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# Interior Architecture Undergraduate Students' Distance Learning Experiences of Interior Architecture Project Course\*

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Abstract: Distance education is an education model in which learning resources and learners are far from each other in terms of time and space. Distance education started by mail in the past and continues through internet technologies today. As a result of the global Covid-19 epidemic, the use of the distance education model is gaining importance. In this process, the use of distance education model has begun to be compulsory in art and design disciplines where practice-oriented and face-to-face education is important. This study focuses on the application of Interior Architecture Project III course with distance education model in Interior Architecture undergraduate education which is an art and design disciplines. Students' opinions are taken on the "Interior Architecture Project III" course, which is conducted with distance education by using the phenomenological approach (phenomenology), one of the qualitative research methods. Accordingly, the opinions of 25 interior architecture third-year undergraduate students from a state university in Turkey were taken. Participants received a project assessment for this course, through text and drawing, for 14 weeks through distance learning. In determining the participants, it is obeyed that they have taken this course face to face and on a voluntary basis. The data obtained are evaluated through content analysis. According to the results of the study, students state that the feedback they receive during the distance education process is more understandable and permanent compared to face-to-face education. The inadequacy of the tools for computer technologies in the students' hands in terms of equipment creates a low motivation in students. At the same time, it is understood that the students who are with the family physically and psychologically do not have enough comfort conditions to study. It is observed that there is no significant difference in the education preferences of the students between face-to-face and distance education approaches. It is thought that this study can provide guiding data in order to increase the quality of distance and hybrid education models.

Keywords: Distance education, Google classroom, Interior architecture, Interior design project

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### Introduction

Distance education entered the literature by taking place in the catalog of the University of Wisconsin in the United States in 1892. The history of distance education goes back to the first quarter of the 1700s. The development of postal technologies has initiated distance education activities by letter. The spread of radio and television technologies in the 1900s led to the start of mass distance education. By the 1960s, open universities began to be opened and the use of distance education became widespread (Kaya, 2002). In the 1980s, distance education was carried out by teleconferencing, and with the widespread use of internet technologies in the period from the 1990s to the present, distance education began to be provided through devices such as computers, tablets and mobile phones (Moore & Kearsley, 2011). Today, it is emphasized that the most prominent of the distance education tool is computer technologies. Tuncer and Taşpınar (2008), on the use of computer technologies in distance education,

- Dissemination of education.
- Efficient use of resources,
- Functionality of education,
- Ensuring the standard in education,
- Preventing inequality of opportunity,
- Ensuring the supply-demand balance,
- It recommends the use of computer technologies in education in terms of increasing the quality of education.

Distance education is based on the use of communication technologies for educational purposes among individuals who are physically far from each other. Moore and Kearsley (2011) define distance education as the communication between instructors and learners for the purpose of teaching and training activities when they are separated from each other permanently or partially. Gökçe (2008) emphasizes that distance education is independent of time and space. According to Güneş and Güneş (2016), synchronous and asynchronous education is provided in distance education. There are materials such as e-books or videos in asynchronous education. On the other hand in synchronous education, there is an instant interaction between the trainer and the trainee. Holmberg (1995) is of the opinion that distance education is a concept carried out today through computer technologies. Schlosser and Simonson (2009) consider distance education from a broad perspective and state that it has four components. These are institutional basedness, separation of teacher and student, being able to communicate interactively and sharing text, sound recording and video. It emphasizes that the lack of one or more of these components may hinder distance education.

In distance education, Holmberg (1995) states that the student engages in self-learning activities. This situation confronts the student with the problem of feeling lonely. Holmberg (1995) states that as a solution to this, the teacher, the education program or the educational institution interacts with the student at certain times. Özer (1990) emphasizes the structure of distance education that reaches more people, requires less cost and provides a standard education opportunity in terms of education programs. Gökbulut (2021), in his study on students' perceptions and readiness for distance education, reveals that students' perceptions are moderately positive, and there is no significant difference regarding gender and age. Fojtik (2018) emphasizes that in distance education, the grades of undergraduate students in their first year are lower compared to the grades of students who received face-to-face education in previous years. However, King, Young, Richmond, and Schrader (2001) state that education is an individual cognitive process, and distance education, as one of the practices prepared within this framework, will be more effective in education. Giryakova (2009) thinks that in order to increase the effectiveness of distance education, arrangements should be made in accordance with student needs and student profiles. Guri-Rosenblit (2005) establishes the relationship of

information and communication technologies with distance education and e-learning. Accordingly, she states that e-learning activities are incompatible with the concept of distance education. He emphasizes that distance education is at a professional level, rather than a mere information-gathering function, and progresses based on curriculum and process, according to e-learning.

In this research, distance education is evaluated within the framework of Interior Architecture education. In the project course conducted with distance education, the advantages and limitations of the students' project design and feedback processes are determined. According to this, conclusions are drawn about the education preferences of the students. It is expected that the results will be a guide to all art and design education disciplines.

## Methodology

In this study, which is about the experiences of interior architecture 3rd year undergraduate students in the Interior Architecture Project course conducted with distance education, the phenomenological approach, one of the qualitative research methods, was used. The phenomenon of this research is to take the interior design project course through distance education. The research focuses on the experience of the participants in the interior architecture project course in distance education.

Participants continued the Interior Architecture Project III course, which has the most ECTS credits, over the Google Classroom application during a course period (14 weeks). The participants uploaded their project design assignments that they regularly do every week to this application. The lecturer of the course gave feedback to the students' assignments. Feedback was provided through written expression and drawing on the student's project. At the end of the course, the students obtained an interior design project ready to be implemented.

## **Participants**

Purposive sampling method was preferred in determining the participants. Purposeful sampling is used to select sources that are thought to have knowledge about phenomena for a particular purpose. Among the purposive sampling methods, participants are determined by criterion sampling. Accordingly, participants who meet certain criteria are included in the study (Patton, 1987).

In this research, the participants were selected considering the criteria of having previously taken the Interior Architecture Project course face-to-face and being a volunteer for the research. 25 Interior Architecture and Environmental Design Department students attending a state university in Turkey who meet these criteria are the participants. 18 of these students are female and 7 are male. Age ranges vary between 20-25 for female students and 19-25 for male students.

#### **Data Collection Tools**

In this study, the opinions of the participants were obtained in written form through open-ended questions. There is no length restriction in answering the questions. In the preparation of the research questions, the following questions were asked by scanning the relevant literature and in line with expert opinions:

- 1) How would you evaluate the course of Interior Architecture Project III being held remotely?
- 2) How would you evaluate getting a written and drawing evaluation from the lecturer in the Interior Architecture Project III course?

- 3) If there are any aspects that you think are advantageous in conducting the Interior Architecture Project III course remotely, could you please explain with the reasons?
- 4) If there are any aspects that you think are disadvantageous in conducting the Interior Architecture Project III course remotely, can you explain with the reasons?
- 5) If you have the choice to take Interior Architecture Project Courses face-to-face or remotely, which would you prefer? Can you explain why?
  - 6) If there is a topic you want to add, please specify.

## **Analysis of Data**

According to Weber (1989), the content analysis method is a method in which the results are revealed by processing the evaluations obtained from the texts. Accordingly, thematic and descriptive analysis methods should be used. In content analysis, there are coding, categorization and sampling stages. The numerical, percentage and ratio values that the codes frequently repeat are expressed as frequency analysis.

In this study, content analysis method was used to analyze the data. Themes and subthemes were determined according to the answers given by the participants. Sub-themes were given and interpreted with their numerical values (frequency values).

Themes and sub-themes were generated via the coding key. Four experts were determined by the impartial assignment method. In order to ensure the reliability of the study, the reliability formula of Miles and Huberman (1994) was used. Three experts were asked to do the coding. According to the answers given, the codes of disagreement and consensus were marked. According to this, it is seen that the agreement of the agreed codes is 84%

#### **Results**

As a result of the analysis of the data, two main themes emerged. These main themes are "Limitations of Distance Education" and "Advantages of Distance Education". The subthemes of these two themes are presented in Figure 1.

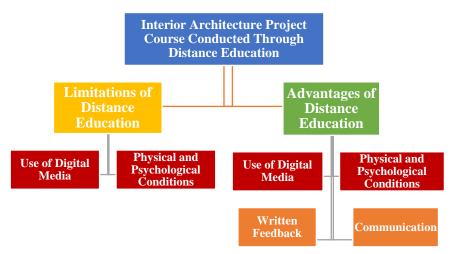


Figure 1 Themes and sub-themes formed as a result of data analysis

The sub-themes of the "Limitations of Distance Education" theme are "Digital Media Use" and "Physical and Psychological Conditions". The sub-themes of the "Advantages of Distance Education" theme are "Use of Digital Media", "Physical and Psychological Conditions", "Written Feedback" and "Communication".

In terms of the limitations of distance education, the codes formed under the theme of digital media use are given in Table 1.

Table 1 Limitations of Distance Education 1

Sub-themes	Code	Frequency
	Feeling that the student cannot adequately communicate with the lecturer	7
Use of Digital	Thinking that face-to-face feedback is more effective	6
Media	Lack of technology literacy	4
	Students do not interact with each other's designs	3
	Decreased acceptance of students' designs	3

According to Table 1, seven students feel that they cannot adequately communicate with the lecturer. Students emphasize that communicating with the lecturer from a distance is not effective in learning. Student 23: "In face-to-face education, I was entering the teacher's room and asking my questions, and at that moment I got my answer immediately. I could understand better because I went to the teacher.", Student 14: "The criticisms I get from the digital environment are very target-oriented, I would like to talk to the teacher for a long time as before and ask my project to be evaluated. I think this process is more effective." expressed his views. Six students state that face-to-face project course feedback is more effective. Student 2: "When I could not understand what the teacher said in face-to-face lessons, I would immediately ask him a question and clear my mind. But now I am writing my question to the teacher. I forget why I asked until he only answers." Four students stated inadequacy in terms of technology literacy. Students express that they have problems in the use of digital media. Student 19: "It took 3 weeks until I understood the Classroom program and figured out how to upload my project. While I was waiting for the teacher's evaluations for 2 weeks, he had already made it and sent it." expressing his opinion, expressed his lack of basic skills to use the program. Three students state that they have no interaction with each other's project designs. In face-to-face education, students have the opportunity to listen to each other's project design feedback during the lesson. It is understood that this situation increases the motivation of the students. Student 7: "I realized that I learned more while listening to the project evaluations of my friends, apart from the evaluation of my own project. Especially until the end of the lesson, I would stay to listen to my friends. We are all alone in distance education, I only stay with what the teacher said for me." expressed an opinion. Three students highlight the decline in adoption of their designs. They state that the sense of belonging disappears because the students cannot sufficiently connect with their designs in the digital environment. It is thought that with the printed projects in face-to-face education, the design perception leaves the virtual world and gives reference to the real world. Student 4: "When I print out my project every week and take it to the teacher, I used to make corrections on it with my own hand drawing, I liked to touch the paper. I used to work on my project with hand drawing first. But now we always do it from the computer. I do not feel that my project is mine. The project turned into something soulless." stated that his belonging to the project he prepared with his opinions decreased.

Table 2 Limitations of Distance Education 2

Sub-themes	Code	Frequency
Physical and	The inability of living with the family to create a suitable	0
Psychological	working environment	9
Conditions	Insufficient Availability of Digital Media Tools	5

The second theme in terms of the limitations of distance education is physical and psychological conditions. According to Table 2, nine students state that living together with

their family does not create a suitable working environment. Students state that they have to share the same environment with their siblings and their course concentration is negatively affected by this situation. Student 1: "We are 4 siblings at home, we share 2 rooms. We all go to our own lessons. Internet speed is splitting. I can't be comfortable in the room so that my sister doesn't lose her concentration when my class is over. Studying is difficult." Five students emphasize that the digital media tools they have are not sufficient. Students focus on the issues that they do not have an internet connection and that their computer hardware is insufficient. Student 15: "I was using the computers in the computer lab in face-to-face education. I can't afford to buy a laptop. No matter how difficult it is in distance education, I try to draw projects from my mobile phone." Student 6: "Your computer must be powerful in distance education, otherwise the education will be unpleasant. My computer has difficulty opening applications." It is seen that some students in distance education do not have a suitable working environment and sufficient equipment.

Table 3
Advantages of Distance Education 1

Sub-themes	Code	Frequency
Written Feedback	Elimination of the risk of forgetting returns	17
	Increasing the intelligibility of feedback	12

Table 3 shows the advantages of distance education aspects of distance education. Accordingly, there are two sub-themes under the written theme. Seventeen students stated that the risk of forgetting the feedbacks disappeared. It is understood that giving written feedback in distance education compared to verbal feedback in face-to-face education contributes positively to the effectiveness of the evaluations made about the student's project. Student 20: "I used to forget my teacher's project criticisms in the lesson, I used to tell my friends to listen to my criticism. Now that I received the teacher's requests in writing, that situation has disappeared. Words fly away, writing remains." Student 19: "A few days after my project was evaluated, I would start working on correcting my project, but I still had to clear my head to remember what the teacher said. After the project evaluation, I had to work immediately. Thanks to Classroom, I can always access what the teacher says from his own mouth.". Twelve students emphasized that the intelligibility of feedback increased. Student 17: "In the lesson, the teacher was saying everything at once, I had difficulty in understanding some things. With the written evaluation in distance education, I read what the teacher says in writing until I understand it, if necessary, I make friends read it." It is thought that the psychological and physical condition of the student may affect the understanding of verbal feedback. It can be said that the written feedbacks made in the digital environment are more understandable when they can be analyzed independently of time and environment.

Table 4
Advantages of Distance Education 2

Advantages of Distance Education 2		
Sub-themes	Code	Frequency
Use of Digital Media	Effectiveness of digital design tools in drawing and presentation	15
	Reduction in course costs	12

In Table 4, the sub-theme and codes of digital media use are given in terms of the superior aspects of distance education. According to this, the effectiveness of digital design tools in drawing and presentation is stated by fifteen students. Students have the opportunity to use digital design tools more intensively in distance education. Over time, students see digital design tools as effective in terms of design and aesthetics in their project drawings and presentations, as they have more experience in this subject. Student 4: "As a result of working so much in distance education with computer programs, I discovered new applications. My

projects got better with the new rendering engines in 3D visualization." Student 12: "I used to present my project in face-to-face education. Now I am preparing my project with presentation programs, I think I can express myself better." Twelve students stated that the use of digital media reduces course costs. Student 1: "I used to wait at the stationery for the project critique every week, for me the best thing about distance learning was that there were no output costs." expressed his opinion.

Table 5
Advantages of Distance Education 3

Sub-themes	Code	Frequency
Communication	Ability to communicate with the lecturer without the constraints of time and space.	19
	Flexible course and working hours	16

In Table 5, there is the theme of communication in terms of the superior aspects of distance education. Accordingly, nineteen students stated that they were able to communicate with the instructor of the course without time and space constraints. Student 21: "I can text to the teacher whenever I want from the classroom application. When the teacher is available to me, he usually comes back a day later. In the past, I should have gone to school and sought him out." The students stated that they communicated more easily with the lecturer. Sixteen students emphasize flexible study and study hours. It can be said that digital environments have advantages over face-to-face education in communication. Student 17: "I can study whenever I want without waiting for lesson hours, I can open the teacher's project evaluations whenever I want and work on my project." He emphasized the flexibility of time with his view.

Table 6
Advantages of Distance Education 4

Sub-themes	Code	Frequency
Physical and	Comfort of living with family	
Psychological		9
Conditions		

According to Table 6, nine students talk about the comfort of living with their families in terms of physical and psychological conditions. This comfort can be evaluated financially and psychologically. It is thought that students feel safe with their families. Student 19: "With my family, I can focus on my studies without ever using my financial means. They make me feel like our job is just a lesson." stated that he was more comfortable in terms of physical and psychological conditions with his opinion. While living with the family is disadvantageous for some students (9), some students (9) have evaluated this situation as advantageous. This situation draws attention to the importance of socioeconomic status for distance education.

Students' Education Preferences

Education Preference	Frequency
Face to Face	11
Distance Learning	9
Hybrid	5

In Table 7, the education preferences of the participants for the upcoming periods are indicated. Accordingly, eleven students preferred face-to-face education, nine students preferred distance education, while five students stated that they wanted hybrid education. Student 9: "I have difficulty getting used to distance education, it is more beneficial to communicate directly with the teacher in face-to-face education.". Student 11: "There is a physical factor such as

being next to the teacher in face-to-face education, we can immediately ask the teacher where we do not understand, my preference would definitely be face-to-face." He stated that he preferred face-to-face education with his opinions. Student 4: "I have seen that distance education can also be taught, and I can even say that I enjoyed my project process more." Student 16: "While distance education scared me at first, I think the process is productive." stated that he prefers distance education with his views. Five students choose the hybrid education model where distance and face-to-face education can be done together. Student 3: "It would be better to have both face-to-face and distance learning, I saw that there are advantages to both. I cannot distinguish. My preference is for hybrid." With this view, the student prefers a hybrid education where he can benefit from the advantages of both education methods.

#### **Conclusion and Discussion**

The limitations and advantages of the Interior Architecture Project III course conducted by distance education, and the results of their preferences for education are given below.

In distance education, the effectiveness of feedback in terms of the risk of being forgotten and intelligibility comes to the fore. Compared to face-to-face education, students experience low motivation due to the lack of written feedback. Yıldız (2020) emphasizes that e-mail and mobile messaging are used as feedback methods in distance education and that students' satisfaction levels are high in terms of feedback methods and effectiveness. Feedbacks, in which written expressions are supported by drawings, enable students to increase their achievements by directing them to target-oriented work in terms of interior design project course.

Distance education can be evaluated in two ways in terms of communication. The first is the communication between the lecturer and the students. Accordingly, the potential of the students to reach the lecturer at any time over the digital environment comes to the fore. This situation is a factor that increases the course gains of the students. Erzen and Ceylan (2020) mention that an effective communication environment cannot be established with the instructor in distance education models. This situation makes students question the quality of education. However, in this research, it can be said that the use of Google Classroom application has advantages in terms of effective communication. Despite this, it should not be overlooked that there are advantages to communicating face-to-face with the lecturer. It is thought that this situation may be shaped depending on the personal development characteristics of the students. It can be said that face-to-face education is more effective for students whose verbal communication skills have improved compared to their written communication skills. The second is the communication that students establish with each other. Compared to face-to-face education, students cannot experience each other's project designs. According to the results of their research with the nursing department students, Süt and Küçükkaya (2016) define this situation as an alternative learning environment. Aydın (2020), on the other hand, emphasizes that distance education should be learner-centered and learners should be able to cooperate in the computer environment. For this purpose, it is recommended to create an environment where students' projects can be shared and their feedbacks can be read within the scope of protection of personal data in distance education.

The results related to the study process are evaluated physically and psychologically. Work environment components in distance education are digital tools and a physical space requirement. The technical inadequacy of digital tools and the fact that it takes time to learn their effective use negatively affect the achievement of gains. However, if these factors are not encountered, digital tools become more effective than face-to-face education in terms of drawing and presentation techniques. Al and Madran (2004) mention that the hardware and

software of technical tools should be upgraded and standardized in this regard in web-based distance education. It is foreseen that student gains can increase with such a standardization regarding the interior architecture project course.

It is understood that study space is an important component in distance education. The comfort level of the space affects the gains positively or negatively. According to Kaya, Erden, Çakır, and Bağırsakçı (2002), unlike classroom environments in distance education, students are independent in terms of space and time. This highlights the importance of the workplace. The fact that the choice of place in distance education is limited to the living environment can negatively affect motivation due to noise pollution and human density.

According to the results of education preference, no significant difference was found between face-to-face education and distance education. Both education models have limitations and advantages. Arat and Minister (2014) state that distance education will not replace traditional education. On the other hand, it is emphasized that distance education is advantageous for individuals who do not have the opportunity to receive physical education. However, the hybrid education model is not preferred compared to these models. It is thought that the fact that the students have not experienced the hybrid education model is an important factor in the emergence of this situation. It is thought that the reliability of the results related to the hybrid education model preference can be achieved with the data obtained as a result of conducting the course with the hybrid education model.

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