STUDENTS' PERSPECTIVES OF DISTANCE EDUCATION

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Abstract
This study was carried out within the scope of the Basic Information Technologies Use (BITU) course given to formal education students in classroom and distance education environment. The aim of the study was to determine the perspectives of students regarding the course and distance education environment. Case study, which is one of the qualitative research methods was used in this research. The sample, which was a group of 303 students, contained 273 freshmen from the Faculty of Agriculture (FA), the Faculty of Forestry (FF), the Faculty of Fisheries (FoF), and 30 students from various associate degree programs, who repeated the course. Data were collected through the interview forms. During the analysis process, "data reduction", "data display", "conclusion drawing/verification" steps were carried out. The study revealed that the students generally found the course necessary, and that distance education was considered to be positive mostly due to the location independence, and negative mostly due to the internet connection problems and lack of communication. While more than half of the distance education students thought that they learned the subject efficiently, the majority of them preferred taking the course in the formal education environment. The study revealed that the rate of attendance and watching recorded lecture videos was not as high as expected. From the findings of this study, it can be suggested that arrangements be made to increase the level of communication in the distance education environment, and that students be encouraged to do more hands-on activities.

Keywords: students' perspective; distance education; formal student; Basic Information Technologies Use; distance education environment

Introduction

Distance education has shown its significance once again with the increasing number of studies in this field in recent years. Thanks to hardware and software innovations, this extremely important system has become more accessible and affordable, as well as being easier to use. Therefore, it is considered that distance education has become the mainstream (Simonson et al., 2019). According to a report by Allen and Seaman (2003) the rapidly growing distance education system was positively welcomed by instructors and administrators. Subsequent reports from the same researchers suggest that distance education is a component of higher education seen as a normal activity (I. Allen & Seaman, 2004). Other reports prepared by these authors in different years indicate the rapid progress and acceptance of distance education (Allen & Seaman, 2007; I. E. Allen & Seaman, 2017)). While distance education is growing extremely rapidly, it can be argued that that there are two different approaches to distance education by students (Simonson et al., 2019). In one of these approaches, students, instead of distance education, prefer the classroom environment, where extra-curricular communication can be provided. The other approach is to increase the opportunities for distance education and even switch completely to the distance education system (Picciano & Seaman, 2007). Students' opinions vary, because the rapid development in distance education or internet access does not guarantee quality education and student satisfaction (Swan, 2001). Therefore, the opinions of the students who are the main users of the environment can be determined, and new arrangements can be made if necessary.

In terms of distance education environment, there are various studies in which students' views have been evaluated. In the study conducted by Northrup (2002) with 52 graduate students taking an online course, flexibility and convenience were expressed as the two factors that had a positive effect on choosing the environment. Northrup (2002) also reported that it is extremely important for students to organize their own learning and to receive timely feedback from the instructor. In a qualitative study with graduate students who took a web-based distance education course, Hara and Kling (2000) determined that the students were uncomfortable mostly with communication and technical problems. In the study with 285 participants who attended in two different distance education programs: "Management Science" and "Education", Tricker et al. (2001) determined three reasons for students' participation in the course, which were "course content", "personal development", and "professional development". One can see that satisfaction of the students from the course was expressed in different ways in two different sections of the study, and yet both groups were satisfied with the flexible study opportunity. In addition, some of the students in the study emphasized to the instructors that they were satisfied about the access. Among the student expectations were the high quality of the course materials, feedback and communication. In his study, Young (2006) investigated students' views of an effective distance education in higher education and grouped twenty-five items in the following seven items: adapting to student needs, providing meaningful examples, motivating students to do their best, facilitating the course effectively, delivering a valuable course,

communicating effectively and showing concern for student learning. There are studies in which students' views were determined within the scope of different courses given in distance education environment in associate and undergraduate degree programs such as Turkish Language, Internet Programming, The Principles of Atatürk and the History of Turkish Revolution and common compulsory courses (Akbaba et al., 2016; Kan & Fidan, 2016; Tuncer & Bahadır, 2017). Fincham (2017) investigated the views of students who had successfully completed their postgraduate education in the Full Distance Learning environment. It was concluded that the participants were to become successful in self-regulation, self-motivation and organization in order to be successful in this environment. Thomson (2010) conducted a study with teachers and students as regards how good or appropriate distance education is for gifted students. It was found out that distance education environment is an environment that can provide individualized and differentiated learning opportunities when compared to the classroom environment. The study revealed that students can learn at their own pace, control the learning process better, and participate in self-directed and independent learning in this environment. Limniou and Smith (2010) aimed to get an insight into how virtual learning environment was assessed by lecturers and students in engineering education, and what their expectations were. On the other hand, Khoo et al. (2010), conducted a study with lecturers and students in an attempt to determine the necessities for efficient online environment. Their study revealed that the pedagogical, managerial, social and technological fields associated with the instructor's roles are of vital importance. Leonard & Guha (2001) mentioned in their study what teachers ought to do in distance education, which argued that students usually want to attend online courses, but they may not have the opportunity to do so. According to their study, distance education teachers are to address the negative perspectives of students that distance education is not efficient.

As is seen, there are a variety of studies on students' views of distance education. Developing technologies have brought student-oriented studies in distance education (Simonson et al., 2019). This study aimed to determine the perspectives of formal education students with respect to distance education. For this purpose, we determined, in this study, the views of two different groups of formal education students about Basic Information Technologies Use (BITU) course which they took in distance education environment and in formal education environment. Marsh (2001) stated that the assessment about education made by students is valid and reliable, and that it is very useful in terms of arranging teaching practices. In terms of addressing the arrangements that can be made in the distance education environment, it is extremely important to determine the perspectives of students in the study who are the main users of the system. It is considered that this study will contribute to determining students' perspectives and new regulations that academic staff can apply.

Method

Research Pattern

In this study, a case study pattern, which is one of the qualitative research methods, was used to determine the views of formal education students as regards the course and distance education environment who took BITU course in two separate environments. This pattern is defined as an in-depth analysis of a given situation or event for the assessment of it in a certain period of time through data collection tools such as interviews and observations (Creswell, 2007). In the case study, an event or phenomenon is analyzed naturally by focusing on how and why questions (Yin, 1984).

Working group

The research included a total of 303 students studying at Faculty of Agriculture (FA, n = 172), Faculty of Forestry (FF, n = 94), and Faculty of Fisheries (FoF, n = 7) in 2019-2020 Fall Semester. 30 participants, who repeated the course, were enrolled in different associate degree programs (ADP, gastronomy and culinary arts, marketing, public relations, accounting). 94 students at the Faculty of Forestry took the course in a computer lab in a formal education environment. The rest of the students completed the course in distance education environment. 61% of the students were female and 39% of them were male. The students ranged between 19 and 22 years of age.

Data Collection Tools

A six question semi-structured interview form prepared by the researcher was used in order to collect data. After the interview form was prepared, the opinions of 3 experts in the field of distance education were received and the form was finalized.

Data Analysis

At the end of the course, which lasted for fourteen weeks, the students who volunteered were asked to fill out the semi-structured interview forms to determine their views. Attention was devoted not to write students' names in the forms. In the research, we conducted qualitative data analysis process, which consists of the basic steps "data reduction", "data display", "conclusion drawing/verification" that were identified by Miles and Huberman (1994).

The researcher first examined all the data and created codings. Afterwards, categories and subcategories were established for the codes. By reviewing the data, codes and categories were arranged, and thematic codes were generated using percentage and frequency values. In order to promote the reliability of the study, another researcher was made to create the codes (Miles & Huberman, 1994) and the agreement percentage was calculated 85%. After discussing the codes which were different, the codes took their final form.

Findings

The perspectives of the students at the end of the BITU course which they took in the distance and formal education environments are detailed in this section. Students' views regarding the course are shown in Table 1.

Table 1: Students' views on BITU course

Category	Sub Category	Code	Department/Type of Environment			
			de		fe	
			n	f	n	f
Necessary	Application	Use in business life	57	23,17	32	29,09
		Use in daily life	45	18,29	41	37,27
		Fast / easy application	21	8,54	7	6,36
	Benefit	Required to be computer literate	67	27,24	11	10,00
		Self improvement	37	15,04	11	10,00
	Awareness	Realizing not knowing	5	2,03	4	3,64
Unnecessary	Content	Subject outside the field of study	6	2,44	2	1,82
		Known topic	3	1,22	-	0,00
		Too much information	3	1,22	1	0,91
		Subject to be learnt individually	2	0,81	1	0,91

Both formal and distance education students evaluated the course they took in two categories: "necessary" and "unnecessary". The category of "necessary" contained three sub-categories: "application", "benefit" and "awareness". However, the category of "unnecessary" involved only one sub-category: "content". In the sub-category of "application", distance education students thought that the course was necessary mostly because it would be used in business (n=57). In the sub-category of "benefit", they most frequently mentioned (n=67) that the course was beneficial because the age in which they lived required to be computer literate. On the other hand, formal education students stated that the knowledge they learned during the course would be mostly used in their daily life (n = 41). There are not many opinions about the category of "unnecessary". In this category, both groups of students stated that the course covered the subjects which were from outside their field of study.

The statement of the female student coded with S35, studying at FA, who took the course in the distance education environment, mentioning the codes of "required to be computer literate" and "use in business life" in the sub-category of "benefit" was as follows:

"I think the BITU course is quite significant and essential for me, because it's the age of science and technology, computers are used everywhere now. Everyone needs to know how to use a computer, or else we can't keep up with this age. For example, I believe that I will have to use it in my career in the future. As is in every other field, you can't do without a computer in our field of business…"

The statement of the male student coded with S215, studying at FF, who took the course in the formal education environment, mentioning the unnecessary aspect of the course because of its familiar topics was as follows:

".. I think this course isn't necessary because people at the age of information already know how to use a computer. I already knew what was told during the course, why should I spend time with the things I know?"

Table 2: Students' perspectives of distance education

Category	Sub Category	Code	n	f
Advantage	Flexibility	Location independence	40	9,57
		Chances for watching the recorded videos	37	8,85
		Time independence	28	6,70
		Comfort	13	3,11
		The right for absence from classes	12	2,87
		Individual study	11	2,63
		Different simultaneous activities	2	0,48
	Accessibility	Ease of access	6	1,44
		Appealing to students with different characteristics	5	1,20
	Saving	Financial savings	5	1,20
		Saving time	4	0,96
	Others	Silent environment	10	2,39
Advantage Total			173	41,40
Disadvantage	Technical	Internet connection problems	38	9,09
		Audio-Video problems	24	5,74
		No internet access	11	2,63
		Not being able to print out the content	5	1,20
		Complicated system	1	0,24
	Personal	Not being able to learn	16	3,84
		Not owning a computer	20	4,78
		Reluctance to attend	13	3,11
		Distraction	11	2,63
		Computer illiteracy	2	0,48
	Discipline	Not taking the lesson seriously	17	4,07
		Lack of discipline	12	2,87
	Application	Not being able to do simultaneous hands-on activities	13	3,11
		Theoretical learning only	8	1,91
	Interaction	Lack of communication	25	5,98
		Not being able to ask questions instantly	15	3,59
		A sense of virtuality	9	2,15
		Not being able to make eye contact	5	1,20
Disadvantage Total			245	58,61

As seen in Table 2, students taking the course with distance education evaluated the environment in two main categories as “advantage” and “disadvantage”. The category of “advantage” includes the sub-categories of “flexibility”, “accessibility”, “saving” and “others”. Among these categories, “flexibility” included the codes related to a more comfortable working environment, and the most common one was the code of location independence. While “accessibility” referred to the opportunity for accessing to the course, “saving” referred to saving money or time. In addition, the students identified silent environment as an advantage. The category of “disadvantage” includes the sub-categories of “technical”, “discipline”, “personal”, “practice” and “interaction”. The most frequently mentioned code in this category was the code of “internet connection” problems (n = 38) among technical problems. 1 student stated that the system was complicated. 24 of the students emphasized that they could not learn enough with the available system. In addition, there were 17 students who stated that they did not take the course seriously because of the distance education environment. 13 of the students mentioned the negative aspects of not doing simultaneous hands-on activities while attending the course on the internet. “Lack of communication” (n = 16) and “being unable to ask questions instantly” (n = 15) were also rated among the negative aspects.

The male student coded with S105, studying at FoF, mentioned the codes of "audio / video problems", "unwillingness to participate" and "not taking the lesson seriously" in the “disadvantage” category as follows:
“I think it is very unfortunate to offer the BITU course via distance education. I can say it is a loss for us. I tried to attend the first lesson. The lecturer’s voice, and therefore the lecture wasn’t quite understood. So, I did not even remember the other lessons afterwards. Because it was via distance education, I started to think as if there were no lesson, and so I didn’t take it seriously. I didn’t have any enthusiasm to participate. I felt it was unnecessary to attend the class in front of the computer.”The female student coded with S180, studying gastronomy and culinary

arts in ADP, regarded distance education as an advantage and made the following statement concerning the codes of "location independence", "revision opportunity" and "financial savings":
“I think distance education is very good. It gives an advantage to those who can reach it. You don’t have to meet the requirements like transportation and food. You can attend the class at home or in the dormitory without physically going to school. You can watch the lecture as much as you like if you miss a class or don’t understand it.”

Approximately 80% of the formal education students stated that they had a positive opinion about the classroom environment as seen in Table 3. On the other hand, nearly 20% of the students stated that they were not satisfied with the classroom environment due to the reasons shown in Table 4, and that they wanted to take the course in the distance education environment instead.

Table 3: Students' views on the formal education environment

Category	Sub Category	Code	n	f
Advantage	Interaction	Being able to ask questions instantly	14	12,28
		Communication with the lecturer	13	11,40
		Peer communication	5	4,39
	Discipline	Taking the course seriously	15	13,16
		Compulsory attendance	14	12,28
	Practice	Simultaneous hands-on activities	14	12,28
	Personal	More permanent learning	14	12,28
		No obligation to have a computer	6	5,26
	Physical environment	Adequate hardware tools	15	13,16
		Environmental Comfort	4	3,51

Of the 94 students who took the course through formal education, 75 students rated the classroom environment as advantageous. The category of “advantage” included the sub-categories of “interaction”, “discipline”, “practice”, “personal” and “physical environment”. In the category of “interaction”, the students most frequently mentioned “being able to ask questions instantly” and “to communicate with the lecturer”, and least frequently “to communicate with their classmates”. While there were 15 students who stated that taking the course in the classroom environment was effective in taking it seriously, 14 students expressed the benefit of simultaneous hands-on activities. 14 of the students stated that they had learned more permanently in this environment, and 15 stated that the classroom environment was equipped sufficiently.

The male student coded with S250, studying at FF, who took the course in the formal education environment, mentioned the codes of “being able to ask the lecturer instantly”, “learning more permanently” and “obligation to attend the lesson” as the advantage of formal education as follows:

“I am glad that I’ve taken the course in the classroom because I can ask questions to the lecturer instantly when doing hands-on activities. Since they are subjects that I do not know, if I ask the lecturer right away, they become more permanent. This is how I can learn. Also, we have to attend the classes; otherwise, we would fail. This is important for me to attend the class. I might think of not doing so if I weren’t obliged to.”

Table 4: Reasons why formal education students wanted to receive distance education

Category	Subcategory	Code	n	f
Preference for Distance Education	Flexibility of distance education	Location independence	12	33,33
		Chances for watching the recorded videos	11	30,56
		Time independence	5	13,89
	Classroom environment	Inadequacy of phsyical equipments	4	11,11
		Temperature	2	5,56
		Noise	2	5,56

Table 4 shows the reasons for preferring the distance education environment stated by 19 of the students who took the course in the classroom environment. The students stated that they preferred distance education because they found it more flexible. Besides, they considered some of the aspects in the classroom environment negative. The sub-category of “flexibility” in distance education includes the codes related with location and time independence, and chances for watching the recorded videos. In the category of “classroom environment”, 4 of the students stated that the classroom was physically inadequate, while 2 of them expressed that the temperature and noise were at a disturbing level. On the other hand, the female student coded with S260, who took the course in the formal

education environment, mentioned the codes of "location independence", "time independence" and "temperature of the classroom environment" regarding her desire to take the course in the distance education environment instead of the classroom as follows:
"I think it would have made more sense if the course had been offered via distance education. I normally get bored after a while. The classroom gets hotter especially as the lesson progresses. The heat makes me uncomfortable. But if the course were via distance education, I wouldn't have to be stuck in the classroom, and I would watch the lecture any time I like …"

Table 5: Shows the learning environment preferences of distance education students and their reasons.

Category	Subcategory	Code	n	f
Preference for DE (n = 59, 28.23%)	Flexibility	Location independence	21	7,09
		Chances for watching the recorded videos	20	6,76
		Time independence	15	5,07
		The right for absence from classes	13	4,39
		Comfort	8	2,70
		Individual study	8	2,70
		Different simultaneous transactions	2	0,68
	Content	Visual elements	5	1,69
Preference for Formal Education (n = 150, 71.77%)	Education process	Permanent learning	40	13,51
		Chances for hands-on activities	25	8,45
	Discipline	Compulsory attendance	27	9,12
		Sense of responsibility	15	5,07
	Technical	No technical problems	25	8,45
		No internet problems	15	5,07
	Personal	Loving the environment	14	4,73
		Not having a computer	10	3,38
	Interaction	Lecturer-student communication	33	11,15

According to Table 5, only 59 of 209 distance education students preferred distance learning, while 150 students wanted to take the course via formal education. The desire for formal education was expressed by the codes in the categories of "education process", "discipline", "technical", "personal" and "interaction". Among these categories, "having the chance of permanent learning" and "doing hands-on activities in the education process" constituted the most frequently mentioned category. However, "student-lecturer interaction" was the least frequently mentioned category of interaction. The study revealed that the main reasons for preferring distance education consisted of the codes that provided flexibility such as "location independence", "chances for watching the recorded videos" and "time independence". Five students, on the other hand, expressed the advantages of the visual imagery used in the content.

The male student coded with S47, studying public relations in ADP, who preferred having taken the course in distance education environment mentioned "time independence", " chances for watching the recorded videos " and "benefit of visual elements" as follows:

"Distance education must be available. Because I can learn it whenever I want, watching it again and again without missing anything. We can rewind or forward the lecture video. These videos also have pictures, clips, etc. which help me learn the content much better .. "
The female student coded with S19, studying at FA, mentioned "compulsory attendance", "sense of responsibility", "chances for hands-on activities" and "permanent learning" as the reasons for her preferring formal education as follows:

"I would prefer the course to be formal. I would attend it because it would be compulsory to be in the classroom. For now, I don't feel responsibility. I have things to do and don't even think about the lesson. I usually get the desire to postpone watching it. If it were in the classroom, I would have a chance to try it while the lecturer is teaching, so I could learn and wouldn't forget the subject.

The students in both groups emphasized the importance of attendance to the course. Only 2 of the formal education students did not have absences, and 21 of them did not attend the course at all, due to the reasons that they were repeating the course and attendance was not compulsory for them. The maximum absence limit was specified as 5 weeks during the course, and the other students were absent for 1 week (n = 7), 2 weeks (n = 15), 3 weeks (n = 17), 4 weeks (n = 19) and 5 weeks (n = 13). Table 6 lists the reasons for the absence of students taking formal education.

Table 6: The reasons for formal education students' not attending the course

Category	Code	n	f
Personal	Going to the hometown	30	30,61
	Illness	22	22,45
	Repeating the course	21	21,43
	Arbitrary absence	8	8,16
	Using the right for absence from classes	4	4,08
	The obligation to work	4	4,08
	Family-related reasons	2	2,04
Classes	Morning classes	5	5,10
	Course day	2	2,04

Table 6 shows that students' not attending the lessons were mostly due to personal reasons and that the most frequently mentioned reason in this category was that they had been to their hometowns (n = 30); in other words, location change. This code was followed by "illness" (n = 22) and "exemption from attendance due to repeating the course" (n = 21). In addition, the classes started in the afternoon and there was another class in the morning. Students mentioned that changes in the schedule of the morning class had an effect on attendance. The female student coded with S217, a formal education student, mentioned "going to the hometown" and "morning classes" as the reasons for her two absences during the semester as follows:
"I had been attending all classes since the beginning of the semester, then I missed my family after the midterm exam and went to my hometown. As for my second absence, the chemistry class in the morning finished too early, so I did not want to attend the class because I had to wait for it for 3 hours at school."

In the distance education environment, class participation was divided into two: synchronous course and recorded videos.

Table 7: Number of synchronous attendance and watching recorded course videos

Synchronous attendance			Watching the recorded videos		
Week	n	f	Week	n	f
1-2 weeks	26	20,31	1 week	9	7,09
3-4 weeks	24	18,75	2 weeks	9	7,09
5-6 weeks	11	8,59	4 weeks	8	6,30
7-8 weeks	11	8,59	Never watching	40	31,50
10-11 weeks	11	8,59	All the classes he/she had not	61	48,03
14 weeks	6	4,69			
Never attending	39	30,47			

Table 7 reveals that 39 students never attended synchronous classes, and only 6 students attended the classes without absence during the entire semester. As for recorded course videos, 61 students who watched all the recorded videos of the classes that they had not been able to attend synchronously, whereas 40 students did not watch any videos at all.

Table 8: Reasons for not attending synchronous classes in the distance education environment

Category	Code	n	f
Technical	Internet connection problems	31	14,90
	Telephone connection problems	20	9,62
	Inability to login to the system	15	7,21
	Audio / Video problems	10	4,81
Personal	Not owning a computer	18	8,65
	The obligation to work	11	5,29
	Illness	6	2,88
	Distractibility	4	1,92
Discipline	No obligation to continue	20	9,62
	Forgetting to attend the class	11	5,29
	Not feeling responsible	9	4,33
	Not knowing that there is a class	7	3,37
Others	Coincidence with other courses	20	9,62
	Urge to watch videos later	15	7,21
	Day of the class	6	2,88
	Finding the course inefficient	5	2,40

Table 8 shows the reasons for students' not attending synchronous lessons in distance education environment, which were technical problems, personal limitations, discipline problems and others. The reasons for not attending synchronous lessons were most frequently attributed to technical problems, among which internet connection problems was the most common (n = 31), while the second most frequently mentioned reason was the problems encountered due to the connection via mobile phone (n = 20). In the category of "discipline", "being exempt from attendance" (n = 20), and "coinciding with another class" in the category of "the others" (n = 20) were most frequently mentioned. "Getting distracted during the class" and "finding the course inefficient" were the least mentioned codes.

The statement of the female student coded with S89, studying at FA, mentioning "courses coinciding with each other" as the reason for her not being able to attend synchronous classes was as follows:

"I'm actually curious about this course. I find it boring to watch it later as a video, and I want to listen to the lecturer live. However, since a required course of ours coincided with it, I had to attend that one. I've attended the lectures a few times instead of my own classes, and I liked it. But if I don't attend the classes in my own program, I'll fail so I have to prefer them."

Table 9: Reasons for not watching recorded videos

Category	Code	n	f
Technical	Inability to login to the system	15	14,42
	Internet connection problems	14	13,46
	Telephone connection problems	7	6,73
	Audio / Video problems	6	5,77
Personal	Not owning a computer	5	4,81
	Priority of other chores	2	1,92
	Reluctance	2	1,92
	Distraction	1	0,96
Discipline	Finding the course unimportant	7	6,73
	Not knowing that there is a class	6	5,77
	No obligation	6	5,77
	Leaving everything to the last moment	6	5,77
Video content	Long records	4	3,85
	Known content	4	3,85
Way of learning	Studying from lecture notes	12	11,54
	Hands-on activities	5	4,81
	Research from the Internet	2	1,92

Table 9 classifies the views of students in the distance education environment about recorded videos and the reasons for not watching them in five categories. According to the table, "technical problems" were the most frequently mentioned code as a reason, which was also similar to the reasons for "not attending synchronous classes". The study revealed that 15 students could not log into the system, and 14 students had internet connection problems. Some students preferred different methods such as studying from lecture notes (n = 12) and doing hands-on activities (n = 5) instead of watching videos.

The statement of the male student coded with S78, studying at FoF, mentioning "not being able to log into the system" as the reason for his not watching the recorded videos and preferring to study from the lecture notes was as follows:

"Because I know that the lecture has already been recorded, I usually think I can watch it later, so I usually don't log in during the informatics class. However, the right time has never come. I wanted to watch and study the recorded videos some time before the exam, but I couldn't log in even though I tried a lot. For some reason, I always delayed watching them, and after a while I gave up. Instead, a friend of mine had lecture notes, and I studied from the printout. I felt it was much easier to have papers in my hand…"

Finally, the study investigated the effects of different environments on students' beliefs that they had learned what was taught in the course. Table 10 illustrates that 15 out of 94 students studying in the classroom environment did not think that they had learned the course content, whereas 79 participants who accounted for the majority of the students believed that they had learned it.

Table 10: Belief in learning the content of the course in the classroom environment

Category	Subcategory	Code	n	f
Being able to learn (79 people)	Education process	Classes with hands-on activities	29	24,17
		Efficient class	10	8,33
	Interaction	Lecturer's attention	20	16,67
		Opportunity to ask questions instantly	18	15,00
	Personal	Student's interest in the course	15	12,50
		Prior knowledge	4	3,33
Not being able to learn (15 people)	Personal	Not attending the classes	10	8,33
		Distraction	3	2,50
		Not practising again	2	1,67
		Health problems	1	0,83
		Disliking computers	1	0,83
	Class	Long duration	5	4,17
		Too much content	2	1,67

Table 10 shows that the students who believed that they had learned the content of the course most frequently mentioned that "the educational process focused on hands-on activities", "the lecture was efficient", and "the interaction in the process was high". In addition, as an effect on the realization of learning, 15 students expressed their own interest in the course, and 4 students mentioned their prior knowledge. 15 students who thought that they did not learn the subjects in the course mostly associated the situation with themselves. In addition, 5 students stated that they could not learn due to the long duration of the lecture and 2 students mentioned the excessive content. The male student coded with S278 mentioned "the hands-on activities in the course" and "opportunity to ask questions to the lecturer instantly" as the reason for his successful learning as follows:
"I think I have learned the topics covered in the BITU course, especially the parts we did hands-on activities. I may have forgotten the verbal narratives in the first weeks. But afterwards, when we went on applied Office training, I didn't forget anything, because the lecturer made us practise everything and always asked us if we understood it or not, and when we got stuck, we asked the lecturer for help and completed the process. "
While 106 of the 209 students who took the course in the distance education environment believed that they learned the subjects, 103 students thought that they did not learn them.

Table 11: Belief in learning the content of the course in the distance education environment

Category	Sub Category	Code	n	f
Being able to learn (106)	Personal	Watching lecture videos again	24	9,76
		Attending the classes	23	9,35
		Loving the course	22	8,94
		Prior knowledge	15	6,10
		Individual effort	15	6,10
	Course	Content	20	8,13
		Teaching methods	8	3,25
Not being able to learn (103)	Personal	Not attending the classes	23	9,35
		Not taking the lesson seriously	12	4,88
		Disliking the environment	10	4,07
		Distraction	5	2,03
		Not understanding	2	0,81
	Interaction	Lack of communication	20	8,13
		Not being able to ask questions instantly	15	6,10
	Education process	Lack of hands-on activities	12	4,88
		Long duration	2	0,81
	Technical	Internet connection problems	10	4,07
		Audio / video problems	6	2,44
		Problems related with attendance via mobile phones	2	0,81

According to Table 11, the vast majority of students thinking that they learned what was taught associated the reason for their learning with themselves. Among the most frequently mentioned codes were "watching the lecture videos again", "attendance", and "loving the course". In addition, students mentioned that content of the course (n = 20) and teaching methods (n = 8) also contributed to their learning. In the category of "not being able to learn", while students most frequently associated its reason with themselves, they also mentioned interaction, lack of

hands-on activities during the educational process, duration of the lecture and technical problems as the reasons for “not being able to learn”.

The female student coded with S17 stated that she could not learn because of the distance education environment and listed the reasons for her failure as "not attending the class" and "internet connection problems".
“Frankly, I would have learned better if I had taken this course in the classroom. I don't quite think I learned much when it was online. There are different reasons for this. At first, I started the term very enthusiastically because I wasn't computer literate and it would be useful to learn it. But in the first weeks when I tried, the internet always disconnected. I stay in the dormitory and the internet connection in the dorm is very poor, so it is difficult or impossible to connect. But, sure, this is not an excuse. I could have tried harder to attend the classes and been to the library at the campus. I knew both computers and the internet were available there. But I did not attend classes.”

Discussion and Conclusion

In the study, within the scope of the BITU course, formal education students were trained by the same instructor for 14 weeks in the classroom and distance education environment. Students' views about the course and the environment were analyzed, after which the following results were achieved.

The majority of the students who took the course in the distance education environment (94.31%) and in the classroom (96.36%) considered the course to be necessary. Both groups of students mentioned that the course was essential with the sub-categories of “application”, “benefit” and “awareness”. A small number of students thought that the course was unnecessary due to its content. The students who took the course in the distance education environment considered the course to be necessary mostly due to the reasons of “required to be computer literate” (27.24%) and “use in business life” (23.17%). On the other hand, students who took the course in the classroom environment found the course necessary mostly due to “use in daily life” (37.27%) and “use in business life” (29.09%).

The views of 209 students, who were formal education students but took the course in distance education environment, were grouped in two sub-categories as “advantage” and “disadvantage”. In these categories, a total of 418 codes were created. 58.61% of the students’ statements were in “disadvantage”, while 41.40% were in “advantage”. Participants mentioned the disadvantages more frequently. The advantage category was grouped into 4 sub-categories: “flexibility”, “accessibility”, “savings” and “the others”. Among these categories, the most frequently mentioned sub-category was “flexibility”, which was followed by “location independence” (9.57%), “chances for watching the recorded videos” (8.85%), and “time independence” (6.70%). The least mentioned codes in the category of “advantage” were “being able to do something else at the same time” (0.48%) and “saving time” (0.96%). The category of “disadvantage” consisted of 5 sub-categories: “technical”, “personal”, “discipline”, “hands-on activities” and “interaction”. The first sub-category in coding was “technical” (18, 9%) and the second was “interaction” (14.35%). The most frequently mentioned codes were “internet connection problems” (9.09%) and “lack of communication” (5.98%). In the category of “personal”, “not being computer literate” constituted the least frequently mentioned code. In summary, the students considered the environment to be positive mostly due to “location independence”, and negative mostly due to “internet connection problems” and “lack of communication”. There are similar results from other studies. Hara and Kling (1999) found out that one of the frustrations experienced by students in the distance education environment was technological problems and the other was little or late feedback that was provided by the instructor. Balaman (2018) determined that students experienced technical problems in the distance education system. Kan and Fidan (2016)established that watching recorded videos again, permanence, convenience, as well as time and location independence were the most frequently mentioned positive aspects related to distance education. Among the most frequently mentioned negative aspects were lack of practice, lack of communication, failure in paying attention and technological problems. Fincham (2017) stated that students expressed the advantages of full distance education as flexibility, independence and convenience. Lack of face-to-face communication was considered to be a major limitation. Motiwalla and Tello, (2000) stated that students were satisfied with the flexibility, and access to content anytime and anywhere in distance education. The study by Akbaba et al. (2016) indicated that 76.6% of the students did not find distance education useful. In the study of Shea et al. (2001), it was found out that students expected more communication in distance education. Ross et al. (1990) formed two separate groups in his study. The students in the second group, who had more interaction, made more positive evaluations, whereas the other group was not satisfied with the education and stated that they could not learn much. Tuncer and Bahadır (2017), on the other hand, stated that, regarding the issues they encountered, students most frequently mentioned connection problems, which was followed by the lack of internet access access or computers.

While most of the students (79.78%) who took the course in the classroom environment as they used to found it advantageous, some (20.21%) stated that they preferred distance education instead of classroom environment. The

reasons for being satisfied with the classroom environment consisted of 5 sub-categories: "interaction", "discipline", "hands-on activities", "personal" and "physical environment". Among these subcategories, students most frequently mentioned "interaction" (28.07%), after which "discipline" was the second most common (25.44%). It is evident that interaction was a very important component in both educational environments. The students who participated in the study of Limniou and Smith (2010) stated that it was necessary to provide a more interactive learning environment and individual feedbacks so as to solve the difficulties related to the course. In the study, 12.28% of the students stated that, as the course was in the classroom environment, compulsory attendance provided some discipline. The least mentioned codes were "environmental comfort" (3.51%) and "peer communication" (4.39%). The fact that students requested distance education instead of the classroom environment was due to the flexibility of distance education and the disadvantages of the classroom environment. 33.33% of the students who desired to take the course via distance education stated that it was appealing because of the location independence, and 30.56% of them mentioned chances for watching the recorded videos. There were also students who found the current classroom environment physically inadequate (11.11%), too hot (5.56%) and noisy (5.56%).

Most of the formal education students who took the course in the distance education environment (71.44%) stated that they preferred to take the course in formal education environment. 59 students who wanted to take the course through distance education mentioned the flexible structure of distance education and the effect of the content. The most frequently mentioned codes of the students who wanted to continue the course in distance education environment were "location independence" (7.09%), "chances for watching the recorded videos" (6.79%) and "time independence" (5.07%). "Being able to do something else at the same time" (0.68%) and "the effect of visual items (1.69%) in the course content" were the least frequently mentioned codes. The sub-categories of "education process", "discipline", "technical", "personal" and "interaction" were also mentioned by the students who wanted to study in the formal education environment. "Education process" (21.96%) was the most frequently mentioned sub-category among them. The students who preferred the formal education environment also believed that they learned more permanently in the classroom environment (13.51%) and they had chances to do hands-on activities (8.45%). The codes of "student-lecturer interaction" (11.15%), "feeling of discipline in the students because of compulsory attendance" (9.12%) and "not having to deal with technical problems in the classroom environment" (8.45%) were also frequently expressed as regards class preference. Young (2006) claimed that adaptation to students' needs, motivating students, and effective communication are among the most important components for effective distance education. It is essential that an efficient teacher, in this environment, establish a trust-based communication with his students and create a flexible but structured classroom environment. It is evident that these components are compatible with the codes mentioned by the students in terms of the environment preference. As a result of the meta-analysis conducted with different articles, M. Allen et al. (2002) concluded that student satisfaction in the face-to-face education environment was slightly higher than distance education. Evidence from the research indicates that individual differences in learning style may have an impact in distance education. Khoo et al., (2010) argued that online learning is a social and interactive environment where participation in the learning community is provided. In order for this to happen, individuals in the environment must be keen on learning from one another. It should be noted that the differences in the learning styles of the students may have reflected on their preferences for environment in this study. In addition, in some of the studies which revealed the results about the positive aspects of distance education it is evident that the study group consisted of a highly motivated older age group with self-discipline (Chen et al., 2008; Dibiase, 2000; Hardy & Boaz, 1997). Chen et al. (2008)argued that students of older age group are more likely to engage in higher levels of mental activity, such as analysis and synthesis, although they interact less with other participants. In this study, however, the participants who were in the first year of university were not in the older age group. It can be inferred that students' age may reflect on the preference for the environment.

"The importance of class participation" was frequently mentioned in both student groups. However, the study revealed that some of the students taking the course in the formal education environment did not attend the classes for up to 5 weeks, which was the maximum absence limit, and that the percentage of the students who attended all the classes during the semester remained at only 2.13%. The reasons for not attending the class in the classroom environment consisted of the codes which were dependent on the students, such as "going to the hometown (30.61%) and "becoming sick" (22.45%), both of which were the most frequently mentioned codes. It is expected that this will reflect positively on the distance education environment that provides time and location independence for the course. However, the analyses revealed that the rates of attending the classes in the distance education environment or watching the recorded videos after the classes were not as high as expected. While the percentage of the students attending the synchronous courses throughout the semester remained at only 4.69%, 30.47% of the students did not attend any synchronous classes at all. While the number of students who watched the recorded videos of all the courses that they had not attended did not exceed half of students (48.03%), 31.50% of the students never watched any recorded videos. The study by Akbaba et al. (2016) revealed that the majority of students

(89.3%) did not attend the classes regularly and 40.3% of students associated this with the lack of compulsory attendance.

The reasons for students' not attending synchronous classes included "technical", "personal", "discipline" and other sub-categories. Among these reasons, students most frequently mentioned "technical problems". Similarly, the study by Shea et al. (2001) indicated that students expected technical support in the distance education environment. The study revealed that 9,62% of the students did not attend the classes because attendance was not compulsory and that the courses of 9,62% of the students coincided with another course. This result suggests that neither students nor those who prepare class timetables care about distance education courses sufficiently. The reasons for not watching the recorded videos were similar to the reasons for not attending synchronous classes. Moreover, the major reasons for students' not watching the recorded videos were "preferring other learning methods such as studying from lecture notes and doing hands-on activities" or "putting off watching all the videos until the exam date". Akbaba et al. (2016) also revealed that nearly half of the students studied from the textbook. While students' learning beliefs were quite high in the classroom environment (84.04%), they were slightly lower in the distance education environment (50.71%), yet still more than half. According to the study of Leonard and Guha (2001), most of the students in the online courses meet their academic needs and improved their technological skills. In the study of Tuncer and Bahadır (2017), more than half of the students (62%) had negative thoughts about learning with distance education. The students who stated that they had learning problems in the classroom environment associated this with "not attending the lesson", "being distracted", "not doing hands-on activities after the class", "health problems", "disliking computers", and "too long duration and too much content". On the other hand, distance education students associated the reasons for their learning with their own personal efforts such as "re-watching the recorded videos", "attending the classes regularly", "loving the lesson", and "prior knowledge". As for the reasons for not learning, students mostly associated their not learning with the reasons about themselves. "Not attending the classes", "not taking the course seriously", and "disliking the environment" were the most frequently mentioned reasons, while "interaction" (14.23%), "not being able to do hands-on activities during the education process" and "technical problems" (7.32%) were among the others.

Recommendations

As a result of this study, the following suggestions can be made: arrangements can be made to eliminate the lack of communication in distance education, because the use of interactive hands-on activities in distance education is not only effective in learning but also increases motivation (Berge, 1999; Northrup, 2002). The 21st century student requires creating educational opportunities that allow interaction with educators and peers, regardless of time or place. Various tools are available for this purpose (Beldarrain, 2006). Thanks to these tools, it is possible to increase the interaction in the environment. Technical support can be provided in the environment. It is evident that students often complain that they cannot do hands-on activities simultaneously in distance education. This perception can be changed, and one can enable students to realize that they can do hands-on activities about what they have learned after watching the lectures. Moreover, students can be encouraged to attend or follow the classes.

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