AN ANALYSIS OF STUDENTS' OPINIONS ABOUT BLENDED LEARNING ENVIRONMENT

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ABSTRACT

This study examines views of students related to Blended Learning Environment (BLE). The sample group of the study consisted of 36 students enrolled in social science teacher education programme at Ahi Evran University, Education Faculty during the 2006/07 Fall Semester. This approach has been carried out both online and face to face (F2F) settings in the course "Instructional technologies and material development". The results of the study showed that the students had quite positive opinions about three subscales of the questionnaire (student-student, student-instructor interactions and course structure and learning environment). In the study, there was no significant difference between views of students related to above three subscales in respect of gender.

Keywords: Blended learning environment, face to face learning, web based learning, teacher candidates.

INTRODUCTION

The importance of information is increasing, due to this, the concept 'information' and the understanding of 'science' are changing, the technology is developing and the skills that the society expects from the individuals are changing in order to keep in step with these changes. So, it can be said that the change in education system as in each field is obligatory in order to reach contemporary civilization level balanced with rapid changes. (Alkan, 1997).

Because of the reasons of insufficiency in financial sources separated to the education with the rapid population rises; not using of existing education and instruction sources; insufficiency of the teachers, the education need of the individuals that were met before with traditional methods and environment caught new openings with the technological opportunities and there were many concepts in order to solve the problems being met. Distance education is one of the concepts that is formed in this process. (Alkan, 1997).

Blended Learning

The practice way of distance education goes from instruction with letter to the transfer of information with satellite. The studies gained speed with being used the innovations in technology field and in providing individual education and distance education field .In recent years, increase of computer usage ,developing internet technologies and fast internet connection laid the groundwork for providing an important item of distance education with internet.

It has some advantages like on-line learning; low cost; facilitative in being expert in fields needing special skill; sending information due to the needs and habits; being presented the content according to the class environment in wider time; providing learning in every time of the day; giving opportunity to improve according to their individual speed; providing to communicate.

In addition to these, it has some disadvantages like preventing the people to be social; taking no attraction of the traditional e-learning practices to the individuals ;not recognizing teachers and students each other; limitation to the communication. These problems in practice steered the education technology experts and educators towards new searches; and in this way there was a solution to combine with traditional class practices and on-line learning practices. Blended learning used as Hybrid learning is a concept that was appeared in this process. (Singh& Reed, 2001).

One of the reasons of being considered the concept 'blended learning' in a short time is practises are as old as on-line learning and it's used by many academicians in this way Young (2002) explained this situation as an old friend changing his/her name (cited by, Rasmussen, 2003). According to the view that accepts the activities and methods like excursions and observations are methods based on blended learning strategy; the first blended learning practice is the students' observations of human behavior styles in Atina market place send by Sokrates, research and dramatization in class (Hall, 2002).

Blended learning is accepted not only in education institutions but also in work and commercial environments and it's described as 'the last point in distance education (Lamb, 2001). Based on blended learning approach, learning environments solve some communication problems sourced by distance education environments; decrease time and cost in traditional class; provide to use the buildings owning to education institutions (Graham, 2006).

In blended approach, both student-student; student-teacher interaction and the advantageous sides of on-line learning are used. The aim in blended learning is to balance on-line learning with face to face learning in class. This balance can change according to each lesson and because of some lessons' characteristics, face to face learning is used more and in other lessons

online learning is used. This rate can be equal in other lesson. The important point is to plan and organize which part of lesson will be given on-line or face to face effectively in design process (Osguthorpe& Graham, 2003).

The benefits of blended learning:

No method presented alone can be ideal for education styles because, the style of learning of different people requires different education methods. Blended learning provides user to find the most appropriate learning style to education needs. Blended learning is a combination of the best class approach and the best additional education methods and the best instruction methods that are practised. (Wilson ve Smilanich, 2004).

The natural and interactive structure of the class has a positive effect in learning process. In addition to this, the support of management structure in school environment can increase the success.

The benefits of using this approach: (Wilson& Smilanich, 2004)
- Reaching education in a widen field
- Easy practise
- Effectiveness of benefit-cost
- Positive professional results
- Serving various needs
- Developed education

Reaching education in a widen field: The usage of one method in education limits education programme in some situations. Class interior education programme affects the number of participants because of time and geographical location. This education provides participation opportunity to the students that aren't in class by presenting alternatives.

Easy practice: Many institutions use blended learning styles. So, the needs are determined easily with this practice, and instruction is shaped to serve these needs. Any programme can be needed. An appropriate plan can be prepared for the that have no blended learning experience.

Effectiveness of benefit-cost: Blended learning provides the mot appropriate solution to the needs of institution. Institutions have opportunity to choose the most economical education solution.

Positive professional results: Institutions can gain remarkable results with blended learning. At the result of research made by Bersin (2004), %73,6 of the participants explain that blended learning is more effective than one method learning. Traditional class education is decreased with additional methods and journey means more time ,less expense for education.

Serving various needs: Different people learn differently to the learning theory. The researches show that some want to learn by listening; some want to read the subject and need visuality. Blended learning can present different solutions and methods to these different learning needs. Computer based blended learning give a chance to the workers in different geographies to participate into education according to their own programme.

Developed education: Blended learning can present flexible solutions for rapid information development to the workers that have disadvantage of geographic location.

Blended learning process:

Some design and practice levels are similar to many instruction techniques in blended learning programme and these are steps. For example; the needs should be analyzed well to be effective, the things that we have and that wanting to be gained should be distinguished ;and the needs should be related with professional aims. At the same time, design and practice have differences in blended learning, because what should be done is to bring the various solutions together in a good way. Each practise step is summarized below: (Wilson ve Smilanich, 2004).

1. Determine the needs
2. Determine the aims and lower aims for the programme
3. Determine blending programme
4. Determine and arrange individual education styles
5. Practise blended learning
6. Evaluate the results of the programme.

METHOD

Participants of this study were 36 pre-service teachers who enrolled in social science teacher education programme at Ahi Evran University, Faculty of Education in Kırşehir. The study was carried out in 2006-2007 fall semester in "Instructional Technologies and Material Development" course.

Data Collection Process

In this study, both quantitative and qualitative research methods were used. Data were collected through a questionnaire including open-ended questions.

The scale used in the study is an adoption of "*internet satisfaction scale*" developed by Parlak (2005). Three subscales of the scale developed by Parlak (2005) were used in this questionnaire. However, some of the items were removed and some items were added to the scale. The scale included 5 items in the first subscale; 10 items in the second subscale, and 11 items in the third one with the expert's opinions. It was totally 26 items then.
A pilot study executed in the summer school for 2 two weeks. The pilot study was carried out among 28 students. At the end of the pilot study, reliability coefficients of the scale were obtained as .81, .84, .62 and .74 for total score for student-student interaction subscale, student-instructor subscale and course structure and learning environment subscale, respectively.

The students were asked to expressed their opinions, suggestions and their difficulties encountered relating to BLE through open-ended questions. These questions were conducted 2 times in 4 weeks, second week and at the end of the application. Some of the open-ended questions were "*what do you think about the learning environment of the course?*", "*Express shortly your opinions on the implementation process*", "*Did you have any problems or difficulties during the application?*"

Procedure

The students don't have any problem when they reach the material by entering with their own user name and login and when they find the instruction material in the internet environment since they had 2 hours training to use the learning and communication tools in the material (noting, asking question to their own group, chat, dictionary etc.). In this education, they learned how they will use the material, what they will do when having a problem, how they will share their notes with the groups, how they will study and behave in web situation were all described.

This study was planned for 4 weeks. The subjects and activities were planned in a detailed way in these four weeks and students were informed from the lesson's web page. Each activity such communicating with the teacher, the group members and the discussion group, noting individually, and sharing information etc. were traced by ASP technology and saved into a data base.

During the blended learning application (BLA) process, each student studied totally four hours each week, 2 hours in the web and 2 hours in the class. Thus, each student studied eight hours in the web and eight hours in the class for the whole 4 weeks.

FINDINGS

1-The findings regarding the students' opinions about blended learning environment (BLE)

Table 1: Students' opinions about student-student interaction in blended learning environment

Survey Items	N	M	SD
1. I could interact with other students in this program	36	3,88	,97
2. I could share what I learned with other students in this program			
36		4,27	,74
3. This program enabled me to cooperate with my friends about the exchange of information			
36		3,94	1,01
4. Being interaction with other students in this prog. helped me to benefit from this program more			
36		3,75	,87
5. I had a chance to have more communication with some students thanks to this program			

36		4,00	,89
Total items score	**36**	**3,97**	**,89**

Scoring: 5 = Strongly Agree, 1 = Strongly Disagree

As seen in Table 1, students' opinions about student-student interaction in blended learning application (BLA) was found at quite high level (M=3,97). In the scale, the highest score was the second item (M=4,27) for student-student interaction. According to this finding, the students stated to agree with strongly the item "*I could share what I learned in this programme with the other students*". On the other hand, the fourth item had the lowest score (M=3,75). The participants expressed they almost agree with the item '*My interaction with the students in this application helped me to benefit from the programme so much.*' Shortly, the students stated that the student-student interaction occurred in a quite high level in BLA process. Moreover, they could share their information and documents with others, and their interaction and cooperation were stronger.

Table 2: Students' views about student-instructor interaction in blended learning environment

Survey Items	N	M	SD
6.The instructor informed me about my progress in the program	36	3,83	,94
7.The instructor encouraged me to participate in on-line discussions.			
36		3,91	,84
8.The instructor appreciated me as an individual.			
36		4,08	,73
9.I could have interaction with the instructor when I want.			
36		4,13	,68
10.The instructor answered my questions on time.			
36		3,22	,79
11.The answers of the instructor were sufficient for me.			
36		4,00	,92
12.The instructor understood my problems in distance education and helped me.			
36		3,88	,82
13.The instructor gave me feedbacks about my studies.			
36		4,02	,84
14.The instructor spent his time with me when I had a wish about my studies.			
36		3,97	,90
15.The instructor didn't undervalue to evaluate the quality of the studies when evaluating the students' studies.			
36		3,88	,85
Total items score			
36		**3,89**	**,83**

As illustrated in Table 2, the Mean of students' opinions about the interaction between students and instructor was found as 3,89. In the scale, the item 9 '*I could have interaction with instructor whenever I want during the lessons*' had the highest score (M=4,13). In addition, the students had more positive opinions than the other items about the item 8 '*the instructor appreciated me as an individual*'. However, the item 10 '*instructor's answering the questions on time*' had the lowest score (M=3,22). According to this finding, the students' views was found in undecided level as to likert scale. It can be inferred that this finding showed the instructor wasn't sensitive in answering the students' questions on time. Briefly, the students stated that the student-instructor interaction was in quite high level in BLE, they could contact with the instructor without difficulty during the course and the instructor appreciated them as an individual.

Table 3: Students' views related to the course structure and learning environment

Survey Items	N	M	SD
16.The content of the program was arranged to get learning easy.	36	4,11	,78
17.The instructor remained true to the lesson programme. 36		4,13	,68
18.Tests and homeworks about what I learned in the program were given to me except the examinations. 36		3,66	,89
19.The content of the program wasn't totally theoritical but it contained the applications. 36		4,38	,72
20.The subjects of the lessons in the program followed a logical order. 36		4,25	,77
21.The general aims of the program were stated clearly. 36		4,36	,59
22.The lessons and the discussions contained all of the aims of the program. 36		3,80	1,00
23.The subject of each lesson was stated clearly. 36		4,25	,64
24.The duties that are asked from the students were stated clearly. 36		4,08	,80
25.The tests and homeworks in the program controlled my learning and helped me to develop myself 36		4,02	,73
26:I could reach the learning activities in internet environment when and where I want. 36		4,33	,67
Total items score	**36**	**4,12**	**,82**

As seen in table 3, the Mean of students' opinions about the course structure and learning environment was found 4,12. The students stated strong agreement for the items in this subscale. As demonstrated the table, especially students' views about the items 19, 20, 21, 23 and 26 were at strongly agree level. They stated that these five items were almost carried out in the application process.

To sum up, the students found that the BLA was pretty successful and effective in respect of the course structure and learning environment.

2. Findings about the differences of the students' opinions related to BLE according to gender.

Table 4: T test results of the differences of the students' opinions about student-student interaction according to gender

Gender	N	M	SD	Df	t	P
Female	22	3,98	,56	34	,129	,898
Male	14	3,95	,54			

As seen in Table 4, according to the t test analyze; there was no significant difference between students' views in respect of gender ($t_{34}=,129$; $P>0,05$). In other words, both females and males stated to agree with the items about student-student interaction. According to this finding, it could be put forward that both female and male students had a good interaction with the others and blended learning application was quite successful in respect of ensured student-student interaction.

Table 5: T test results of the differences of the students' opinions about student-instructor interaction according to gender.

Gender	N	M	SD	Df	t	P
Female	22	3,93	,51	34	,538	,594
Male	14	3,83	,60			

As seen in table 5, there was no meaningful difference between views of students as gender (t_{34}= ,538; p>,05). In other words, although females' opinions were more positive than the males, both of them stated that they generally agreed with the items student-student interaction. Thus, it can be said that the interaction of the students with their instructors in BLA process was quite effective.

Table 6: T test results of the students' views related to the course structure and learning environment according to gender.

Gender	N	M	SD	Df	t	P
Female	22	4,18	,40	34	,816	,420
Male	14	4,04	,59			

As illustrated in table 6, no significant difference was obtained between opinions of female and male students related to the course structure and learning environment (t_{34}=,816; p>,05). Although females had higher scores about the items in this subscale than the males, both of their opinions were found at level "I agree". According to these findings, it can be asserted that the process of blended learning application was carried out successfully.

Qualitative Findings

At the end of the course, students were asked open-ended questions about the BLE. Their answers were analyzed, and then it was determined that some of the answers composed to general evaluations of the BLE. it was also found that the students' opinions consisted of student-student interaction and student-instructor interaction, the structure and environment of the course.

a) Opinions on student-student interaction:
- *"We could have a good communication and cooperative learning environment with our friends thanks to web-based learning".*
- *"We could have a chance to solve our problems in both F2F class and web environment"*
- *"We had communication sincerely with each other in web environment"*
- *"We could have effective group works and activities both F2F and in web environment"*
- *"We could ask questions to each other and make critiques in web environment"*
- *"We could have communication not only with F2F, but also with e-mail and discussion groups during the BLA"*

b. Opinions on student-instructor interaction:
- *"We could communicate with the instructor whenever we want"*
- *"The instructor gave us necessary support what we required during BLA"*
- *"The instructor guided and coached us in F2F class and web environment"*
- *"Our friends who felt shy to ask question and communicated with the instructor, participated in the BLA without any anxiety"*

On the other hand, the negative opinions of the students about student-teacher interaction are below:

- *"We couldn't have an answer on time when asking a question; so we interested in some other activities except the course in web environment"*
- *"There were occurred some misunderstood among us during the web based environment"*

c- Opinions on the course structure and learning environment:
- *"I could reach easily course materials when and where I want"*
- *"We could get some opportunities to make group works and individual works in F2F class and outside the class"*
- *We had a chance to more practices the theoretical information in F2F environment and this enabled us more permanent learning"*
- *"Course materials especially in web environment were so attractive and useful"*

On the other hand, the negative views of the students about the course structure and learning environment are below:

- *"Some of our friends had a difficulty in using the materials in web environment, since they had some problems about using computer and internet"*
- *"We couldn't carry out the BLA in a good way because of the internet disconnection and getting slower of the connection"*

DISCUSSION OF THE RESULTS

In this study, the students' opinions about the blended learning environment are considered. The results of the study showed that students have generally positive opinions about the BLE.

The result of the likert type questionnaire showed high interaction among the students in the both environment, the web and the class. Also, the result of the open-ended questions showed that the web-based environment was beneficial for sharing learning with classmates.

The results of the study also showed high interaction between the students and the instructor. According to the data from likert scale, the students received enough help, feedback and support from the instructor. According to the expressions of students to the open-ended questions they had opportunities to communicate with the instructor to ask what they didn't understand in web environment and they had sufficient answers. This result supported the findings of Akkoyunlu and Soylu (2006).

The students have positive opinions about the structure of the program and the environment. They thought that the program was so successful in the subjects 'consisting of the program's content not only theoretical information but also practices ; stating the program's general aims ; reaching the activities in internet environment when and where they want ; and following the subjects of the lessons logical row'. One of the results of the study conducted by Akkoyunlu and Soylu (2006) was that the students had an opinion that the information in web environment reinforces with F2F interaction and there was a high level learning.

According to the answers given to the open-ended questions, the students stated that they had an effective student-student interaction about the subjects sincere communication with each other ; effective cooperation and group works ; informing each other about the course and the other subjects.

The students expressed that they could communicate with the instructor when they want, the instructor gave them necessary help and support about the problems in the course and the application, the instructor guided them, however they also stated that the instructor sometimes didn't answer on time and there were some misunderstandings in web environment.

The students also had both positive and negative opinions about the course structure and learning environment. The positive opinions are summarized like that "reaching the content of the lessons when and where is wanted; having chance to work with individual and group in the application process; having opportunity to practice the theoretical information ; having permanent learning; and being materials in web environment attractive". The negative opinions are summarized like that "having difficulty in carrying out the program because of the problems in computer and internet use, having some technical problems in the application process, etc." In a similar study conducted by Akkoyunlu and Soylu (2006), students stated that some problems and shortcomings in web environment were compensated for in the F2F courses.

Another study conducted by Mahesh&İsach (2002) which they looked at learner-learner interaction and course structure. The researchers collected survey data from 139 students. The findings of this study determined that students were highly satistified overall the course. This study also demostrated that learners can be satisfied within a Blended Learning settings, if designed properly (cited by, Rasmussen, 2003).

Consequently, this study showed that blended learning can be an effective way of distance learning in terms of students' satisfaction of student-student interaction and student-instructor interaction, course structure, and learning experience.

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