect to the time of their registration to the course. The difference regarding students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization was caused by the students who never participated in the course blog and by those who participated after the first warning of the course director, those who participated after the warnings of the course director and those who participated after learning that it would influence assessment. In order to see whether students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization differed significantly with respect to how frequently the students used the blog environment, variance analysis was applied. The results obtained are shown in Table: 4.

Table: 4
The variance analysis results regarding whether students' achievements,
their interest in the course, the duration of their preparation for the course exam,
and their socialization differed with respect to their experience in the blog environment

Variable	Source of Variance	Sum of Squares	df	Mean Squares	F	p
Achievement	Between groups	1.832	2	.916	1.301	.280
	Within groups	42.246	60	.704		
	Total	44.077	62			
Interest	Between groups	4.067	2	2.034	2.941	.060
	Within groups	41.497	60	.692		
	Total	45.564	62			
Duration	Between groups	3.223	2	1.611	1.276	.287
	Within groups	75.775	60	1.263		
	Total	78.998	62			
Socialization	Between groups	2.665	2	1.333	1.201	.308
	Within groups	66.599	60	1.110		
	Total	69.264	62			

The results of the analysis revealed that students' achievements (F(2,60)=1.301, p>.05), their interest in the course (F(2,60)=2,941, p>.05), the duration of their preparation for the course exam (F(2,60)=1.276, p>.05) and their socialization (F(2,60)=1.201, p>.05) did not differ significantly with respect to how frequently they used the blog environment. In other words, there was no relationship between the frequency of students' blog use and their achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization.During the semi-structured interviews, regarding the influence of the course blog use for supplementary purposes on students' interest in the course, six students reported that the use of the course blog for supplementary purposes increased their interest in the course and three students stated that the blog use did not increase their interest in the course. Deniz, one of the students who reported that the use of the course blog for supplementary purposes increased their interest in the course, stated that:

> "*It considerably influenced my interest in the course because normally, I would have spent less time studying for the course if it hadn't been for the blog. But with the use of the blog, the subjects of that week were reinforced, and also it became easier to remember what we learnt.*"

Another student, Ali, was of a similar opinion that "*...it increased my interest, my interest in the course, not only because we shared information and reached what we were searching for but also the environment was more enjoyable than typical face-to-face course.*"

Ahmet, one of the teacher candidates who reported that the use of the course blog for supplementary purposes did not increase their interest in the course stated that:

> "*well, normally, I'm not much interested in the course, so it did not influence me at all.*" Similarly, another teacher candidate, Fatma, reported that "*Negative...It influenced badly... In fact, at the beginning, I was quite interested in the course, and I liked it.*"

In this respect, it could be stated that the frequency of students' participation in the course influenced their interest in the course in different ways.Regarding the influence of the blog environment on the duration of students' preparation for the course exam, six students reported that the blog use decreased the duration of their preparation for the exam, while three students stated that it did not have an effect on the duration of their preparation for the exam. Deniz, one of the students who reported that the use of the course blog for supplementary purposes decreased the duration of their preparation for the course exam, stated that

> "*...if it weren't for the blog, I would study for the exam just one or two hours before the exam, and, well, this is a very common situation among students. And also, I would search the sources. And this would be all I would do, but more time, well, more, well, blogs, because I made comments on the subject every week when I entered the blog, and even though I didn't study before the exam week, and because I entered the blog and made comments for a long time, I didn't need to study for the exam before the exam week.*" Another student, Fatih, was of the opinion that "*I can say it decreased the time for studying for the exams. And because I entered the blog before the exam week and I learnt the subjects before the exam, I didn't spend much time before the exams.*"

On the other hand, Ahmet, one of the students who reported that the use of the course blog for supplementary purposes did not influence the duration of their preparation for the course exams stated that

> "*Because I didn't use the blog much, well and because I generally don't study for exams, I didn't see any effects of the blog.*" Fatma, another student, stated that "*well, I normally study for the exams revising my own notes. I didn't look at anything from the blog ... Therefore, it didn't affect the duration of my preparation for the exams.*"

In this respect, it could be stated that the duration of preparation for the course exam was shorter for the students who regularly used the course blog and that the blog did not influence the duration of preparation for the course exam for the students who did not follow the blog or participate in the activities in the blog environment. Regarding the influence of the blog environment on students' socialization, five students reported that the course blog used for supplementary purposes contributed to their socialization, while four students stated that it did not. Sami, who believed that the course blog used for supplementary purposes contributed to their socialization, stated that:

> "*it increased my communication and interaction with my friends.*" Another student, Fatih, reported that "*thanks to the blog, I was able to learn their various characteristics, their social sides, and their thoughts about various subjects. I took part in enjoyable discussions with them.*"

Contrary to these, Leman, a student who reported that the course blog used for supplementary purposes did not contribute to their socialization, stated that

"there was no environment for communication in the blog; It was rather an environment for tasks to be completed." **Fatma, another student, was of the opinion that** *"...the blog didn't have any effects on our socialization in any way ... maybe, I could say it is my because of my irresponsibility. I myself didn't want to enter the blog and I wasn't interested in the blog, either."*

In this respect, it could be stated that depending on certain reasons that result from the course blog used for supplementary purposes or from the characteristics of the students, the blog environment did not have any effects on their socialization.

Table: 5
The variance analysis results regarding whether students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization differed with respect to the frequency of their participation in the course blog

Variable	Source of the Variance	Some of Squares	df	Mean Squares	F	p	Difference **
Achievement	Between groups	13.927	3	4.642	9.084	.000*	1-2
	Within groups	30.150	59	.511			1-3
	Total	44.077	62				1-4
Interest	Between groups	9.608	3	3.203	5.255	.003*	1-2
	Within groups	35.956	59	.609			1-4
	Total	45.564	62				
Duration	Between groups	7.092	3	2.364	1.940	.133	
	Within groups	71.906	59	1.219			-
	Total	78.998	62				
Socialization	Between groups	7.799	3	2.600	2.495	.069	
	Within groups	61.465	59	1.042			-
	Total	69.264	62				

*p<.05
**1: Participation in the course blog once a week, 2: Participation in the course blog two or three days a week, 3: Participation in the course blog four or five days a week, 4: Participation in the course blog six or seven days a week

On the other hand, it could also be stated that the blog environment allowed students to know about different characteristics of their friends and increased their interaction and thus contributed to their socialization. In order to see whether there were any significant differences between the frequency of students' participation in the course blog and their achievements, their interest in the course, the duration of their preparation for the course exam and their socialization, variance analysis was run. In the case of any difference that might occur as a result of the analysis, Tukey test was applied to see between which groups the difference occurred. The results obtained are presented in Table: 5. The results of the analysis revealed a significant difference between the frequency of students' participation in the course blog and their achievements (F(3,59)=9.084, p<.05) and their interest in the course (F(3,59)=5,255, p<.05). However, as a result of the analysis, no significant difference was found between the frequency of students' participation in the course blog and the duration of their preparation for the course exam (F(3,59)=1.940, p>.05) and their socialization (F(3,59)=2.495, p>.05).

The difference found between the frequency of students' participation in the course blog and their achievements was due to the students who participated in the course blog once a week, those who participated in the course blog two or three days a week, those who participated in the course blog four or five days a week and those who participated in the course blog six or seven days a week. In addition, the difference found between the frequency of students' participation in the course blog and their interest in the course was due to the students who participated in the course blog once a week, those who participated in the course blog two or three days a week, and those who participated in the course blog six or seven days a week. In order to see whether there was a difference between the frequency of students' participation in the course blog and their achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization, variance analysis was applied. In the case of any difference that might occur as a result of the analysis, Tukey test was run to see between which groups the difference came out. The results obtained are presented in Table: 6.

Table: 6
The variance analysis results regarding whether students' achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization differed with respect to the frequency of their participation in their personal blogs

Variable	Source of Variance	Sum of Squares	df	Mean Squares	F	p	Difference**
Achievement	Between groups	16.410	3	5.470	11.664	.000 *	1-2 1-3
	Within groups	27.668	59	.469			
	Total	44.077	62				
Interest	Between groups	15.425	3	5.142	10.065	.000 *	1-2 1-3
	Within groups	30.140	59	.511			
	Total	45.564	62				
Duration	Between groups	14.495	3	4.832	4.419	.007 *	1-2
	Within groups	64.504	59	1.093			
	Total	78.998	62				
Socialization	Between groups	15.099	3	5.033	5.482	.002 *	1-2
	Within groups	54.165	59	.918			
	Total	69.264	62				

*p<.05
**1: Participation in the personal blog once a week, 2: Participation in the personal blog two or three days a week, 3: Participation in the personal blog four or five days a week, 4: Participation in the personal blog six or seven days a week.

The results of the analysis revealed a significant difference between the frequency of students' participation in their personal blogs and their achievements (F(3,59)=11.664, p<.05), their interest in the course (F(3,59)=10.065, p<.05), the duration of their preparation for the course exam (F(3,59)=4.419, p<.05) and their socialization (F(3,59)=5.482, p<.05). The difference between the frequency of students' participation in their personal blogs and their achievements and their interest in the course was due to the students who participated in their personal blog once a

week, those who participated in their personal blog two or three days a week, and those who participated in their personal blog four or five days a week. Moreover, the difference between the frequency of students' participation in their personal blogs and the duration of their preparation for the course exam and their socialization occurred due to the students who participated in their personal blogs once a week and those who participated in their personal blogs two or three days a week. For the purpose of seeing whether students' achievements and their interest in the course differed significantly with respect to the average study-hours they spent for the course exams, variance analysis was conducted. The results of the analysis can be seen in Table: 7.

Table: 7
The variance analysis results regarding whether students' achievements and their interest in the course differed with respect to the average study-time they spent for the course exam

Variance	Source of Variance	Sum of Squares	df	Mean Squares	F	p
Achievement	Between groups	3.681	3	1.227	1.792	.159
	Within groups	40.397	59	.685		
	Total	44.077	62			
Interest	Between groups	2.478	3	.826	1.131	.344
	Within groups	43.086	59	.730		
	Total	45.564	62			

As shown in Table: 7, the results of the analysis revealed that there was no significant difference between the students' average study-time for the course exam and their achievements (F(3,59)=1.792, p>.05) and their interest in the course (F(3,59)=1,131, p>.05).In order to determine whether students' achievements, their interest in the course and the duration of their preparation for the course exam differed significantly with respect to the types of sources they benefited from during their use of the course blog, variance analysis was applied. The results are seen in Table: 8.

Table: 8
The variance analysis results regarding whether students' achievement, their interest in the course and the duration of their preparation for the course exam differed with respect to the types of sources they benefited from during their use of the course blog.

Variance	Source of Variance	Sum of Squares	df	Mean Squares	F	p
Achievement	Between groups	3.681	3	1.227	1.792	.159
	Within groups	40.397	59	.685		
	Total	44.077	62			
Interest	Between groups	2.478	3	.826	1.131	.344
	Within groups	43.086	59	.730		
	Total	45.564	62			
Duration	Between groups	1.151	3	.384	.291	.832
	Within groups	77.847	59	1.319		
	Total	78.998	62			

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As seen in Table 8, the results of the analysis revealed that students' achievements ($F_{(3,59)}=1.792$, $p>.05$), their interest in the course ($F_{(3,59)}=1,131$, $p>.05$) and the duration of their preparation for the course exam ($F_{(3,59)}=.291$, $p>.05$) did not differ significantly with respect to the type of sources they benefited from during their use of the course blog.

Table: 9.
Frequency and percentages regarding how frequently the students scanned and benefited from the sources during their use of the course blog

	Frequency	Percentage (%)
For the texts that I would write on the course blog,		
a. I scanned the Internet sources	59	86.8
b. I scanned the printed sources	24	35.3
c. I didn't do any scanning	4	5.9
d. I wrote what I understood from the sources	55	80.9
e. I wrote down the sources as a whole	10	14.7
f. I wrote without scanning the sources	2	2.9

Note: The students marked more than one choice. (n=68)

The texts the students wrote on the course blog revealed that the students scanned the Internet sources (86.8%) more than the printed sources (35.3%). In other words, it was concluded that the students preferred the Internet sources more and did not scan the printed sources in the library at all. A similar conclusion was drawn from the semi-structured interviews as well. Among all the students participating in the present study, seven of them stated that they primarily searched the Internet sources, while two students reported that they scanned the printed sources. Sami, one of the students, remarked that.

> "*we generally scanned the sources via the Internet as well as the sources in the library.*"

In addition, Ali, another student stated that:

> "*I used the Internet more. Of course, we sometimes searched through the books in the library. ...*"

Although, among all the students, 80.9% of them reported "I wrote what I understood from the sources (on the course blog)", it was seen when the course blog was examined that students did not give references to the sources that they benefited from during their use of the course blog and directly used the copy-paste method without paraphrasing. In addition, the fact that 14.7% of the students wrote down the sources as a whole for the texts they wrote on the course blog could be an indicator of their violation of the ethical rules.

DISCUSSION

The present study, which aimed to determine learners' views about the usage of the course blog use for supplementary purposes, revealed that students' interest in the course, the duration of their preparation for the course exam and their socialization did not differ with respect to their gender and to the availability of their access to the Internet. On the other hand, the results of the study also indicated that in terms of the variable of achievement, there was a significant difference in favour of female students.

In addition, regarding students' achievements, their interest in the course, the duration of their preparation for the course exam and their socialization, there was a significant difference to the disadvantage of especially the students who never participated in the course blog. Similarly, a significant difference occurred between the frequency of students' participation in the course blog and their achievements and interest in the course. Both of these results could be said to be the expected results because participation in the course blog is one of the factors that influence the assessment of students' achievements.

The findings of the study conducted by Churchill (2009) revealed that 54% of the students stated they received higher marks as they used the blog environment, which supports the related finding of the present study.

In addition, the findings of this study are also similar to the results of the study carried out by Goldman, Cohen and Sheahan (2008) in that 60% of the students in their study reported that blogs considerably increased their learning. Similarly, the conclusions of Williams and Jacobs (2004) showed that 66% of the students believed blogs contributed to their learning. It could be stated that students who never participate in the blog or those who rarely participate in the blog are not much interested in the course and that they thus have a low level of achievement. Parallel to this finding of the current study, the students' performances in blogs were found to be a significant predictor of learning outcomes in the study carried out by Du and Wagner (2007). Depending on these findings, it could be stated that in order to determine the effects of the use of the course blog for supplementary purposes on students' achievement, experimental studies should be conducted in different courses. The fact that there was no difference between the frequency of students' participation in the course blog and their socialization is different from the findings of the study administered by Dickey (2004) since it revealed blogs prevent students' feelings of isolation and social alienation in distance learning environments and provide a structure supporting the interactions among them.

The current result is not in line with the result of Williams and Jacobs (2004) who showed that 77% of the students stated blogs increased their interaction with each other.

In addition, this finding of the present study differs from the findings of other studies reported in related literature. For example, students in Yang's study (2009) stated that blogs developed their communication skills in the blog environment. It was also revealed that 88% of students felt themselves as an important part of their own class thanks to the blog environment (Churchill 2009). Different from the current results again, Felix (2008) proved that blogs are used as a new way of interaction with students. The last but not least, Lin and Hooft (2008) showed blogs were effective tools for interaction with students outside the classroom. Although students' achievements, their interest in the course, the duration of their preparation for the course exam and their socialization did not differ with respect to their frequency of participation in the blog environment, during the semi-structured interviews, most of the students reported that the use of the course blog for supplementary purposes increased their interest in the course.

This finding of the present study could be said to be similar to the finding of the study conducted by Tekinarslan (2008) who emphasizes blogs encourage students by giving them the responsibility for performing better tasks. Thus, the students participating in the present study were given individual responsibilities regarding the use of the blog environment.

In the study, a significant difference was found between the frequency of students' participation in their personal blogs and their achievements, their interest in the course, the duration of their preparation for the course exam, and their socialization. The difference found between the frequency of students' participation in their personal blogs and their achievements and interest in the course results from the students who participated in their personal blogs once a week and from those who participated in their blogs more frequently. Thus, it could be stated that the students who participated in their personal blogs once a week did so in order to write down their reflections on their personal blogs.

On the other hand, the students who participated in their personal blogs more than once a week could be said to participate both to write down their own reflections and to read the reflections written by other students. Since especially the reflections written by the students and posted on their personal blogs allow them to revise the subjects in the course and reinforce their related knowledge, their participation in their personal blogs might have increased their achievements and interest in the course and decreased the duration of their preparation for the course exam.

In addition, instead of reporting the present situation on their personal blogs as it was, the students wrote down the reflections by structuring them in their minds. In this way, the students might have developed their reflective skills as well as their critical-thinking skills, which are among high-level thinking skills. It could also be stated that such a process influenced students' achievements in a positive way.

This finding, which emphasizes blog environment develops reflective critical thinking skills is similar to the findings of some studies in literature (Chretien, Goldman and Faselis 2008; Stiler and Philleo 2003; Williams and Jacobs 2004).Moreover, this finding of the present study is also parallel to the finding of another study conducted by Yang (2009) who found that the blog environment develops communication and reflection skills.

In this study, the students wrote reflections on their own personal course blogs used for supplementary purposes yet did not write any reflections on each other's personal blogs. In future studies to be carried out, students could be encouraged to write comments onto the reflections on each other's personal blogs with a critical perspective. In this way, students' critical thinking skills could be developed.

In the study, there was no significant difference between students' average study-time for the course exams and their achievements and interest in the course. This result could be said to be due to the individual differences of the students and to the factors that are not considered during the process. In addition, no significant difference was found between the type of the sources that they benefited from during the use of the course blog and their achievements, their interest in the course and the duration of their preparation for the course exams. This finding could be a result of the fact that the students were not able to reach the correct and up-to-date sources, or they did not use the available sources by relating them to the subject of the course. That they used the sources as a whole without understanding the information given in the sources could be another reason as well.

In the texts that the students wrote on the course blog, it was revealed that the students scanned the Internet sources most.

What can be inferred from this is the fact that the new generation had different learner characteristics and that the sources are now available on the Internet.

The fact that most of the students were not aware of the necessity to give reference to the sources they benefited from when they wrote on the course blog and that they used the sources as a whole could indicate that they had low level of awareness of the ethical rules or even had no such awareness.

This finding of the present study is similar to the finding of the study conducted by Tekinarslan (2008), which also highlights some students plagiarize by directly using the copy-paste method without paraphrasing or referring to the sources while creating a content on the blog.

In this respect, it could be stated that courses should be given regarding ethical issues in curriculums or ethical issues could be taught in detail within the related courses.

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