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## The Effect of Multimedia Learning Activities on Teaching Turkish as a Foreign Language

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In this study, it is aimed to reveal the effect of multimedia learning activities on teaching Turkish as a foreign language. The quasi-experimental method with a pretest-posttest control group was used in the research. The experimental process was carried out with the students in the experimental group using multimedia activities and the control group students of traditional education methods. Academic success and language skills in teaching Turkish as a foreign language were measured using two separate measurement tools. The Academic Achievement Test in Teaching Turkish to Foreigners was used to measure the academic achievement levels in Turkish, and the Turkish Language Skills Assessment Rubric was used to measure the language skill levels. Both the Turkish academic achievement levels and the Turkish language skill levels of the students who used multimedia activities had a higher increase than the students who used traditional methods. According to the findings, it has been revealed that teaching Turkish as a foreign language by using multimedia activities is more effective and productive than traditional methods. Given the favorable impact that multimedia resources have on the teaching of Turkish as a foreign language, it is critical to create multimedia activities for all levels of education in the field and to guarantee that students and teachers have access to them.

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## Introduction

Since the existence of human beings, there has been a desire to communicate in every society and to leave a message to the societies that follow. It is seen that in prehistoric societies, they used the most convenient methods of that time, which are quite primitive for today, in order to convey messages and communicate. The geography in which people grew up and the objects they used had a significant impact on language development and caused various languages to be shaped. People who multiply and disperse to various places have realized that language varies according to the places where they are used. The globalizing and developing world brings with it many innovations. With the development of international

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educational activities and social, political, economic and cultural relations, the need for learning a foreign language has increased. For this reason, foreign language teaching has great importance in developing and developed countries. Countries that teach their language to foreigners also aim to transfer their culture, lifestyle and their own assets to the language learner. The person who tends to learn a new language, on the other hand, has the opportunity to improve himself by sailing to a different country and culture as well as his own culture. A person who learns a foreign language cannot isolate himself from the society and geography where that language is spoken. In fact, due to his desire to learn the language, he starts to become more interested in the culture and geography of the society by feeling close to him. In this context, it can be said that one of the most effective and easy ways to introduce a country is to teach its own language to foreigners. Due to Türkiye geopolitical location, the aforementioned relations with other countries have increased. Therefore, the demand for teaching Turkish as a foreign language has increased. In this context, studies in this field have gained momentum in recent years.

There are technological materials that make access to information easier in the twenty-first century, also known as the information era. The dizzying rapid development of technology has made room-size computers smaller and fit in pockets. In this way, it was possible to access the information in the books full of libraries everywhere. As technology develops, the use of technology in education has developed in parallel with technology. Increasing demands for foreign language teaching have led to the need to use technology in language teaching and computer-assisted multimedia has begun to be used in the field of foreign language teaching (Sülükçü & Karabörk, 2011). According to the constructivist education system, the teacher is the guide and the students are active. The teacher determines the methods and techniques that will increase the interest and motivation of the students towards the lesson by arranging the lesson topics in accordance with the students' levels. The fact that the prepared materials appeal to more than one sense organ accelerates learning and makes it permanent. People remember 10% of what they read, 20% of what they hear, 30% of what they see, 50% of what they see and hear, 70% of what they say, and 90% of what they see, hear, say and do (Demirel, 2011). Considering that multimedia activities are based on visual and auditory materials; it can be said that permanent and effective language teaching can be carried out easily by using multimedia activities. The prepared materials should appeal to more sense organs of language learners. In this case, it is of great importance that the student is taken to the center and benefit from multimedia activities. Multimedia materials are at a level that both teachers and students can use. The teacher has the opportunity to develop his own software in case he cannot reach a software with the desired content. This developed material should provide a permanent change in the behavior of the student and increase his interest in learning (Gürbüz & Dursunoğlu, 2018). It is seen that most of the studies carried out to reveal the effect of the developed materials on learning skills have achieved positive results (Gürbüz & Dursunoğlu, 2018). Multimedia activities used in the education and training process not only alleviate the burden of the teacher but also increase the motivation of the students and enable them to participate in the lesson (Özdemir, 2013).

Multimedia tools save time by being versatile and useful. One of the important points that should not be ignored is that multimedia tools provide great benefits to teachers and students in foreign language teaching. In addition to all these, interactive multimedia tools increase the efficiency of learning by providing more fun and independent environments for students with learning difficulties (Ahmad, 2020). However, it should not be forgotten that if it is not used in accordance with its purpose, it can have negative consequences. In order to eliminate such problems or to minimize their effects, academic studies can be conducted to inform students

and teachers. It is thought that this study will contribute to the literature in the field of teaching Turkish to foreigners by shedding a light on the elimination of all these problems and will reveal the positive and negative effects of multimedia activities on the field.

Foreigners' interest in the Turkish language and culture is increasing day by day. It is seen that the studies of researchers in this field have increased in parallel with this increase (Göçer & Moğul, 2011). On the other hand, İşcan (2012) states that most of the studies on teaching Turkish as a foreign language in the literature are related to the method and technique used. For this reason, it emphasizes the need to increase the number of studies conducted to improve teaching Turkish as a foreign language (İşcan, 2012). In recent years, "The Project for Integration of Syrian Students into the Turkish Education System (PIKTES)" has been launched in order to ensure the rapid adaptation of our immigrant guests living in our country to Turkish culture. The aim of this project, carried out jointly by Türkiye and the European Union, is to teach Turkish to children of foreign immigrants, most of whom are Syrian nationals (İnal & Korkmaz, 2019).

Considering the importance of the use of multimedia in language teaching, this research aimed to determine the effect of multimedia activities on the academic success of students in teaching Turkish as a foreign language. Despite the increase in multimedia tools used in language teaching, it is thought that both language teachers and students do not have the skills to use it (Gürbüz & Dursunoğlu, 2018). In addition, it is not known whether the multimedia tools used are sufficient in number and the level of their effect on academic success.

When the literature is examined, it is seen that the studies mostly focus on teaching English as a foreign language. It is expected that our study will fill the gap in the literature in this respect, as the number of studies on teaching Turkish as a foreign language is not sufficient, as well as the diversity. It is thought that the research will have an encouraging effect on language teachers to use multimedia materials in the field of teaching Turkish for foreigners.

In order to find answers to these questions, the problem of this research is "What is the effect of multimedia activities on teaching Turkish as a foreign language?" poses a question. In addition, answers to the following research questions will be sought in this context:

- (1) Do multimedia activities have an effect on students' academic achievement in learning Turkish as a foreign language?
- (2) Do multimedia activities have an effect on students' Turkish language skills in learning Turkish as a foreign language

### ***Foreign Language Teaching***

Humans are the only living creature in the world of living things that transforms by seeing and interpreting their surroundings in order to better understand the universe and its place within it. Human beings, who communicate with each other by using sounds in a systematic way, have stepped into scientific and technological developments. From this point of view, it can be said that the system underlying all innovations in today's world is language. According to the Turkish Language Association, language is a sound sign system that people use to tell what they hear and think (TLA, 2020). People who want to learn new languages other than their mother tongue are in search of new ones.



### **Foreign Language Teaching Principles**

When it comes to any teaching, the concepts of "method" and "approach" appear. Undoubtedly, these concepts are also important determinants in foreign language teaching. However, it is necessary to know the principles of language teaching before the concept of method and approach in foreign language teaching. Having a road map that includes generalizable rules for "what" and "how" in the field of foreign language teaching will make the teaching process more beneficial (Demirel, 1993). When the relevant literature is examined, it is seen that the following principles are mentioned in foreign language teaching:

*Skills Principle:* Education should be started with the development of monitoring, internal understanding, listening and speaking skills (Demirel, 1993).

*Principle of Usability:* In education, the teaching of the words that the student needs in his daily life should be given priority (İnce, 2018).

*Principle of Realism:* Since there may be people from more than one nationality in the classroom environment where Turkish will be taught, pronunciation should be given importance (Barın, 2004). Otherwise, the perception of the sentence and speech becomes difficult (Karatay, 2007).

*Input Principle:* Students' readiness levels should be considered in teaching and new knowledge should be built on old knowledge (Krashen & Terrel, 1983).

*Principle of Practice:* Students should be given the opportunity to be in an environment where they can apply the information they learned in the textbooks (Barın, 2004, p. 25).

*Feedback Principle:* When mistakes made by students in language teaching are noticed, they should be corrected immediately. (Barın, 2004).

*The Equality Principle:* It is the most democratic of the principles. Since there is a teacher-student relationship, the teacher should give every student the right to speak. Even if the opinions of the students who have the right to speak are wrong, the student should be listened to until the end and their opinions should be valued (İnce, 2018).

*Principle of Responsibility:* Students should be held responsible only for what they learn. Otherwise, failure will cause low motivation (İnce, 2018).

*Ideal Speed Principle:* Content should be transferred in the most ideal way in order to keep the student active in the teaching environment. The main purpose of teaching should not be to train the subjects but to make sense of the information (Barın, 2004).

*The Principle of Spiral Education:* Two-three days after the information is entered into the memory, the information should be repeated, and these repetitions should be done weekly and monthly (Turgut, 2006).

*Bringing Language and Culture Together:* While teaching languages to foreigners, learners should be open to learning the culture of the target language. The negative attitude towards the culture of the target language and the speakers of that language are amongst of the biggest obstacles to language teaching. One of the most important duties of teachers is to instill positive emotions in the target language and the culture of that language (Köksal & Varışoğlu, 2011).

*Developing All Language Skills:* According to this principle, what skills will be included in language levels and how much should be included in this plan. Input skills should be given weight at the beginning (A1, A2) levels, while output skills should be given at the intermediate (B1, B2) and advanced levels (C1, C2) (Barın, 2004).

*Technology Principle:* The use of communication tools in language teaching has been needed since the transition from oral and written culture to visual and auditory culture. In line with this information, language instructors should include plenty of multimedia designs (İnce, 2018).

*Principle of Considering Individual Differences:* Every person's need for language learning, speed and attitude towards language are not equal. For this reason, the age, psychosocial status and language learning goals of individuals trying to learn Turkish should not be overlooked (Barın, 2004).

*The Principle of Transferring Language Teaching from the Classroom to Real Life:* Whether the students have acquired permanent knowledge in language teaching depends on whether they have the opportunity to use what they have learned. If it is given in its own country, the rate of learning the target language also increases. However, if education is not provided in the country where the target language is spoken, both the teacher and the student should make an effort to create an environment where the language will be spoken. Students who are active by applying what they have learned to create their language learning on a solid ground (Demirel, 1993).

All of the general principles have been utilized in the most efficient way, when necessary, during the course of our study. Considering the individual differences of the students during language teaching, attention was paid to ensure that they had a productive process, and care was taken to fulfill the requirements of the principles completely.

### ***Methods and Techniques Used in Foreign Language Teaching***

It is necessary to plan the teaching process in advance and to know in advance what is to be taught and how. In this context, teaching methods and techniques emerge. The methods and techniques used in foreign language teaching can be listed as follows:

*Direct Method:* While there was a tendency towards natural processes in language teaching at the end of the 19th century, the Direct Method, which emerged as a reaction to the Grammar-Translation method, takes its name from establishing a direct connection with the target language without any translation (Larsen-Freeman, 1986, p. 18) . The direct method has lost its effectiveness by receiving negative criticism in terms of not including the mother tongue in the course and the lack of teachers (Durmuş, 2018).

*Counseling Language Learning Method:* The method aims to find solutions to the problems that arise in the language teaching process by looking at the teacher-student relationship from the perspective of the consultant-client. For this reason, the method is also called the Supervised Language Teaching Method (Demirel, 2011; Demircan, 2013; Bölükbaş, 2018).

*Cooperative Learning Method:* The Cooperative Learning Method, in which students work in small groups and based on mutual assistance, is basically a student-centered method (Açıkgöz, 2005; Ekinci, 2010). This method, also called cooperative learning, aims to develop students' mental skills such as problem-solving and critical thinking, as well as improve their



social skills. In addition, it has been evaluated negatively in terms of slowing down fast learners, overloading teachers, and causing noise in crowded classrooms (Bölükbaş, 2018).

*Total Physical Response Method:* With the Collective Physical Response Method, it is aimed to activate the motor skills of the students with the help of physical activities in foreign language teaching (Kumaravadivelu, 2006).

*Silent Way Method:* The silent path method, developed by Caleb Gattegno (2010), is a method that aims to activate the mental skills of students by claiming that imitations are not sufficient in the language teaching process, and is based on the diversification of the examples presented to the students in this direction.

*Suggestopedia Method:* Suggestopedia Method, whose foundations were laid by Lozanov, is the application of "suggestion science" in the field of education, which tries to reveal the effect of suggestion on individual behaviors (Richards & Rodgers, 2007). The method received negative criticism as it did not adequately meet the theoretical expectations of educational sciences (Durmuş, 2018).

*Whole Language Approach:* The Whole Language Approach, which supports constructivism, is an approach that argues that foreign language teaching is provided through the configurations performed in the mind of the individual (Cavkaytar, 2018).

*Balanced Literacy Approach:* It is an approach that argues that teaching should be teacher-centered and activities should be student-centered (Fitzgerald, 1999).

*Communicative Method:* The method that emphasizes the effects of communication in the language teaching process argues that communication exercises should be used for successful teaching (Memiş & Erdem, 2013).

*Eclectic (Selective) Method:* The Eclectic Method is the selection and use of the most appropriate methods that serve the purpose and provide serious success in teaching (Melanlıoğlu, 2018).

*Task-Based Teaching Method:* It is a method that argues that tasks should be used as the main element in the planning or conclusion of language teaching (Richards & Rodgers, 2007).

*Content-Based Teaching Approach:* More emphasis is placed on content in second language teaching. The main purpose is to gain knowledge and improve academic language skills while learning a foreign language (Brinton, Snow, & Wesche, 1989).

*Intercultural Communication Oriented Approach:* A person who starts to learn a foreign language is faced with a foreign culture or even a foreign world. Individuals learning a foreign language should learn cultural concepts and use them in sentences. This approach aims to make the student establish a link between his own culture and the culture of the target language (Özkan, 2009).

*Audio-Visual Method:* With the Visual and Auditory Method, the simultaneous presentation of pictures, text and sounds in the same environment allows students to learn more effectively by activating more than one sense organ. The most important feature of this method is that the visual and auditory channels carry information to the memory at the same time (Demircan, 2013). In the Audio-Visual Method, it is aimed to develop four basic skills. First of all, verbal

information is handled, then written information is examined. In this way, the objects are considered as a whole. In this method, more emphasis is placed on sound and image, that is, the ear and the eye. The use of sound and image as a whole, which is multimedia tools, accelerates the mental process (Güneş, 2011; Puren, 2004). It is also of great importance that learners can find answers to their questions with the help of audio recordings. In this way, it is seen that learners learn the content they are curious about easily and their participation in the lesson increases (Gün, 2018). Especially with the development of technology, it is noteworthy that the importance of the tools and materials used in the audio-visual method has increased. One of them is the use of multimedia materials in foreign language teaching.

### ***Using Multimedia in Foreign Language Teaching***

Mayer (2009) multimedia; It is defined as the presentation of the materials to the students in various forms by supporting the moving-still images of the materials with verbal texts (Mayer, 2009). Multimedia applications, which are used at all levels of education, have recently started to be used in foreign language teaching. Although multimedia tools are widely used in language education, successful use of multimedia learning resources in foreign language teaching remains a challenge (Vu, Hung, Van and Lien, 2022). Multimedia materials used in language teaching have a great importance. Today's teaching environments are equipped with multimedia designs that teachers and students can use. Even if the classroom environment does not have these multimedia designs, the teacher can create his own multimedia (Gürbüz & Dursunoğlu, 2018).

Computer-assisted multimedia content, which is one of the most up-to-date and effective methods in teaching Turkish to foreigners, is one of the most used materials today (Peker & Geçgel, 2018). Especially the internet-based software and applications used to provide students with a flexible and comfortable working environment and accelerate their learning. Policies that support computer-aided education in our country have also been effective in teaching Turkish as a foreign language, and Turkish Teaching Platforms have been created on educational sites such as the Education Information Network (EBA). The field, which has started to keep up with today's technology successfully, continues to develop openly to innovations (İnal & Korkmaz, 2019). Some practices in EBA for teaching Turkish to foreigners are explained as follows:

Guess What: There are the most used concepts in daily life in the interactive application in EBA. The words were categorized based on the student's immediate environment. As seen in Picture 1, these categories are listed as home, school, hospital, colors, vehicles, animals, vegetables, fruits, clothes, foods, occupations, and our body. The fact that the application appeals to the auditory skills of the students allow even an illiterate student to perform vocabulary teaching in practice.



Figure 1. Guess App Categories Section and Sections Screen

**Read and Write:** This application has been prepared entirely to improve literacy skills. There are exercises for making sounds felt, matching words and images.

**Land of Lost Voices:** This application, which is prepared for teaching literacy, has the appearance of an island filled with letters arranged in order of instruction, as seen in Picture 4. The application, which is filled with letters, syllables, words, sentences and text activities, respectively, enables students to comprehend literacy faster by using all five senses thanks to the multimedia environment it provides.



Figure 2. Land of Lost Voices App Home Screen

**Vocabulary Train:** This application has been prepared for listening and reading skills rather than language teaching skills. The application input train is in the form of a train, each of which handles sound groups, as seen in Picture 5. The student, who keeps his attention at the highest level during all these activities, will be able to comprehend the correct sequence and correct pronunciation of sounds.

**Which One Is Correct:** When the interface of this application is opened, the correct and incorrect spelling of the word to be taught appears as written one under the other as seen in Picture 3. The student tries to find the correct spelling of the word. This game can facilitate the correct pronunciation and writing of the word during speaking and writing.





Figure 3. Which is the Right Application Introduction and Content

Picture Sudoku: This application is a visualized version of the sudoku game, as seen in Picture 7. The game includes images of fruits, vegetables, animals, vehicles, school supplies, numbers and the alphabet. The application can contribute to the development of students' vocabulary and mental skills.

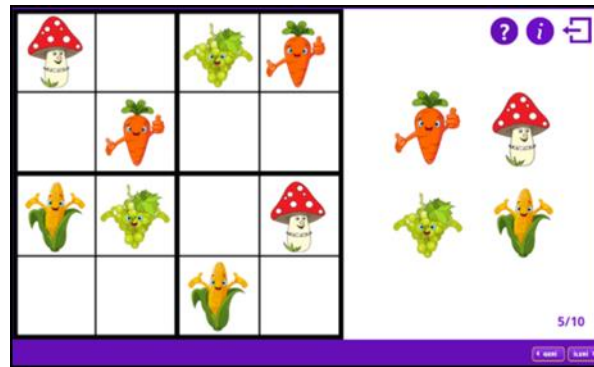


Figure 4. Picture Sudoku Application Login and Content Screen

Arabic Vocabulary 1: This application, which brings together interactive applications for teaching Arabic, offers Turkish and Arabic languages as a whole. As seen in Picture 5, the application can enable students to improve their Arabic and Turkish language skills.



Figure 5. Arabic Vocabulary 1 Application Login and Content Screen

### Studies in the Literature

Although the origin of the studies carried out to reveal the effect of multimedia on Turkish teaching within the scope of teaching Turkish to foreigners does not go back to ancient times, these studies have started to gain momentum today (Parlak, 2018). It is possible to list these studies together with their experimental stages and results as follows: The use of

multimedia materials in foreign language teaching depends on students' motivation and success (Ağca, 2012; Şengör, 2010; Aslan, 2015; Dumanlı Kadızade, 2015; Yağmur Şahin, Kana. , & Kahn, 2015; Sülükçü & Karabörk, 2011), language skills (Ilgar, 2013; Gürbüz & Dursunoğlu, 2018; Kır & Arıcı, 2019), permanence of learning (Büyükaslan , 2007; Erdem, 2019; Forcier & Descy, 2002; Yalçınkaya & Özerbaş, 2017) there are studies showing that it has a positive effect.

In the literature, many researchers, both in the world literature and in Türkiye, have addressed the issue of language teaching with multimedia materials in order to provide a positive increase in educational outcomes and to increase students' interest in the course. Bringing up the benefits of using multimedia materials in education and the role of the teacher in this process (Simeone, 2007); which deals with how to use technological tools to learn the language that individuals do not know and how to increase the language skills of the materials developed in this field reliably and with the lowest error (Mkdadi, 2019); The use of multimedia materials in teaching English as a foreign language, which determines the effect of four basic language skills on speaking (Cárdenas Gómez, 2019); examining the effect of technological applications designed to facilitate learning the characters of the language for Chinese as a foreign language learners on success and cognitive load (Chen, Wang, Chen, & Chen, 2014); on gaining controversial writing skills with the support of designed technological applications and programs (Benetos & Bétrancourt, 2020); development of a multimedia program for teaching English grammar as a foreign language (Koehler, Thompson, & Phye, 2012); describing the effect of technological materials used in education on English literature and writing (Al-Sharqi & Abbasi, 2020); on gaining writing skills with technological applications that provide instant feedback in language teaching (Lim & Phua, 2019); There are also studies (Xu, Chen, Eutsler, Geng, & Kogut, 2019) about revealing the readiness of students with technological educational games used in teaching English as a second language. The effect of mobile devices, which are frequently used in foreign language teaching, on language teaching has also taken its place in the literature. In this context, Belyakova and Pyrkina, in their study conducted in 2021, revealed that mobile devices increase the success of the participants in foreign language teaching and accelerate language learning (Belkaya and Pyrkina, 2021).

When we consider the studies carried out around the world as a whole, in preventing the loss of the native language, in teaching a second language and mother tongue, gaining language skills to learners, creating e-books, distance education, and teaching vocabulary for the target language; There are many studies that include multimedia materials, computer-assisted education, and interactive computer programs and applications. Many countries that carry out such studies are in the race to transfer the teaching of their languages to the digital environment within the framework of their cultures. This race is triggered by the development of technology and its involvement in education day by day. Due to the recent epidemic events, distance language teaching has gained importance (Kırkkılıç & Kurtlu, 2021).

When the studies conducted in Türkiye are compared with the world literature, they show similarities in terms of subject. However, Türkiye is working to develop multimedia materials. Researchers seem to focus on research on theory building rather than developing technological programs or applications to improve the language (Kırkkılıç & Kurtlu, 2021).

When the literature studies are examined, it has been observed that most of the studies revealing the effect of multimedia designs on language teaching are up-to-date and that the success of the learners in teaching environments where teaching materials enriched with

visual and auditory elements are used is higher than those in the traditional method. There are many methods, techniques, and tools used in foreign language teaching. However, multimedia designs used in foreign language teaching not only provide convenience to the teacher but also enable learners to be active in the teaching environment. These designs attract the attention of the students and increase their participation in the lesson. Visual and auditory elements have great importance today. In addition, teachers need to have a good command of these designs (Özdemir, 2013).

## **Method**

A quasi-experimental method with a pretest-posttest control group was used to collect the quantitative data of the study. The individuals in the experimental and control groups cannot be selected impartially, and a random selection is made by naming one of the two groups as the control and the other as the experimental group (Creswell, 2016; Büyüköztürk, 2007).

### **Working group**

The sample of this research consists of 71 students between the ages of 9 and 11 who continue their education at the 3rd grade level in a primary school located in the city center of Bursa. These students are foreign students, mostly from Syria. While forming the groups, care was taken to be impartial and random. The control and experimental groups were randomly selected and arranged as 34 students in the experimental group and 37 students in the control group. The gender and number distributions of the students are as indicated in Table 1

Table 1. Distribution of Students by Groups and Gender

|       |              | Gender |     | Total |
|-------|--------------|--------|-----|-------|
|       |              | Girl   | Boy |       |
| Group | Experimental | 19     | 15  | 34    |
|       | Control      | 16     | 21  | 37    |
| Total |              | 35     | 36  | 71    |

### **Data Collection Tools**

The Academic Achievement Test in Teaching Turkish to Foreigners was used to reveal the Turkish academic achievement levels of the students participating in the research, and the Turkish Language Skills Evaluation Rubric was used to reveal the language skill levels of the students. The research was evaluated from an ethical perspective and consent was obtained from the participants. Academic Achievement Test and Language Skills Assessment Rubric were administered as pre-test and post-test before and after the experimental process.

*Academic Achievement Test in Teaching Turkish to Foreigners:* The Academic Achievement Test in Teaching Turkish to Foreigners, consisting of 30 multiple-choice questions, was used in order to reveal the academic achievement levels of the experimental and control groups in Turkish. The test was prepared by the researchers and opinions were taken from experts in the field. The developed test was applied to 119 students as a pilot. These students are 4th-grade foreign nationals studying in our country. As a result of the application, the average item difficulty index value of the test was determined as 0.62. This value, which reveals the degree of difficulty of the questions in the test, should be close to 0.50. Because as this value approaches +1.00, the simplicity level of the test; As it approaches 0.00, the level of difficulty

increases (Yalçinkaya & Özerbaş, 2017). The value obtained in the study shows that the Academic Achievement Test in Teaching Turkish to Foreigners is moderately simple and not difficult. According to the item discrimination lists, the discrimination power of the items with an index below 0.19 is low, the discrimination power of the items with an index between 0.20 and 0.29 is weak, and the items with an index between 0.30 and 0.39 have good discrimination power and the items with an index between 0.40 and 0.40. It is stated that the day of identification is high and it is mostly used to distinguish the lower and upper groups (Büyüköztürk, 2007). As a result of the analysis, it is seen that the discrimination levels of the questions are between 0.23 and 0.56. In this case, it can be said that the discrimination power of the items in the academic achievement test is high.

*Turkish Language Skills Assessment Rubric:* The Turkish Language Skills Assessment Rubric was used to reveal the Turkish language skill levels of the students. The rubric was obtained from the application website (PIKTES, 2020) of the Project for the Integration of Syrian Children into the Turkish Education System and has been revised in accordance with expert opinions. The rubric consists of twenty-eight items and four factors. These factors are the four basic skills of language: listening, speaking, reading and writing. The rubric was filled by the instructors who performed the application before and after the experimental process, based on the language skill levels of the students.

### ***Experimental Process***

During the research, multimedia activities were used to teach the students in the experimental group and to convey the targeted program. The materials to be used based on multimedia were applied considering their suitability for the weekly curriculum and the unit. The duration of this research was arranged as six weeks in accordance with the six units in the Istanbul Turkish for Foreigners textbook. In order to gain the achievements of a unit every week, all of the necessary studies were carried out completely by making use of the smartboard. In addition to Turkish literacy skills, various applications such as song teaching and video conferencing were used, mostly EBA Language Teaching Portal developed by the Ministry of Education and Turkish Education Portal developed by Yunus Emre Institute, in order to develop vocabulary teaching and pronunciation skills suitable for A1 level used in daily life. Multimedia applications were selected according to the level of the students in accordance with the Turkish for Foreigners teaching program. These applications are specially designed for teaching Turkish. These are the applications named Guess, Guess2, Read and Write, Word Train and Land of Lost Sounds from the Language Teaching Portal in EBA in order to accelerate and make language teaching permanent. As support course materials, Turkish teaching textbooks, storybooks and Turkish Proficiency Exams, which were uploaded to the digital environment, were used.



Figure 6. Experimental Group Students Figure 7. Experimental Group Guess 2 App.

Experimental group students made interactive studies provided by Web-based education portals. With these studies, it is aimed to make language learning more permanent. In addition, it is aimed to use the new vocabulary and phrases they have learned more in daily life. Web-based applications used in the experimental process: Guess 1, Guess 2, Read and Write, Land of Lost Sounds, Word Train, Which Is Correct, Picture Sudoku applications. Apart from the applications explained, the pdf format of the Istanbul Textbook for Foreigners, which was used throughout the experiment, was used with the help of the smartboard. The exercises in the book were completed on the smartboard. Students actively participated in multimedia applications thanks to the smart board in the educational environment. In addition, Turkish Proficiency Exam questions prepared and applied by the Ministry of National Education were also used.

The education process of the foreign students in the control group was planned and implemented according to traditional methods. In this context, an environment suitable for the plan was prepared and the students were provided to form sentences in accordance with the grammar rules. The curriculum was prepared based on the six units in the Istanbul Turkish for Foreigners Textbook, which was taken as a source. As in the experimental group, a six-week period was found suitable for education in the control group. During the teaching process, students followed the lesson with the textbook, did free text writing activities, played games with language cards, and did coloring activities. After the lesson, the students practiced speaking Turkish with the Turkish students at school and among themselves. The methods, techniques and activities applied for the control group are generally as follows: Lecture, demonstration, question and answer, flashcards, role-playing, demonstration, simulation, drama, group work, educational games, grammar games.



Figure 8. Control Group Students Figure 9. Language Cards Activity in the Control Group

**Results**

SPSS (Statistical Package for Social Sciences) program was used to analyze the data collected during the research. Before applying parametric analyzes, normality tests of all data were performed. As a result of the analyzes carried out, it was determined that the pre-test and post-test scores of both the academic achievement test and the language skills assessment rubric were in accordance with the normal distribution. After this stage, parametric analyzes of the data were carried out.

Before the experimental process, Academic Achievement Pre-Test and Language Skills Assessment Rubric Pre-Test were applied to measure the Turkish academic achievement and language skills levels of the groups. As a result of the data obtained, it was seen that there was no statistical difference between the results of the experimental and control groups, and they were equivalent to each other

**Comparison of Groups' Academic Achievement and Language Skills Assessment Rubric Post-Test Scores**

After the experimental process, the findings regarding the comparison of the rubric post-test scores of the experimental and control groups' academic achievement and language skills assessment are summarized in Table2.

Table 2. Comparison of the Academic Achievement and Language Skills Assessment Rubric Post-Test Scores of the Experimental and Control Groups After the Experimental Process

| Data Collection Tool              | Group     | N       | $\bar{X}$ | Ss    | t     | sd    | p    |                                   |           |      |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|-----------------------------------|-----------|---------|-----------|-------|-------|-------|------|-----------------------------------|-----------|------|------|-------|-------|-------|-------|------|---------|---------|------|-------|----------|---------|------|-------|-------|-------|-------|------|---------|---------|------|-------|---------|---------|------|-------|-------|-------|-------|------|---------|---------|------|-------|---------|-------|------|------|-------|-------|-------|------|---------|---------|------|-------|-------|------|----|-------|-------|-------|----|------|
| Academic Success                  | Test      | 34      | 21.55     | 4.48  | 4.50  | 69    | 0.00 |                                   |           |      |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   | Control   | 37      | 16.10     | 5.60  |       |       |      | Language Skills Assessment Rubric | Listening | Test | 34   | 14.82 | 3.41  | 6.727 | 69    | 0.00 | Control | 37      | 8.86 | 3.99  | Speaking | Test    | 34   | 14.82 | 3.37  | 7.334 | 69    | 0.00 | Control | 37      | 8.67 | 3.65  | Reading | Test    | 34   | 14.58 | 3.33  | 7.652 | 69    | 0.00 | Control | 37      | 7.29 | 4.54  | Writing | Test  | 34   | 7.41 | 2.27  | 6.186 | 69    | 0.00 | Control | 37      | 3.51 | 2.95  | Total | Test | 34 | 51.64 | 10.62 | 7.983 | 69 | 0.00 |
| Language Skills Assessment Rubric | Listening | Test    | 34        | 14.82 | 3.41  | 6.727 | 69   |                                   |           | 0.00 |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   |           | Control | 37        | 8.86  | 3.99  |       |      |                                   | Speaking  |      | Test | 34    | 14.82 | 3.37  | 7.334 | 69   | 0.00    | Control | 37   | 8.67  | 3.65     | Reading | Test | 34    | 14.58 | 3.33  | 7.652 | 69   | 0.00    | Control | 37   | 7.29  | 4.54    | Writing | Test | 34    | 7.41  | 2.27  | 6.186 | 69   | 0.00    | Control | 37   | 3.51  | 2.95    | Total | Test | 34   | 51.64 | 10.62 | 7.983 | 69   | 0.00    | Control | 37   | 29.35 | 13.62 |      |    |       |       |       |    |      |
|                                   | Speaking  | Test    | 34        | 14.82 | 3.37  | 7.334 | 69   |                                   |           | 0.00 |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   |           | Control | 37        | 8.67  | 3.65  |       |      |                                   | Reading   |      | Test | 34    | 14.58 | 3.33  | 7.652 | 69   | 0.00    | Control | 37   | 7.29  | 4.54     | Writing | Test | 34    | 7.41  | 2.27  | 6.186 | 69   | 0.00    | Control | 37   | 3.51  | 2.95    | Total   | Test | 34    | 51.64 | 10.62 | 7.983 | 69   | 0.00    | Control | 37   | 29.35 | 13.62   |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   | Reading   | Test    | 34        | 14.58 | 3.33  | 7.652 | 69   |                                   |           | 0.00 |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   |           | Control | 37        | 7.29  | 4.54  |       |      |                                   | Writing   |      | Test | 34    | 7.41  | 2.27  | 6.186 | 69   | 0.00    | Control | 37   | 3.51  | 2.95     | Total   | Test | 34    | 51.64 | 10.62 | 7.983 | 69   | 0.00    | Control | 37   | 29.35 | 13.62   |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   | Writing   | Test    | 34        | 7.41  | 2.27  | 6.186 | 69   |                                   |           | 0.00 |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   |           | Control | 37        | 3.51  | 2.95  |       |      |                                   | Total     |      | Test | 34    | 51.64 | 10.62 | 7.983 | 69   | 0.00    | Control | 37   | 29.35 | 13.62    |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   | Total     | Test    | 34        | 51.64 | 10.62 | 7.983 | 69   |                                   |           | 0.00 |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |
|                                   |           | Control | 37        | 29.35 | 13.62 |       |      |                                   |           |      |      |       |       |       |       |      |         |         |      |       |          |         |      |       |       |       |       |      |         |         |      |       |         |         |      |       |       |       |       |      |         |         |      |       |         |       |      |      |       |       |       |      |         |         |      |       |       |      |    |       |       |       |    |      |

When Table 2 is examined, it is observed that there is a significant difference between the academic achievement post-test average score of the experimental group obtained at the end of the experimental process ( $\bar{X}=21.55$ ) and the academic achievement post-test average score of the control group ( $\bar{X}=16.10$ ) ( $t(69)=4.50, p<0.05$ ). These data reveal that teaching Turkish as a foreign language designed using multimedia activities has more effective results in terms of academic success than teaching Turkish as a foreign language conducted with traditional methods.

According to Table 2, when the Language Skills Assessment Rubric Post-Test scores of the



students were examined, it was observed that there was a significant difference between the students' listening, speaking, reading, writing and total scores at the end of the process (tlistening=6.727, tspeaking=7.334, tokuma=7.652, twriting=6.186, tttotal). =7,983, p<0.05). Experimental group students who achieved a significant degree of success in all skills improved their language skills more than control group students.

### **Mixed ANOVA Analysis Results of the Academic Achievement Test Scores of the Groups**

The results of the mixed ANOVA analysis regarding the significance levels of the changes observed after the experimental process in the academic achievement scores of the students are presented below.

Table 3. Mixed ANOVA Analysis Results of the Academic Achievement Test Scores of the Groups

| Factor  | Source of Variance | Sum of Squares | Sd     | Average of Squares | F      | p    | $\eta^2$ |
|---------|--------------------|----------------|--------|--------------------|--------|------|----------|
| Success | Between groups     |                |        |                    |        |      |          |
|         | Group              | 252.75         | 1      | 252.75             | 11.76  | .001 | 0.14     |
|         | Error              | 1482.55        | 69     | 21.48              |        |      |          |
|         | In Groups          |                |        |                    |        |      |          |
|         | Time               | 1573.16        | 1.67   | 940.01             | 113.93 | .000 | 0.62     |
|         | Time*Group         | 363.45         | 1.67   | 217.17             | 26.32  | .000 | 0.27     |
|         | Error              | 952.74         | 115.47 | 8.25               |        |      |          |

When Table 3 is examined, it is seen that the success of the students participating in the research is affected by the measurement time and group factors by interacting (F (1,67) =26.32, p<0.05). It is seen that the common interaction of time and group factors positively affects the academic achievement scores of the students. It can be said that the statistical data of the study, group and time factors have an effect on the academic achievement scores of the students. The magnitude of this effect was found to have a moderate effect ( $\eta^2= 0.27$ ). Another point to be considered in the analysis results is that the scores of the students in the pre-test and post-test show a significant difference regardless of the group (F (1,67) =113.93, p<0.05). Regardless of the effect size of the group, it is seen that the multimedia materials used in education make a meaningfully contribution to the academic achievement scores of the learners ( $\eta^2=0.62$ ).

### **Mixed ANOVA Analysis Results of Groups' Language Skills Assessment Rubric Scores**

The results of the multi-directional analysis of variance of the language skills assessment rubric scores of the groups are summarized in Table 4.

Table 4. Mixed ANOVA Analysis of Groups' Language Skills Assessment Rubric Scores Results

| Factor    | Source of Variance | Sum of Squares | <i>Sd</i> | Average of Squares | <i>F</i> | <i>p</i> | $\eta^2$ |
|-----------|--------------------|----------------|-----------|--------------------|----------|----------|----------|
| Listening | Between Groups     |                |           |                    |          |          |          |
|           | Group              | 346.89         | 1         | 346.89             | 15.63    | .000     | 0.18     |
|           | Error              | 1530.84        | 69        | 22.18              |          |          |          |
|           | In Groups          |                |           |                    |          |          |          |
|           | Time               | 1122.50        | 1         | 1127.50            | 344.12   | .000     | 0.83     |
|           | Time*Group         | 283.78         | 1         | 283.78             | 86.61    | .000     | 0.55     |
| Speaking  | Between Groups     |                |           |                    |          |          |          |
|           | Group              | 218.82         | 1         | 218.82             | 21.55    | .000     | 0.23     |
|           | Error              | 700.46         | 69        | 10.15              |          |          |          |
|           | In Groups          |                |           |                    |          |          |          |
|           | Time               | 1572.08        | 1         | 1572.08            | 403.22   | .000     | 0.85     |
|           | Time*Group         | 245.77         | 1         | 245.77             | 63.03    | .000     | 0.47     |
| Reading   | Between Groups     |                |           |                    |          |          |          |
|           | Group              | 299.31         | 1         | 299.31             | 23.56    | .000     | 0.25     |
|           | Error              | 876.26         | 69        | 12.69              |          |          |          |
|           | In Groups          |                |           |                    |          |          |          |
|           | Time               | 1116.56        | 1         | 1116.56            | 270.02   | .000     | 0.79     |
|           | Time*Group         | 358.53         | 1         | 358.53             | 86.70    | .000     | 0.55     |
| Writing   | Between Groups     |                |           |                    |          |          |          |
|           | Group              | 97.43          | 1         | 97.43              | 14.79    | .000     | 0.17     |
|           | Error              | 454.54         | 69        | 6.58               |          |          |          |
|           | In Groups          |                |           |                    |          |          |          |
|           | Time               | 155.35         | 1         | 155.35             | 52.16    | .000     | 0.43     |
|           | Time*Group         | 85.49          | 1         | 85.49              | 28.71    | .000     | 0.29     |
| Total     | Between Groups     |                |           |                    |          |          |          |
|           | Group              | 6625.25        | 1         | 6625.25            | 50.74    | .000     | 0.91     |
|           | Error              | 9008.18        | 69        | 130.55             |          |          |          |
|           | In Groups          |                |           |                    |          |          |          |
|           | Time               | 27489.70       | 1.51      | 18185.52           | 311.23   | .000     | 0.81     |
|           | Time*Group         | 7232.54        | 1.51      | 4784.61            | 81.88    | .000     | 0.54     |
| Error     | 6094.44            | 104.30         | 58.43     |                    |          |          |          |

When Table 4 is examined, it is seen that the multimedia materials used in education positively affect the four basic language skills of the students together with the interaction of time and group factors ( $F(1, 1.51) = 81.88, p < 0.05$ ). Considering the size of the effect of time and group factors, it is seen that there is an effect on the total scores of students' language skills ( $\eta^2 = 0.54$ ). There is a statistically significant difference between the language skills assessment rubric pre-test and post-test scores of the students in the experimental group ( $F(1, 69) = 50.74, p < 0.05$ ). Likewise, it was observed that there was a significant difference between the pre-test and post-test total scores of the students who participated in the study regardless of the group ( $F(1, 1.51) = 311.23, p < 0.05$ ). When the effect size is examined, it is seen that the effect of the education given without any group discrimination on the language skills of the learners is moderate and it has a positive effect on the total scores ( $\eta^2 = 0.81$ ).



When the language skills assessment rubric factors are examined one by one, it is seen that there is a significant difference between the scores of the students in the pre-test and post-test in terms of numerical data. It was observed that the factors whose effect sizes were examined had a medium and high level of effect on the success of the students. In line with these statistical results, it can be said that the multimedia activities used in education have a significantly more positive effect on the language skills of the students than the traditional methods applied in the control group.

## **Discussion**

In this study, the effect of multimedia learning activities on Turkish teaching was examined. The results obtained as a result of the study reveal that teaching Turkish as a foreign language designed by using multimedia activities has more effective results in terms of academic success than teaching carried out with traditional methods. In addition, it was observed that teaching Turkish as a foreign language designed by using multimedia activities improved the whole of the listening, speaking, reading and writing skills of the experimental group students and increased their success in a positive way. As a result, multimedia activities significantly increased the academic achievement levels of students in teaching Turkish as a foreign language. Likewise, it was determined that the language skill levels of the experimental group students increased more than the control group students. In light of these data, it was revealed that Turkish teaching designed using multimedia activities increased students' language skill levels more than Turkish teaching designed using traditional methods. The fact that multimedia activities were more interesting and fun for students may have been effective in the emergence of this result. There are studies that support the result of this research. Şengül and Türel (2019) investigated the effects of an interactive whiteboard on teaching Turkish as a foreign language in their study in 2019. As a result of the study, it was revealed that there was a positive increase in students' Turkish writing skills and grammar, and it was stated that students developed a positive attitude towards the use of smart boards. Similarly, Baysan and Uluyol emphasized that the effect of traditional education on the academic success of students is positive in their master's thesis study called the effect of the use of augmented reality books (Ag-Books) on the academic success of students and student views on the environment in 2016 (Baysan & Uluyol, 2016). İnal and Korkmaz, in their studies conducted in 2019, revealed that educational games based on smart boards improved speaking Turkish as a foreign language more than teaching based on traditional method activities (İnal & Korkmaz, 2019). İnal and Korkmaz, in another study they conducted in 2019, examined the effect of DynEd, a web 2.0 tool, on students' academic achievement in English as a foreign language and their attitudes towards English lessons. As a result of the study, it was revealed that DynEd contributed significantly to the academic success of the students, but did not have a significant effect on their attitudes towards the English lesson (İnal & Korkmaz, 2019). Yeşilbağ and Korkmaz examined the effect of Voki, a web 2.0 tool, on students' academic success in English and their attitudes towards English lessons in 2021. As a result of the study, an increase was observed in the achievement test scores of the experimental and control groups. It was stated that the speaking scores of the experimental group showed a statistically significant difference. In the study, in which the attitudes towards the English lesson did not show a significant difference, it was suggested that English teachers use the Voki application in speaking activities (Yeşilbağ & Korkmaz, 2021).

When the literature is examined, it is observed that there are many studies on the use of multimedia materials in education and on the effects of different methods and multimedia materials used in the field of Turkish as a foreign language. Ağca, in his study investigating



the Effect of Mobile Multimedia Support on Vocabulary Learning and Motivation, revealed that multimedia activities have a positive effect on student motivation and vocabulary teaching (Ağca, 2012). Similarly, Şengör (2010) compared teaching using computers with teaching using traditional methods. In this study, it was revealed that teaching using computers achieved significantly more successful results than teaching using traditional methods (Şengör, 2010). Aslan discussed the use of social media tools in Turkish teaching in his study conducted in 2015. In his study titled Teaching Words via Facebook in Teaching Turkish to Foreigners, he stated that the games developed for teaching Turkish vocabulary can be delivered to students via Facebook platform. Emphasizing the effectiveness of games in education, Aslan suggested that the points obtained from the games could be added to the lecture notes of the students (Aslan, 2015). In recent study, Çangal (2020) revealed the results that the use of social media in language teaching provides socialization, provides authentic content, increases motivation, facilitates learning, and improves language skills. Çangal listed the negative aspects of social media use as addictive, technical failures, presenting false information, difficulty in auditing, causing loss of time, and requiring preliminary preparation (Çangal, 2020).

Dumanlı Kadızade examined the smart phone applications developed to be used in the field of Turkish as a foreign language in his study carried out in 2015 and determined the positive and negative aspects of these applications. As a result of the research, it was revealed that smart phone applications will lead to positive results in teaching Turkish as a foreign language (Dumanlı Kadızade, 2015). Yılmaz and Talas demonstrated the importance of animations in language teaching in their study conducted in 2015. They stated that animations should be used frequently in language teaching and underlined that they do not have enough material. Yılmaz and Talas, who wanted to overcome this problem, designed animations for teaching Turkish as a foreign language (Yılmaz & Talas, 2015). Ilgar, in his study conducted in 2013, examined e-learning tools and stated that language teaching sites used in our country generally focus on listening, speaking, reading and writing skills, and vocabulary teaching remains in the background (Ilgar, 2013). Moreover, Sülükçü and Karabörk (2011) explained the ways of developing multimedia materials in their study titled Computer Aided Material Development in Teaching Turkish to Foreigners (Basic Level A1) and Its Effect on Student Success. He concluded that these materials affect student achievement positively (Sülükçü & Karabörk, 2011). In addition, Büyükaslan, in his study conducted in 2007, stated that informatics applications appeal to more than one sense organ of students and explained that this situation increases permanence in learning. He emphasized that infrastructure studies should be carried out for the problems experienced in the area (Büyükaslan, 2007).

In his study, Alar revealed that the creative writing method had a positive effect on students' writing skills in Turkish as a foreign language. Stating that this method increases students' interest in writing, Alar states that it improves students' thinking skills and writing process (Alar, 2018). Similarly. In his study, Dursun (2017) revealed that students who watched movies increased their vocabulary and were more successful in language teaching. In this study, Dursun suggested that the use of films should become widespread in teaching Turkish as a foreign language (Dursun, 2017). In his study, Toker revealed that the teachers and students working in the field of teaching Turkish to foreigners were willing to use the game activities, they found the game useful, and although some games were thought to be difficult, the general attitude of the games was that the games were beneficial. Stating that there are not enough games in the field in teaching Turkish as a foreign language, the researcher suggested developing games suitable for the level of students (Toker, 2021). Moreover, in his study, Sevtekin revealed that cartoons with subtitles make a significantly positive difference in

student achievement compared to cartoons without subtitles (Sevtekin, 2020). This study of Sevtekin and the other studies examined support that the materials that appeal to both auditory and visual channels of students increase their learning success.

Mudimba (2011) has developed the "FundaWethu" program that can be used to help learners acquire the first literacy skills. Teachers who teach in this field have stated that they have achieved positive results in gaining the first literacy skills of the program (Mudimba, 2011). Williams (2013) investigated the effect of multimedia materials on teaching Chinese as a second language to beginner and intermediate level students in his study on the Use of Multimedia Materials in Teaching Chinese as a Second Language and Pedagogical Suggestions. As a result of the research, in line with the data obtained, the group that was trained with video and verbal text; He observed that the group trained with visuals and verbal texts, and the group trained with visual and verbal texts were more successful than the group trained only with verbal texts, and he explained that environments supported by multimedia materials positively affect second language teaching (Williams, 2013). According to Rassaei (2017)'s research textual and auditory activities supported by multimedia materials of second language learners positively affect vocabulary learning at a good level (Ehsan, 2017).

As a conclusion, it is revealed that multimedia materials used both in the field of teaching Turkish as a foreign language and in other fields of education positively affect academic achievement and accelerate learning. In this context, it can be said that multimedia materials and computer-assisted instructors to be used in teaching Turkish as a foreign language have a positive effect on learning success (Forcier & Descy, 2002). In this respect, it can be said that the language skills and academic achievements of the students who continue their education in educational environments equipped with multimedia materials have improved more than the language skills and academic achievements of students who continue their education in educational environments equipped with traditional methods. Technological materials are easy to access and use due to their structure. For this reason, learners can access and use it whenever they need it. Thanks to this ease of transportation, learners can enrich their vocabulary in the field of Turkish as a foreign language.

## **Recommendations**

In consideration of the findings and results obtained in our study, in which we investigated the effect of multimedia learning activities on teaching Turkish as a foreign language, we can make the following suggestions.

- (1) The number of materials used and developed in the field of teaching Turkish to foreigners during the application is quite limited. Undoubtedly, the field that needs the most material is the field of teaching Turkish as a foreign language. Considering this need, it can be said that the material shortage is very high. In order to fill this gap, materials for teaching Turkish as a foreign language can be developed to improve the language skills of learners in different summer groups.
- (2) In teaching Turkish as a foreign language, multimedia materials should be prepared especially for primary school students. While preparing these materials, entertaining English teaching materials that support gamified teaching can be taken as a guide.
- (3) 3) Different multimedia materials can be compared and their effect on learning styles can be revealed.

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