Eurasian Journal of Educational Research 75 (2018) 115-136

Eurasian Journal of Educational Research
www.ejer.com.tr

Adapting a Residential Course to Web-Based Blended Learning

Busra OZMEN[1], Tansel TEPE[2], Hakan TUZUN[3]

ARTICLE INFO

Article History:
Received: 13 Mar. 2016
Received in revised form: 30 Jun. 2017
Accepted: 20 Apr. 2018
DOI: 10.14689/ejer.2018.75.7

Keywords
ADDIE instructional design model
distance education
foreign language learning
instructional design
learning management systems.

ABSTRACT

Purpose: This study describes the design of the Basic English 1 and Basic English 2 courses taught in the Foreign Languages School (FLS) of a large public university in Turkey as blended learning in a mostly distance education system. **Research Method:** This study was structured as a case study describing an instructional design effort. The study used the ADDIE instructional design model to convert these courses into the distance education format. In the analysis phase, the designers held discussions with the FLS lecturers to determine their needs and contextual limitations. These discussions revealed the knowledge and skills of the FLS students, the expectations of the lecturers and students, and the course objectives. The design process focused on determining Basic English 1 and 2 learning activities and presentation formats for these activities. Each course has a duration of 15 weeks and includes the skills of grammar, reading comprehension, writing, listening comprehension, and speaking. In the development phase, the designers added all the tools from the design phase to the Moodle environment. In the implementation phase, the designers conducted usability tests with the students and identified deficiencies of the design phase. In the evaluation phase, the designers improved the content based on student feedback from the usability tests. **Findings:** The designers conducted a planned and systematic design process based on the ADDIE instructional design model. At the end of the design process, the course content was transferred to the Moodle environment, and a usability test was administered to the students. The designers revised the environment's design based on student feedback. Eventually, the study presented an environment that was suitable for blended learning educational activities that mainly used distance education. **Implications for Research and Practice:** Designing blended learning opportunities for formal learning environments is a rising trend, and the community can benefit from the documented design process.

© 2018 Ani Publishing Ltd. All rights reserved

[1] Fırat University, TURKEY, e-mail: bozmen@firat.edu.tr, ORCID: https://orcid.org/0000-0003-3761-6215
[2] Kilis 7 Aralık University, TURKEY, e-mail: tanseltepe@kilis.edu.tr, ORCID: https://orcid.org/0000-0003-3576-6172
[3] Corresponding Author: Hacettepe University, TURKEY, e-mail: htuzun@hacettepe.edu.tr, ORCID: https://orcid.org/0000-0003-1153-5556

Introduction

With the use of special design software together with increasing access to pedagogical content, the Internet has begun to offer educational environments that enhance the distribution of information. At the same time, distance education increases the quality and strength of education since it is carried out over the Internet. Distance education also has the advantages of supporting teachers and students in the exchange of information independent from time and location, using multimedia, notes and materials; facilitating individual learning; and even reaching more people (Peachey, 2015). However, there are some important issues to be considered when preparing distance education environments. Sales (2010) indicated that online education could produce effective results when maintained in a successful, fast, and cheap way. The uninterrupted online provision of content prepared for a specific purpose at a low cost increases the quality of distance education. Quality online courses can be conducted quickly and economically thanks to the Learning Management Systems (LMSs).

The main disadvantages of online education have been its inabilities to provide learning materials that are not asynchronous and to share and discuss materials in different ways, to keep student, lecturer, and system records and to meet needs such as reporting. LMSs have recently been introduced to eliminate these deficiencies. Designers might use a variety of instructional strategies and design models to make courses effective and productive through LMSs (Cinar & Tuzun, 2016). There are many LMSs available on the market. However, Moodle is one of the most useful LMSs due to its ease of use (Ueda & Nakamura, 2016). Moodle is an open-source and free LMS. One of the greatest advantages of Moodle is that it offers many components—including course content, activities, examinations, surveys, discussion environments, and calendars—anytime and anywhere in both synchronous and asynchronous ways (Kudryashova, Gorbatova, & Rozhkova, 2016; Limongelli, Sciarrone, & Vaste, 2011). Moodle makes it possible to track students' participation within the system and determine how active they are during practice.

Instructional design examines everything related to planning instructional activities. It is described as the systematic development of instructional elements applying teaching and learning theories to the purpose of maintaining the quality of education (Berger & Kam, 1996). In the instructional design process, teaching activities and materials are developed, and teaching and learning activities are tested and evaluated. The theories that provide guidance for improving people's learning and development are called instructional design models (Reigeluth & Frick, 1999). In other words, instructional design models are approaches that help the systematic and effective progress of the instructional design processes based on a plan (Tuzun, 2001). Distance education can be implemented to determine the educational needs of a specific target group and to shape the development of effective learning systems to

satisfy these needs. Therefore, it is important to make use of the instructional design models to obtain the learning outcomes that are expected from distance education learning environments.

This study reviewed the relevant studies on the design of web-based distance education courses and found that Tuzun (2001) proposed an instructional design model including nine phases: preliminary efforts to the design, creating a center for the development of the course, doing the analysis, developing instructional strategies, providing administrative structure, doing the design, eliminating technological barriers, administering student assessment, and conducting course evaluation. Tuzun and Cinar (2016) improved this model by proposing an experience-based e-course design model consisting of seven stages: forming a design team, doing a preliminary search, conducting analysis, creating an instructional and technical design, integrating the designs, performing tests, and making improvements. Power (2009) tried to help university instructors who taught their courses using traditional methods to transfer their courses to web-based distance education. Power also described personal experiences in ten case studies based on notes taken over three years. Based on this work, Power (2009) proposed an instructional design model with six steps: conducting analysis, developing the modules, developing teaching activities, developing activities that support teaching, developing assessment tools, and performing ongoing revision. Balci (2010) also proposed an instructional design model with eight steps: deciding on the redesign of a course for web-based distance education, developing the program, administering the course, providing support, preparing the technical structure, testing the program, implementing changes, and updating and maintaining the e-learning program.

Blended learning is a form of learning that combines face-to-face learning and online learning. According to Garrison and Kanuka (2004), "At its simplest, blended learning is the thoughtful integration of classroom face-to-face learning experiences with on-line learning experiences" (p. 96). Blended learning offers self-learning opportunities and flexible online learning opportunities for students. With this learning approach, students are able to control learning content, speed, time, and location to a certain extent (Powell et al., 2015). Real-time data provided through digital technology to blended learning helps teachers organize the teaching process according to the progress of the student (Hilliard, 2015). In foreign language domain, blended learning is defined as a language teaching approach that combines the most effective features of face-to-face learning activities and online collaborative learning activities (So & Lee, 2013).

This study reviewed the research on the design and effectiveness of blended learning environments in foreign language learning and found that Dogan et al. (2011) conducted a study to convert the “Human-Computer Interaction” course into distance education. They used the ADDIE instructional design model (Analysis, Design,

Development, Implementation, and Evaluation), conducted a usability test and tried to demonstrate the effectiveness of the system based on feedback. Tomlinson and Whittaker (2013) wrote a book that compiled 20 case studies of blended learning in English language teaching. They tried to provide guidance for the design of blended learning environments and their implementation processes by balancing classroom learning with e-learning. Bueno-Alastuey and Lopez Perez (2014) created a blended learning environment to determine students' perception of the benefits of using Information and Communication Technologies (ICTs) in English-language teaching. Although all the participants had weak ICT skills in language learning at the beginning, most of them experienced positive changes in their perception of ICT's use in language learning. The study revealed the useful outcomes of ICT use in foreign language teaching. Sun and Qui (2016) presented a framework of a blended learning model for English teaching. They observed that the model is useful for developing participants' English proficiency. Additionally, participants earned higher scores on the final test at the end of the study. Challob, Bakar, and Latif (2016) investigated the effects of the blended learning approach on the writing anxieties and writing performance of foreign language learners. A 13-week study was conducted with secondary school pupils in Malaysia. Students participated in both face-to-face and online writing activities through in-class discussions, blogs, and online discussion tools. As a result, there was a significant improvement in students' anxiety about and performance in writing.

Emelyanova and Voronina (2017) conducted a study to determine students' attitudes and perceptions towards blended learning English classes and then designed an online course using an institutional LMS. According to the results obtained from the data collected before and after the lesson, it was revealed that there was a remarkable increase in the perception and attitudes of the students towards the use of the blended learning in foreign language teaching. Pinto-Llorente, Sanchez-Gomez, Garcia-Penalvo, and Casillas-Martin (2017) conducted a study to determine students' perceptions of the technological tools used in blended learning environments in foreign language teaching. The results of the study showed that the positive attitude of students about the effectiveness of technological tools contributed to the development of English grammar skills. Additionally, Wright (2017) investigated the preferences and reasons for students to take online and/or face-to-face lessons in an English grammar course conducted online at the undergraduate level in Malaysia. Prescott, Bundschuh, Kazakoff, and Macaruso (2017) implemented a blended learning program for reading and writing in English at a primary school, until the fifth year of school. With this study, it was found that the reading and writing performances of the students were positively affected. Other studies of blended learning models in foreign language teaching have also been conducted. These studies investigated the influence of blended learning environments on students' grammatical competence (Emelyanova & Voronina, 2017; Pinto-Llorente et al., 2017; Wright, 2017), reading (Pinto-Llorente,

Sanchez-Gomez, & Garcia-Penalvo, 2016; Prescott et al., 2017), speaking (Yang, Chuang, Li, & Tseng, 2013), writing (Cahyono & Mutiaraningrum, 2016; Challob, Bakar, & Latif, 2016; Eydelman, 2015; Ferriman, 2013; Pinto-Llorente et al., 2016), listening (Cigdem, Ozturk, & Topcu, 2016; Emelyanova & Voronina, 2017; Yang et al., 2013), pronouncing (Al Zumor, Al Refaai, Eddin, & Al-Rahman, 2013), learning foreign languages (Hinkelman & Gruba, 2012; Kudryashova, Gorbatova, & Rozhkova, 2016) and teaching foreign languages (Alpala & Florez, 2011; Peachey, 2015; Shaykina, 2015). Overall, the findings of these studies concluded that blended learning environments have positive effects on students' foreign language learning.

Although there are many studies of blended learning environments for foreign language learning, there are few Turkish studies of this subject. This study aimed to convert the Basic English 1 and 2 courses taught at the Foreign Languages School (FLS) of a large public university in Ankara into blended learning using the ADDIE instructional design model and to transfer these courses to a web-based environment. The web-based learning environment prepared for this purpose covered the content of the lessons that were being taught in the classroom environment and was suitable for the blended learning environment that combined classroom activities with the online learning environment. To summarize, the aim of the study was to adapt a classroom course to blended learning and transfer it to the web-based environment. Designing blended learning opportunities for formal learning environments is a rising trend (Bilgic & Tuzun, 2015a), and the community can benefit from the documented design process.

Method

Research Design

This is a case study research project describing a design effort. In a case study, the researcher conducts a profound analysis of one event or multiple events in a given timeframe and describes either the events or the themes associated with these events. The researcher collects information using data collection tools that include multiple sources such as observation, interviews, documents, and reports (Creswell, 2007). Interviews along with document analysis were utilized to collect data in this study in order to guide the design efforts.

Study Group

The study was conducted with students and lecturers from the Foreign Languages School at a large public university in Ankara, Turkey. The study group was chosen through a convenience sampling method. The students and lecturers participated in the study on a voluntary basis.

The Design Process

The study converted the Basic English 1 and 2 classroom courses to the distance education format and transferred them to the web-based environment. Its underlying model was the ADDIE instructional design model. The ADDIE model is one of the most common models used in the design of e-learning systems. It is a systematic design model that consists of five steps (Analysis, Design, Development, Implementation, and Evaluation) (Driscoll, 1998) and contains the components of the other models (Akkoyunlu, Altun, & Soylu, 2008). In this model, all steps are interconnected with each other and are designed based on the outcomes of the previous step.

Analysis.In the first phase of the design, designers held semi-structured interviews with the lecturers in the FLS to identify their needs and contextual limitations. The designers obtained information about the knowledge and skills of the students who attended these courses, the expectations of the lecturers and students, and the various course objectives. The FLS has a preparatory year program and a modern languages program. The students who attend the preparatory year programs are those who are enrolled in a program with a preparatory year because they failed to obtain the required score on the Foreign Language Proficiency Exam at the beginning of the academic year. The students who cannot pass this exam are admitted to courses based on their examination scores. The modern languages program students are enrolled in the university's colleges and need to take mandatory Basic English 1 and 2 courses. A majority of the students fail and enroll in the Basic English 1 and 2 courses again, and there are also students who enroll in these courses several times. The level of attendance in these courses is very low.

In context of the analysis of the lessons, the designers obtained the textbooks and CDs used in the lessons, as well as curricula, course descriptions, course content, general and specific course attainments, and assessment criteria from the lecturers. The designers closely examined these resources and shaped the design process using this information. Basic English 1 and 2 are mandatory three-credit courses taught by the Modern Languages Unit. To attend Basic English 2, students must complete Basic English 1. Each lesson is taught for four hours a week (two theoretical and two practical hours). In the FLS, the practical lessons are taught on DynED software due to a shortage of classrooms and lecturers. Two written mid-term exams and a final exam are administered to assess the students' achievement.

Course content includes

- In both courses: instruction in reading comprehension, writing, listening comprehension and speaking, and beginner-level English grammar.
- In Basic English 1: the verb "to be" in positive, negative and interrogative sentences, the plural suffix and plural verbs, question sentences starting with "what", possessive pronouns and possessive suffixes, simple present tense in positive, negative, and interrogative sentences, countable and uncountable nouns (using "a," "an," "some" and "any"), possessive expressions ("have got"/"has got") and gerunds.
- Basic English 2: the expressions "there is" and "there are," frequency adverbs ("always," "usually," "often," "sometimes," "never"), prepositions ("in," "on," "above," "in front of," "under," "opposite," "next to"), present continuous tense in positive, negative, and interrogative sentences, the usage of "can" and "cannot" to express ability, past simple tense (the verb "to be" in positive, negative, and interrogative sentences with regular and irregular verbs).

The general objective of these courses is "to improve students' beginner-level English language skills." The general and specific objectives of the courses were provided by the lecturers, and the courses were designed based on them.

Design. After completing the analysis phase, the designers conducted the design phase, which included designing learning activities, assessments, methodology, and environments. This phase primarily focused on determining the Basic English 1 and 2 learning activities and adapting them to new presentation formats. The course content was changed by the FLS during the study, which made it necessary to create a flexible and general design for use in different contexts. When designing the learning units, the designers decided to use the subject format instead of Moodle's default weekly format.

In context of the course, the program supported grammar, reading comprehension, writing, listening comprehension, and speaking skills. Accordingly, the designers decided to provide texts with basic grammar rules for each subject and added videos to help improve grammar skills. Additionally, the design process focused on reading passages and corresponding exercises to improve reading comprehension skills. It was assumed that providing writing exercises with the help of open-ended questions after the presentation of various sample cases would support the improvement of writing skills. Subject-relevant audio files were included to enhance listening comprehension skills. Moreover, quizzes were added to allow students to assess themselves at the end of each subject. These quizzes were not graded, but the students could see their results

and the correct responses to the questions. After completing all the subjects, the designers prepared a general assessment examination to evaluate the students.

The planned duration of the courses was 15 weeks. The assessments were scheduled to be conducted every three weeks with two mid-terms and a final examination. It was determined that the first week's lessons should be conducted in the classroom environment to allow the lecturer and students to meet and share information related to the course. A week before the final exam, lessons would again be taught in the classroom for review purposes. For the rest of the course's 10 weeks, the lessons were planned as distance education. Moreover, the content of all weeks is not shared at the beginning of the term but is unveiled week by week to prevent students from seeing all the content when they first enter the environment as this may prevent them from returning.

This design used Moodle, an open-source Learning Management System, as the web-based learning environment. Moodle is a free LMS software that is widely used in higher education. It is easy to use and offers a broad range of tools for teaching on the web, including file sharing, hyperlinks, blogs, wikis, examinations, and discussion forums.

Development. After the design phase, the designers conducted the development phase where all teaching materials and multimedia components were developed and the format was evaluated. All the tools planned for use in the design phase were uploaded to the Moodle environment (Figure 1).

The lessons were recorded and uploaded as videos to convey the content to students. Since the lessons were continuing during the project design process, only the lectures of the last three weeks (weeks 8, 9, and 10) could be recorded. A brief grammar text related to each subject was also provided at the beginning of each week, particularly for the weeks when no video recording was available.

Porter (1997) claims that it is necessary to create suitable interactive environments in this phase to encourage the learners to be creative and enthusiastic about their future studies. Accordingly, the study made use of forums to plan discussions and provide interaction. A variety of videos and games were also included in the environment to make learning more entertaining, to increase students' motivation and help the students who do not attend the classroom lessons to get involved in activities in the web-based environment.

When designing the environment, the designers sought to make the subject titles understandable by using short and clear expressions. All links were embedded and opened in the same window as a blank page to foster both safety and usability. Eventually, the designers concluded that the design was simple enough and not distracting. The content was also presented in a similar fashion for consistency.

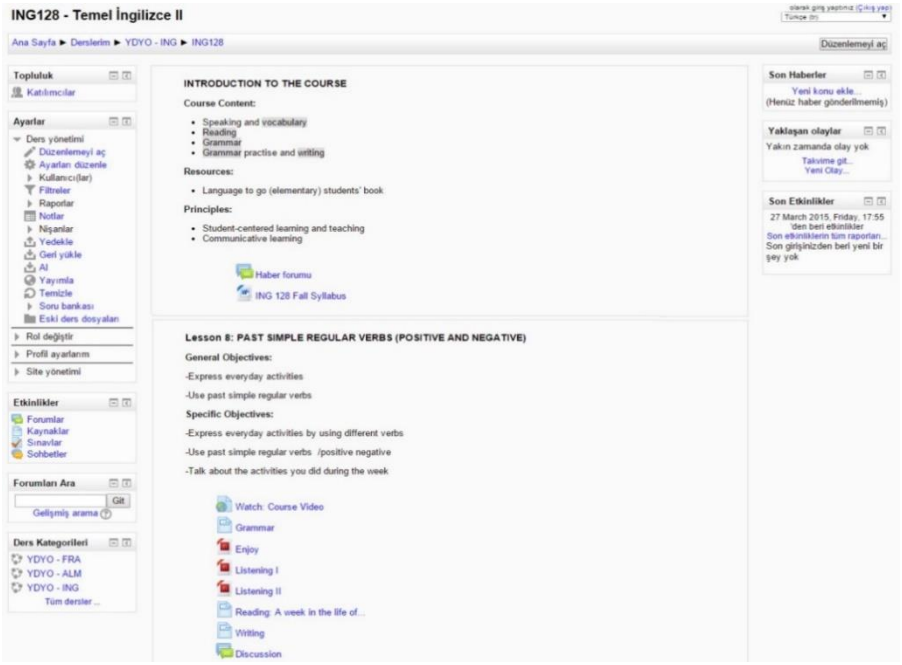


Figure 1. The Moodle homepage for Basic English 2

Implementation. After the teaching materials of Basic English 1 and 2 were transferred to the Moodle environment, a usability test was administered to three students who had previously attended these courses. Two of the students were male and one of them was female. The male participants were 19 and the female participant was 18 years old. The participants had not been involved in any web-based learning before. The participants had Internet access at their homes.

The aim of the usability test was to evaluate the environment from the users' point of view, develop an environment that is easy to use, increase users' satisfaction with the environment, and improve the environment based on their feedback (Rubin, 1994). Initially, the designers made plans for the usability test. Authentic tasks were created for the student testers, and the following were selected for the Moodle usability test:

1. Go to the address moodle.fls.university.edu.tr, and log into Basic English 1 with the username=XXX and the password= XXX.
2. Lesson 6 in Basic English 1: Answer the first three questions on the PRESENT SIMPLE (QUESTIONS AND NEGATIVES) quiz.
3. Lesson 8 in Basic English 1: Watch the lecture video for the subject HAVE/HAS GOT.

4. Lesson 7 in Basic English 1: Find the discussion topic A/AN, SOME/ANY, and participate in the discussion.
5. Lesson 9 in Basic English 2: Complete the writing task for PAST SIMPLE IRREGULAR VERBS.
6. Lesson 6 in Basic English 2: Listen to the audio in the listening section of the CAN FOR ABILITY subject.

The aim of the test was shared with the students at the beginning of the usability study. It was explained that the total duration of the test was 10 minutes and that they could leave the test if they wished. The students were also reminded that they were supposed to think aloud when performing the tasks in the environment. Thus, the participants made observations about the positive and negative aspects of the system as well as suggesting improvements. The designers noted the duration of each task. Their accomplishments of the tasks were graded from 1 to 5 (Table 1), 1 being not solved and 5 being solved.

The problems with the tasks were also noted. After the tasks were completed, the evaluation survey, which was created by the designers, was administered to obtain the users' positive and negative opinions about the system. The evaluation survey had items with scaled responses and open-ended questions. Table 2 presents these data.

The usability test produced remarkable data about the environment. The students had difficulty finding the button for comments in the forum in the fourth task (Basic English 1, Lesson 7: Find the discussion topic A/AN, SOME/ANY and participate in the discussion). To eliminate this problem, the "standard forum with general purpose" setting was replaced with "in-blog standard forum" on the forum settings. This made it easier for the students to find the button to write comments. One student opened the activity video instead of the lecture video in the third task (Basic English 1, Lesson 8: Watch the lecture video HAVE/HAS GOT). To solve this problem, the activity video, which was listed first, and the lecture video changed places, and the name of the lecture video was changed. The students stated that they had difficulty submitting their writing passages in the writing section. It was noted that there was no "Submit" button that students could use to send their writing passages, and the "Next" button, which had the same function, was perceived differently by the students. The "Next" button was renamed as "Submit" to address this problem.

Table 1

Usability Test Task Performance and User Experience Results

Task		***Task Duration***	***Accomplishment level of the tasks 1=Not solved 5=Solved***				
	User		***1***	***2***	***3***	***4***	***5***
	1	21 sec.					x
Task 1	2	28 sec.					x
	3	52 sec.				x	
	1	42 sec.			x		
Task 2	2	72 sec.		x			
	3	19 sec.					x
	1	12 sec.					x
Task 3	2	15 sec.					x
	3	9 sec.					x
	1	80 sec.			x		
Task 4	2	57 sec.		x			
	3	126 sec.		x			
	1	28 sec.			x		
Task 5	2	27 sec.			x		
	3	30 sec.			x		
	1	19 sec.					x
Task 6	2	9 sec.					x
	3	15 sec.					x

Table 2

Evaluation Survey and User Experience Results

	User	***Totally Disagree***	***Disagree***	***Neither Agree nor Disagree***	***Agree***	***Totally Agree***
1. I could use the Moodle System with no difficulties.	1			x		
	2			x		
	3			x		
2. The system helped me to learn the English lessons.	1		x			
	2		x			
	3				x	
3. The content of the system was understandable and suitable for me.	1		x			
	2			x		
	3				x	
4. The environment was sufficiently clear.	1			x		
	2	x				
	3			x		
5. I think the location of the menus in the system was suitable.	1				x	
	2		x			
	3		x			

Evaluation. In this final phase, the web-based learning environment created by the study was evaluated based on the feedback from the participants in the implementation phase, and the environment was altered to address their difficulties and suggestions. The participants used the environment in the usability test, which included authentic tasks. The problems, which designers did not recognize until the usability test, were identified by the students in this phase. At the end of the usability test, the designers reviewed and evaluated these problems, offered the most appropriate solutions for the content of the environment and prepared the environment for use.

Discussion and Conclusion

This study presented the design process of the Basic English 1 and 2 courses taught at the Foreign Languages School (FLS) of a large-scale public university in Ankara, Turkey. The study aimed to offer solutions to problems of classroom teaching including time, place, and number of lecturers. The designers conducted a planned and systematic design process based on the ADDIE instructional design model. At the end of the design process, the course content was transferred to the Moodle environment, and a usability test was administered to the participants to determine its usability. The designers revised the environment's design based on participants' feedback. Eventually, the study presented an environment that was suitable for blended learning educational activities that mainly used distance education.

In this study, blended learning was used in foreign language teaching. In foreign language teaching, blended learning provides an ideal and flexible learning environment that affects the learning process positively (Cahyono & Mutiaraningrum, 2016; Chan, 2014; Pinto-Llorente et al., 2016; Prescott et al., 2017; Wright, 2017). Krasnova and Ananjev (2015) point out that blended learning has many advantages over traditional foreign language learning methods. They state that blended learning provides self-learning, collaborative work, instant feedback, and interaction flexibility. Additionally, blended learning offers many motivational and meaningful learning opportunities for students (Rybushkina & Krasnova, 2015). Emelyanova and Voronina (2017) emphasize that students are mostly positive about blended learning and are willing to use a distance learning platform in foreign language lessons. Pinto-Llorente et al. (2017) noted that perceptions and attitudes towards blended learning tools (podcasts, videocasts, online tests, online dictionaries, and forums) have changed quite positively despite the fact that most of the students had not used them before. It is also stated that the blended learning environment is more efficient than the traditional learning approach. In this respect, Wright (2017) observed that the development of language skills was a significant difference in the language performance of the group in which the blended learning environment was used.

Studies have been carried out on the development of foreign language grammar, reading comprehension, writing, listening comprehension, and speaking skills, especially in the blended learning environment. Many studies in the literature of the field show that blended learning environments are effective in the development of these skills. For example, the study of Pinto-Llorente et al. (2017) shows that the blended learning model in Moodle contributes to the development of grammar skills (parts of speech, sentence types, and vocabulary). Similarly, Emelyanova and Voronina (2017) emphasized that the limited duration of faculty teaching provided a major obstacle to the development of a complex skill such as listening. On this topic, they emphasized that the use of blended learning in foreign language teaching improves the listening skills of the students by giving them the opportunity to reach the materials related to the listening activities at any time and place and to learn at their own pace.

Awan, Azher, Anwar, and Naz (2010) indicated that anxiety about learning a language can be a significant barrier to successful language acquisition. In this respect, it is very important that the anxiety factor not be ignored and that the students are not left alone to confront this problem. In this context, blended learning environments encourage learning autonomously by improving self-learning skills and increasing internal motivation (Liu, 2013). Hence, blended learning environments can be an effective learning tool for increasing students' beliefs in their abilities and helping teachers to raise awareness of the students' own potential.

At the beginning of the design period, the designers interviewed the instructors who worked in the FLS to determine user needs. While some of the instructors indicated that the course should be conducted entirely online, some have indicated that the distance education system should be used as support for classroom instruction. The instructors who expressed the opinion that the course should be conducted entirely online cited student success as a basis for this. Accordingly, the success of the students taking the course is very low and many students re-take these courses. Using blended learning environments that combine online and classroom instruction is important for student achievement, satisfaction, and participation. In this direction, a blended learning environment has been prepared. Similarly, Means, Toyama, Murphy, Bakia, and Jones (2009) found that teaching with a combination of online and classroom elements was more advantageous for learner achievement than teaching only in the classroom or only online.

The design team worked with the students and lecturers who would be using the system to take into account their needs and recommendations to shape the design. Since there were no subject-matter experts on the design team, the designers obtained support from the experts in the FLS. Additionally, designers sought expert opinions on distance education and human-computer interaction during the design process. Furthermore, participants were given the opportunity to use the environment with a

usability test where they could perform certain authentic tasks. The obtained data were used to revise the design. Similar studies (Dogan et al., 2011; Tuzun et al., 2011; Tuzun and Cinar, 2016) emphasize that co-operation between designers, experts, trainers, and students will save time and resources. Cagiltay (2011) and Bilgic and Tuzun (2015b) suggest that support should be provided about how instructional technologies can be used and designed, that various activities should be organized to make teachers and students use technological facilities effectively and productively, and that instructional technology support offices should be established, specifically in Turkey, to allow for new studies be conducted. Cagiltay (2011) also stresses that it is also important to analyze the studies conducted in foreign countries to attain these goals.

The designers in this research discussed the course content and format with the instructors at the beginning of the design process. The data obtained from the interviews were used in the design process. At the beginning of the design process, educational needs should be evaluated, and it should be determined whether they can be satisfied by distance education. Limitations including budget, time, and cost should clearly be identified at the beginning of the process. Tuzun and Cinar (2016) emphasized that conducting needs analysis and preliminary studies are important in terms of teaching effectiveness prior to designing a distance education course. Sales (2010) emphasized that it is very difficult to design an e-learning product that is at once cheap, fast, and high quality and that typically only two of these three criteria are satisfied. The popularization of LMSs, the creation of learning objects repositories, and the development of learning environments make it possible for instructors to prepare web-based courses using e-learning environments without having programming skills. Instructors use these tools to produce fast and cheap learning products. However, it has been documented that quality learning products cannot be created in these environments. This reduces students' enthusiasm for using them. Sales (2010) made the following suggestions about the process of designing a quality e-learning product: a) an instructional design model should be the basis, b) a systematic approach should be used, c) not only subject-matter experts, but also e-learning designers should be involved, d) instead of developing cheap and low quality content, quality content should be developed at a little more cost, and e) cost-benefit analyses should be conducted to ensure a balance of quality, cost, and effectiveness.

In this study, synchronous and asynchronous communication tools were used in order to provide teacher-student and student-student communication and encourage collaboration among students. In order to increase the effectiveness of teaching and get students to participate in learning, it is important that discussion panels, chat rooms, forums, and blogs be used and relevant activities be designed to help students communicate with teachers and other students and access the content and the environments to study cooperatively (Means et al., 2009). Challob, Bakar, and Latif (2016) emphasize that one of the most important factors for the success of blended

learning environments in foreign language teaching is the creation of a collaborative learning environment. Accordingly, in a blended learning environment, cooperative learning tools are used to help learners give feedback to each other's missing or incorrect information and, in so doing, feel more independent and confident. This also encourages students to share their knowledge and learning experiences.

It is important to stipulate that the system be improved according to feedback given after students/learners use it. The design process is iterative, and the product should be improved continuously. Accordingly, Tuzun et al. (2011) emphasized that the use of the newly-created environment should be monitored, opinions should be obtained from students and instructors about the process, and the course design should be conducted in an iterative way with continuous improvements.

This study has some limitations to consider when planning future research. One is the size of the sample group, and it is recommended that larger participant groups be used in future studies. Another limitation is the instructional design model used in the design process. This study followed the ADDIE model and future studies might utilize a different instructional design model and document its effectiveness. Also, the involvement of a subject-matter expert in the design team in future studies about course design in distance education will make it possible to carry out a more effective and rapid design process. The support offices that will be established will not only help teachers use the instructional technologies effectively but will also enhance their desire and willingness to participate in e-learning and make them and their students more inclined to use technologies in classroom activities. A project member who is a technical expert should also be included in the design team to reduce technical difficulties with the design process. Activities should be organized to increase students' communication with their instructors and other students. Discussion tools should be included in the design since students will not have the chance to meet each other and the instructor, especially if all the lessons are taught through distance education. Using tools that provide synchronous communication, such as video conferencing, in addition to asynchronous communication tools will increase students' communication with the instructor and their peers.

Acknowledgements

The authors would like to thank the students and the lecturers from the Foreign Languages School for participating in the study and the director of the Foreign Languages School for permitting the data collection in context.

References

Akkoyunlu, B., Altun, A., & Soylu, M. Y. (2008). *Ogretim tasarimi*. Ankara: Maya Akademi.

Alpala, C. A. O., & Florez, E. E. R. (2011). Blended learning in the teaching of English as a foreign language: An educational challenge. *HOW Journal, 18*(1), 154-168.

Al Zumor, A. W. Q., Al Refaai, I. K., Eddin, E. A. B., & Al-Rahman, F. H. A. (2013). EFL students' perceptions of a blended learning environment: Advantages, limitations and suggestions for improvement. *English Language Teaching*, *6*(10), 95.

Awan, R.-U. N., Azher, M., Anwar, M. N., & Naz, A. (2010). An investigation of foreign language classroom anxiety and its relationship with students' achievement. *Journal of College Teaching & Learning, 7*(11), 33-40.

Balci, B. (2010). E-ogrenme programi tasarim surecleri. In G. Telli-Yamamoto, U. Demiray, & M. Kesim (Ed.), *Turkiye'de e-ogrenme: Gelismeler ve uygulamalar* (pp. 83-110). Ankara, Cem Web Ofset.

Berger, C., & Kam, R. (1996). *Definitions of instructional design*. Retrieved from http://www.umich.edu/~ed626/define.html.

Bilgic, H. G., & Tuzun, H. (2015a). Web tabanli uzaktan egitim programlarinin yuksekogretim kurumlarinda acilmasi sureci. In B. Akkoyunlu, A. Isman, & H. F. Odabasi (Ed.), *Egitim teknolojileri okumalari 2015* (pp. 469-491). Ankara, Turkey: Ayrınti Basim Yayin.

Bilgic, H. G., & Tuzun, H. (2015b). Yuksekogretim kurumlari web tabanli uzaktan egitim programlarinda yasanan sorunlar. *Acikogretim Uygulamalari ve Arastirmalari Dergisi, 1*(3), 26-50.

Bueno-Alastuey, M. C., & Lopez Perez, M. V. (2014). Evaluation of a blended learning language course: Students' perceptions of appropriateness for the development of skills and language areas. *Computer Assisted Language Learning, 27*(6), 509-527.

Cagiltay, K. (2011). Universite ve ogretim teknolojileri destek ofisi: Mevcut durum ve Turkiye universiteleri icin gerekliligi. *Uluslararası Yuksekogretim Kongresi: Yeni yonelisler ve sorunlar (UYK-2011), İstanbul* (pp. 1597-1603).

Cahyono, B. Y., & Mutiaraningrum, I. (2016). Indonesian EFL teachers' familiarity with and opinion on the internet-based teaching of writing. *English Language Teaching, 9*(1), 199.

Challob, A. I., Bakar, N. A., & Latif, H. (2016). The influence of blended learning on EFL students' writing apprehension and writing performance: A qualitative case study. *European Journal of Multidisciplinary Studies, 1*(2), 253-265.

Chan, W. M. (2014). Video podcasting as a supplementary language learning tool. A study of its use, student access and perceptions. *Electronic Journal of Foreign Language Teaching, 11*(1), 183-206.

Cigdem, H., Ozturk, M., & Topcu, A. (2016). Vocational college students' acceptance of web-based summative listening comprehension test in an EFL course. *Computers in Human Behavior, 61*, 522-531.

Cinar, M., & Tuzun, H. (2016). Web-based course design models. In M. M. Pinheiro & D. Simões (Ed.), *Handbook of research on engaging digital natives in higher education settings* (pp. 374-395). Hershey, PA: Information Science Reference.

Creswell, J. W. (2007). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Dogan, D., Tuzun, H., Daghan, G., Altintas, A., Ilgaz, H., Ozdinc, F., Kayaduman, H., & Ozpala, N. (2011). Uzaktan egitimde ders tasarımı: Yuz yuze verilen bir dersin uzaktan egitim surecine hazir hale getirilmesi [Course design for distance education: Getting a class thought face to face ready for distance education]. *5th International Computer Education and Instructional Technologies Symposium Proceedings* (pp. 1037-1043).

Driscoll, M. (1998). *Web-based training: Using technology to design adult learning experience*. San Francisco, CA: Jossey-Bass Pfeiffer.

Emelyanova, N., & Voronina, E. (2017). Introducing blended learning in the English language classroom: Students' attitudes and perceptions before and after the course. *Knowledge Management & E-Learning, 9*(1), 33–49.

Eydelman, N. (2015). A blended English as a foreign language academic writing course. In B. Tomlinson & C. Whittaker (Ed.), *Blended learning in English language teaching: Course design and implementation* (pp. 43-62). London: England: British Council.

Ferriman, N. (2013). The impact of blended e-learning on undergraduate academic essay writing in English (L2). *Computers & Education, 60*(1), 243-253.

Garrison, R. D., & Kanuka, H. (2004). Blended learning: Uncovering its transformative potential in higher education. *Internet and Higher Education, 7*, 95-105.

Hilliard, A. T. (2015). Global blended learning practices for teaching and learning, leadership and professional development. *Journal of International Education Research, 11*, 179-187.

Hinkelman, D., & Gruba, P. (2012). Power within blended language learning programs in Japan. *Language Learning & Technology, 16*(2), 46-64.

Krasnova, T., & Ananjev, A. (2015). Students' perception of learning in the online discussion environment. *Mediterranean Journal of Social Sciences*, *6*(6 S1), 202-207.

Kudryashova, A. V., Gorbatova, T. N., & Rozhkova, N. E. (2016). Developing a blended learning based model for teaching foreign languages in engineering institutions. *SHS Web of Conferences, Tomsk, Russia* (pp. 1-4).

Limongelli, C., Sciarrone, F., & Vaste, G. (2011). Personalized e-learning in Moodle: The moodle LS system. *Journal of E-Learning and Knowledge Society, 7*(1), 49-58.

Liu, M. (2013). Blended learning in a university EFL writing course: Description and evaluation. *Journal of Language Teaching and Research*, *4*(2), 301-309.

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of evidence-based practices in online learning: A meta-analysis and review of online learning studies*. Washington, DC: US Department of Education, Office of Planning, Evaluation, and Policy Development.

Peachey, N. (2015). A blended learning teacher development course for the development of blended learning in English Language Teaching. In B. Tomlinson & C. Whittaker (Ed.), *Blended learning in English language teaching: Course design and implementation* (pp. 65-74). London: England: British Council.

Pinto-Llorente, A. M., Sanchez-Gomez, M. C., & Garcia-Penalvo, F. J. (2016). Assessing the effectiveness of interactive and collaborative resources to improve reading and writing in English. *International Journal of Human Capital and Information Technology Professionals (IJHCITP), 7*(1), 66-85.

Pinto-Llorente, A. M., Sanchez-Gomez, M. C., Garcia-Penalvo, F. J., & Casillas-Martin, S. (2017). Students' perceptions and attitudes towards asynchronous technological tools in blended-learning training to improve grammatical competence in English as a second language. *Computers in Human Behavior*, *72*, 632-643.

Porter, L. (1997). *Creating the virtual classroom: Distance learning with the internet.* Toronto: John Wiley & Sons.

Power, M. (2009). *A designer's log: Case studies in instructional design*. Athabasca, AB: Athabasca University Press.

Powell, A., Watson, J., Staley, P., Patrick, S., Horn, M., Fetzer, L., & Verma, S. (2015). *Blended learning: The evolution of online and face-to-face education from 2008-2015. Promising practices in online learning.* Vienna, VA: International Association for K-12 Online Learning.

Prescott, J. E., Bundschuh, K., Kazakoff, E. R., & Macaruso, P. (2017). Elementary school-wide implementation of a blended learning program for reading intervention. *The Journal of Educational Research*, 1-10.

Reigeluth, C. M., & Frick, T. W. (1999). Formative research: A methodology for creating and improving design theories. In C. M. Reigeluth (Ed.), *Instructional design theories and models* (Vol. 2, pp. 633-652). Mahwah, NJ: Lawrence-Erlbaum Associates.

Rubin, J. (1994). *The handbook of usability testing: How to plan, design and conduct effective tests*. New York, NY: John Wiley.

Rybushkina, S., & Krasnova, T. (2015). Key factors to use blended learning in teaching foreign languages in Russian engineering universities. EDULEARN_15 Proceedings, 6886-6892.

Sales, G. C. (2010). Can modern e-learning development follow a process that ensures quality? *Contemporary Educational Technology, 1*(1), 93-94.

Shaykina, O. I. (2015). Blended learning in English language teaching: Open educational resources used for academic purposes in Tomsk Polytechnic University. *Mediterranean Journal of Social Sciences, 6*(3), 255-260.

So, L., & Lee, C. H. (2013). A case study on the effects of an L2 writing instructional model for blended learning in higher education. *Turkish Online Journal of Educational Technology (TOJET)*, *12*(4), 1-10.

Sun, Z., & Qui, X. (2016). Developing a blended learning model in an EFL class. *International Journal of Continuing Engineering Education and Life Long Learning, 27*(1-2), 4-21.

Tomlinson, B., & Whittaker, C. (2013) *Blended learning in English language teaching: Course design and implementation*. London: British Council.

Tuzun, H. (2001). Guidelines for converting existing courses into web-based format. *Annual Proceedings of Selected Research and Development. Papers Presented at the National Convention of the Association for Educational Communications and Technology* (pp. 360-370).

Tuzun, H., Bilgic, H. G., Kalayci, E., Cinar, M., Akinci, A., Yildirim, D., & Yuksel, Y. (2011). Yerlesik bir dersin web-tabanli uzaktan egitim icin yeniden tasarimi. In B.B. Demirci, G. Telli-Yamamoto, & U. Demiray (Ed.), *Turkiye'de e-ogrenme: Gelismeler ve uygulamalar II* (pp. 175-199). Eskisehir, Turkey: Anadolu Universitesi Yayinlari.

Tuzun, H., & Cinar, M. (2016). Guidelines for transferring residential courses into web. *International Review of Research in Open and Distributed Learning, 17*(4), 145-165.

Ueda, H., & Nakamura, M. (2016). GakuNinMoodle: Toward robust e-learning services using Moodle in Japan. *Procedia Computer Science, 96*(2016), 1710-1719.

Wright, B. M. (2017). Blended learning: Student perception of face-to-face and online EFL Lessons. *Indonesian Journal of Applied Linguistics*, *7*(1), 64-71.

Yang, Y. T. C., Chuang, Y. C., Li, L. Y., & Tseng, S. S. (2013). A blended learning environment for individualized English listening and speaking integrating critical thinking. *Computers & Education, 63*, 285-305.

Yüz Yüze Verilen Bir Dersin Web Tabanlı Karma Öğrenmeye Uyarlanması

Atıf:

Ozmen, B., Tepe, T., & Tuzun, H. (2018). Adapting a residential course to web-based blended learning. *Eurasian Journal of Educational Research, 75*, 115-136, DOI: 10.14689/ejer.2018.75.7

Özet

Problem Durumu: Uzaktan eğitim yoluyla yürütülen bir dersin hedeflenen öğrenme çıktılarının elde edilmesi amacıyla tasarlanmasında, öğretim tasarımı modellerinden faydalanmak önem taşımaktadır. Bu kapsamda, öğretim tasarımcıları öğretim etkinliklerinin tasarlanması için var olan modelleri kullanmanın yanı sıra öğrenenlerin bireysel gereksinimlerini karşılamak, etkili ve verimli bir öğretim süreci düzenlemek amacıyla farklı modellere ihtiyaç duyabilmektedir. Yüz yüze verilen yabancı dil derslerinin karma öğrenme ortamı kullanılarak web tabanlı formata dönüştürülmesinde tasarım sürecine ilişkin çalışmaların azlığı göze çarpmaktadır.

Araştırmanın Amacı: Bu çalışmada Ankara'da bir Devlet Üniversitesinin Yabancı Diller Yüksek Okulu'nda (YDYO) yürütülmekte olan Temel İngilizce I ve Temel İngilizce II derslerinin ADDIE öğretim tasarımı modeli kullanılarak uzaktan eğitim ile verilebilecek biçime dönüştürülmesi ve web tabanlı ortama aktarılması amaçlanmıştır. Web tabanlı karma öğrenme ortamı, halihazırda yüz yüze sınıf ortamında yürütülmekte olan Temel İngilizce I ve Temel İngilizce II derslerinin içeriklerini kapsayacak şekilde ve sınıf içi uygulamaların çevrimiçi öğrenme ortamıyla birleştirildiği karma öğrenme yaklaşımına uygun bir biçimde tasarlanmıştır.

Araştırmanın Yöntemi: Bu çalışma bir tasarım çabasını betimleyen durum çalışması olarak desenlenmiştir. Çalışmada, bir Yabancı Diller Yüksek Okulu'nda yüz yüze yürütülmekte olan Temel İngilizce I ve Temel İngilizce II derslerinin uzaktan eğitim yoluyla verilebilecek biçimde dönüştürülerek web tabanlı ortama aktarılması gerçekleştirilmiştir. Bu doğrultuda, çalışmanın tasarım sürecinde ADDIE öğretim tasarımı modeli temel alınmıştır. Çalışma kapsamında, ADDIE modeline uygun olarak analiz aşamasında, ihtiyaç ve sınırlılıkları belirlemek amacıyla YDYO'da görev yapan öğretim elemanlarıyla görüşmeler yapılmıştır. Bu görüşmeler ile söz konusu dersleri alan öğrencilerin sahip olduğu bilgi ve beceriler, öğretim elemanlarının ve öğrencilerin beklentileri, dersin amaçlarına ilişkin bilgiler elde edilmiştir. Tasarım aşamasında, Temel İngilizce I ve Temel İngilizce II derslerine ilişkin öğrenme etkinliklerinin belirlenmesi ve bunların sunulma biçimleri üzerinde yoğunlaşılmıştır. Her iki dersin içeriği 15'er hafta olacak şekilde dilbilgisi, okuma-anlama, yazma, dinleme-anlama ve konuşma becerilerini kapsayacak şekilde tasarlanmıştır. Geliştirme aşamasında

tasarım aşamasında kullanılması planlanan tüm araçlar Moodle ortamına eklenmiştir. Bazı haftalarda video çekimleri yapılarak derslerin haftalık içerikleri video izleme, dilbilgisi konu anlatımı, okuma, dinleme, oyun, kısa testler ve tartışma forumları konularını kapsayacak şekilde sıralanmıştır. Uygulama aşamasında öğrencilerle kullanılabilirlik testleri yapılmış ve tasarım sürecindeki eksiklikler belirlenmiştir. Tasarım sürecinin son basamağı olan değerlendirme basamağında ise kullanılabilirlik testi sonucu öğrencilerden gelen dönütlere yönelik içeriklerde iyileştirmelere gidilmiştir.

Araştırmanın Bulguları: Kullanılabilirlik testi çalışması sonucunda oluşturulan ortama ilişkin önemli veriler elde edilmiştir. Dördüncü görevde (Temel İngilizce I dersinde Lesson 7: A/AN, SOME/ANY tartışma konusunu bulup katılım sağlayınız) öğrencilerin foruma yorum yazma butonunu bulmakta sorun yaşadıkları gözlemlenmiştir. Bu sorunun giderilmesi için forumun ayarlarından, var olan ayar "genel amaçlı standart forum" değiştirilerek "blog içinde standart forum" yapılmıştır. Bu sayede öğrencilerin yorum yazma butonunu bulması daha kolay hale getirilmiştir. Bir öğrencinin üçüncü görevde (Temel İngilizce I dersinde Lesson 8: HAVE/HAS GOT ders videosunu izleyiniz) ders videosunu açmak yerine etkinlik videosunu açtığı gözlemlenmiştir. Bunun çözümü olarak ilk sırada yer alan etkinlik videosu ile ders videosu yer değiştirilerek etkinlik videosunun ismi değiştirilmiştir. Öğrenciler yazma (writing) bölümünde yazdıklarını göndermede sorun yaşadıklarını belirtmişlerdir. Öğrencilerin yazdıklarını gönderirken "gönder" butonunun olmadığı, onun işlevi olarak "sonraki" butonunun olmasının öğrencilerde farklı bir algı oluşturduğu anlaşılmıştır. "Sonraki" butonu "gönder" olarak isimlendirilmiştir.

Araştırmanın Sonuçları ve Önerileri: Tasarım sürecinin başında öncelikle var olan durum ve ihtiyaçlar göz önünde bulundurularak nelere ihtiyaç duyulduğuna ve söz konusu eğitim ihtiyacının uzaktan eğitim ile giderilip giderilemeyeceğine karar verilmesi önem taşımaktadır. Bu kapsamda, sürecin başında bütçe, zaman ve maliyet gibi sınırlılıkların net bir biçimde belirlenmesi gerekmektedir. ÖYS'lerin yaygınlaşması, öğrenme nesnesi depolarının oluşturulması ve öğrenme çevrelerinin geliştirilmesi ile programlama becerisi gerekmeden öğretim elemanlarının e-öğrenme ortamlarını kullanarak web tabanlı dersler hazırlayabilmelerine olanak sağlamaktadır. Öğretim elemanları bu araçları hızlı ve ucuz öğrenme ürünleri üretmede kullanmaktadır. Ancak, bu ortamlarda kaliteli öğrenme ürünlerinin ortaya konulamadığı göze çarpmaktadır. Bu durum ise, öğrencilerin söz konusu ortamları kullanma konusundaki isteklerini azaltmaktadır. Tasarlanacak ortamın kullanımıyla birlikte alınacak dönütler ile sistemin iyileştirilmesi ve tasarım sürecinin aslında birikimli bir süreç olduğu ve ortaya çıkacak ürünün sürekli geliştirilmesi gerektiğinin kabul edilmesi önem arz etmektedir. İleride kurulacak destek ofisleri, hem öğretim teknolojilerinin etkin kullanımının sağlanmasında öğretmenlere katkı sağlayabilecek hem de öğretmenlerin bu konudaki gönüllülük ve istekliliklerini arttırarak

öğretmenlerin ve dolayısıyla öğrencilerin bu teknolojileri sınıf içi etkinliklerde kullanımlarına ilişkin yatkınlıklarını arttırabilecektir. Ayrıca tasarım sürecinde yaşanabilecek teknik aksaklıkları azaltmak amacıyla tasarım ekibine bir de teknik açıdan donanımlı bir proje üyesi dahil edilmesi önerilmektedir. Öğrencilerin öğretim elemanı ve diğer arkadaşlarıyla iletişimini arttıracak etkinlikler düzenlenmesi gerekmektedir. Özellikle derslerin tümü uzaktan eğitim yoluyla verildiğinde öğrencilerin birbirlerini ve öğretim elemanını tanıma fırsatı olmayabileceğinden tartışma ortamlarının tasarımda bulundurulmasına özen gösterilmelidir. Bu kapsamda, eş zamansız iletişimin sağlanabileceği araçların yanı sıra video konferans araçları gibi eş zamanlı iletişimin sağlanacağı araçların kullanılması da öğrencilerin öğretim elemanı ve akranlarıyla iletişimini arttırabilir.

Anahtar kelimeler: ADDIE öğretim tasarımı modeli, uzaktan eğitim, yabancı dil öğrenme, öğretim tasarımı, öğrenme yönetim sistemleri.