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## The Effect of Technology-Enriched Foreign Language Teaching on Special Talented Individuals' English Attitude

\*Cavide Demirci , \*\*Sedef Çelik 

**Abstract.** The purpose of this study is to determine the effectiveness of technology-enhanced foreign language teaching on the English attitude of special talented individuals. Within the framework of the research, activities were prepared and applied to teach the goals set for gifted individuals more efficiently and permanently with the help of various technical tools. Also, the effects of these practices on students' English attitudes were examined. In the research mixed method was carried out. In line with the purposeful sample selection for the research, a total of 30 6th and 7th grade students studying at Bilecik Science and Art Center participated. In the study, the Attitude towards English Scale developed by Orakcı (2017) was used to measure the English attitude of gifted individuals. The SPSS program for the analysis of quantitative data, paired sampled t-test analysis, totals and averages and for the analysis of qualitative data, induction and content analysis were used. The results of the research reveal that technology-supported alternative teaching methods have a significant effect on increasing students' attitudes towards the English course in a positive way. It is emphasized that the technology-assisted language teaching method discussed within the scope of the study has the potential to be an important alternative to traditional teaching environments in English teaching in terms of students' vocabulary, grammar, listening, speaking, reading and writing skills.

**Keywords.** Special talented individual, English, technology, technology-enriched foreign language teaching.

\* **(Responsible Author)** Prof. Dr. Eskişehir Osmangazi University, Faculty of Education, Eskişehir, Türkiye

e-mail: [demircicav@gmail.com](mailto:demircicav@gmail.com)

\*\* English Teacher, Ministry of Education in Türkiye, Bilecik, Türkiye

e-mail: [sdphcelik@gmail.com](mailto:sdphcelik@gmail.com)

**Note:** This article is derived from the second author's master thesis with the same title.

A foreign language is learning or knowing a language other than one's mother tongue by one's own will. Unlike mother tongue learning, foreign language learning is a complex process involving the target language environment, students, teachers and teaching-learning environments (Dinçer, 2014, p. 1). For this reason, if a person chooses the target language as a tool and not as the goal of using the language in the process of learning another language, it complicates this process and makes the target language an unnatural and difficult process unlike learning the mother tongue. A person's purpose for participating in learning a new language can be professional and cultural requirements as well as personal preferences.

In the process of learning foreign languages, individual differences are another important point to consider. Not all individuals have the same learning pace or style. Within this process, there is a group that must be taken into account in this education system, which aims to provide each individual with the desired language learning process without being left behind, regardless of their characteristics; gifted individuals. Since gifted individuals are more advanced than their peers in developing their talents, educational environments designed for average students are not sufficient for them (Beşkardeş, 2007, p. 2). Programs and practices designed for the education of gifted individuals should include new activities that emphasize the creativity and unique ideas of these individuals beyond mere knowledge transfer or rote learning (Ersoy & Avcı, 2004, p. 206). Considering the status of language learning for gifted individuals, it is necessary to use different methods and techniques. It is known that these students learn quickly and in different ways. In this context, it should not be forgotten that when the target group of language teaching is gifted individuals, this group has a high learning motivation, is curious and has the ability to learn quickly. In a globalizing world, learning foreign languages, one of the most important needs, is especially important for gifted individuals. Given the potential of talented individuals, they have a say in this global world with the professions they hold in the future. In this global structure, where they'll have a say, it becomes necessary to know a foreign language that is spoken in common. In this regard, for our country, which has significant deficiencies in the teaching of foreign languages, learning and using a foreign language permanently is indispensable, considering that these students will have a say in both national and international fields of science and science (Beşkardeş, 2007, p. 5). In fact, the number of studies in the literature on foreign language teaching to gifted individuals is limited. With the research done, it contributes the field of teaching foreign languages to gifted individual.

It is undoubtedly one of the best choices to implement foreign language teaching for the mentioned target audience using the latest technology and applying different methods. Technology

offers a wide range of language learning opportunities for teachers and students thanks to its deep database and wide range of materials. However, the development of technology and its entry into the field of education has caused difficulties in determining in which field and how technology should be used (Farr & Murray, 2016, p. 1). Furthermore, a study conducted by Mohammed (2015, p. 6) found that although the research on technology-assisted language teaching received positive responses, many teachers did not tend to increase the integration of technology into their teaching processes.

As a result of the literature studies, it has been seen that although there are studies on the importance of technology-supported foreign language education, there are not enough studies on foreign language education for especially talented students. In a study conducted by Kaplan Sayı (2013) on the development and implementation of an English language program that meets the academic and intellectual needs of gifted students, testing the effectiveness of the program and revealing the results, it was seen that the English language education program for gifted students significantly increased students' achievement, critical thinking and creativity. On the other hand, Beşkardeş (2007) investigated the effect of applying metaphor technique in foreign language teaching to gifted students on student achievement. According to this study, the average academic performance of the students in the experimental group in which metaphor technique was applied was higher than the students in the control group in which traditional teaching was applied. An Example of Using Technology as a Material in Language Teaching by Temizyürek and Ünlü (2015): "Flipped Classroom", the studies conducted in Turkey and abroad on this subject were examined and the benefits of using this application in language classes were revealed by reviewing the activities of the applications. Moreover; Mohammed (2015), in his study aiming to reveal students' and teachers' perceptions of the advantages and obstacles of a technology-assisted program in foreign language teaching, found that although both teachers' and students' perceptions of integrating technology into foreign language teaching were negative, these schools lacked technology or faced obstacles due to students not using the available technology. In this regard, it is aimed to shed light on how the integration of technology into a foreign language can be offered to instructors or operators in the field.

Finally, the study presents content in the field of foreign language teaching and brings a new perspective to teaching foreign languages to gifted individuals. Also, it reveals these individuals' perceptions of English both by teaching a foreign language with the inclusion of technology in the language learning process and by looking at the effects on the English language attitudes of gifted individuals. In this way, the research contributes to the understanding of a less researched area, the the gifted individuals' English-speaking attitudes and to creating a desired change in these attitudes.

The aim of the research is to reveal how teaching English to gifted students with the help of technological online tools affects students' English language attitudes. In this context, the goal of the research is to prepare and implement activities for the students of the ITRP (Individual Talent Recognition Program) group to teach the English language learning outcomes of the curriculum more efficiently and permanently using technological online tools and to observe the effects of the prepared programs on students' English language attitude. Depending on the main problem, the sub-problems to be answered in the study are the following:

1. What are the students' attitudes towards English within the framework of the study?

2. What are the activities carried out by students with the technological tools for technology-supported language teaching within the scope of the study?

## **Method**

### **Research Model**

In this study mixed method was used to investigate the effect of technology-assisted foreign language teaching on the English-speaking attitude of gifted individuals. Creswell (2002) defined mixed methods research as a research model in which both qualitative and quantitative data are collected, evaluated and analyzed together to answer research questions. In the study, embedded planning, which is one of the mixed methods was preferred. A feature of this design is that one of the quantitative or qualitative methods is more prominent than the other, but also information collected in alternative ways is needed to support, generalize or explain the information obtained (Yıldırım & Şimşek, 2013, p. 322). The relevant qualitative data for this study were collected through the students' works obtained from teaching English with technological online tools and the quantitative data for the supporting role were collected using a pre-test-post-test without a control group.

In the study, a one-group pre-test-post-experimental design without a control group was chosen. In this and similar studies, the lack of sufficient sample student groups for the control group of gifted individuals and the problems in organizing groups and class order in the science and art centers were effective in the selection of the single group design without a control group. In the pretest-posttest study of an individual group without a control group, the effect of the experimental procedure was tested with the application on one group. The test measurements of the group participating in the study regarding the dependent variable are determined by repeating the measurements with the same measurement tool, as a pre-test before the application and as a post-test after the application (Büyüköztürk et al., 2012).

## Study Group

Bilecik Borsa İstanbul Science and Art Center was chosen as the application site of the research. ITRP (Individual Talent Recognition Program) students, who are registered at the research institute and benefit from the educational activities, were defined as the group and the environment in which the application will be made, according to a purposeful sample selection. Purposive sampling enables a comprehensive study by selecting situations that are believed to contain a wealth of information depending on the purpose of the study (Büyüköztürk et al., 2012; Yıldırım & Şimşek, 2008). Students educated at the ITRP (Individual Talent Recognition Program) group in the science and art center are included in the study, because they are the most suitable work group in terms of their English language level and age group by completing support training. In the framework of the study, the real names of the students were hidden due to research ethics and the students were given code names. The demographic information of the participants is presented in Table 1.

Table 1.

*Demographic Information of the Participants*

| <i>Variables</i> | <i>Categories</i> | <i>Frequencies</i> | <i>%</i> |
|------------------|-------------------|--------------------|----------|
| Gender           | Boys              | 14                 | 46.6     |
|                  | Girls             | 16                 | 53.4     |
|                  | Total             | 30                 | 100      |
| Age              | 11                | 11                 | 36.7     |
|                  | 12                | 10                 | 33.3     |
|                  | 13                | 9                  | 30       |
|                  | Total             | 30                 | 100      |

Looking at the table, out of the 30 students who participated in the study, 14 (46.6%) were male and 16 (53.4%) were female students. In addition, 11 (36.7%) of the students who participated in the study were 11 years old, 10 (33.3%) were 12 years old, and 9 (30%) were 13 years old.

## Data Collection Tools

As the study is based on mixed methods, a variety of quantitative and qualitative data collection tools were used throughout the process. The study used the "Attitude Scale Towards English Lesson" developed by Orakci (2017), which measured the attitudes of gifted individuals towards English lessons. In addition, studies were conducted using various online tools during the eight-week technology-supported English teaching period.

**Attitude scale towards english lesson.** The "Attitude Scale Towards English Lesson" structured and developed by Orakcı (2017) was used to determine and measure students' English language attitudes at the beginning and end of the technology-supported English teaching process. The scale used in the study consisted of 16 parts, 10 of which measure affective characteristics and 6 behavioral characteristics. These scale items include responses such as "never", "rarely", "sometimes", "often", and "always". When scoring the scale items, positive and negative attitude expressions were taken into account; positive opinions are scored 5-4-3-2-1 and negative opinions 1-2-3-4-5.

As a result of the reliability study of this scale conducted by the researcher, the reliability value of the first subdimension of the scale was determined to be 0.911 and the reliability value of the second subdimension was determined to be 0.887. If the reliability coefficient values of the scales are above 0.70, it is accepted as high reliability (Özdamar, 2013). In this study, the internal consistency coefficient of the general attitude score was found to be 62.

## **Process**

In this study, technology-assisted English language activities were prepared and implemented to investigate the effect of technology-assisted English teaching on the English language attitude of gifted individuals. The research was carried out in the Physical Appearance, Transportation, Animal Kingdom, Nature and Environment, Free Time Activities, Storytelling and Universe units of the Science and Art Center of the General Department of Special Education. The achievements of these eight units were reviewed. In order to achieve these outcomes, lesson plans were prepared that included technology-supported English language plans. This study lasted 10 lecture weeks in the second semester of the academic year 2021-2022. In the first week of this field study, students took pre-tests. Information was given about answering the English attitude scale and the students answered the attitude scale. Once these processes were completed in the first research week, technology-supported English teaching began. The teaching lasted eight weeks and technology-supported English lesson plans were applied. In ITDP (Individual Talent Discovery Programme) groups with 2 lessons per week, 2 hours of the English lesson are reserved for technology-supported English activities. The applications followed the stages; preparation-warm-up, teaching the target structure, main task and assessment for teaching English with technology. Each week, according to the theme, a different preparation-warm-up, goal structure, main task and assessment activities were taught. Every week, different technical tools were used, with which technology promotes the learning of English.

Technical tools used weekly were Storybird, Voscreen, Wordart, Quizziz, Lyricstraining, Cram, Storyjumper and Mentimeter websites. At the end of the tenth week, it was decided that the activity process of the study was completed and the attitude scale used as the first test was applied again to the students who participated in the study afterwards.

### Data Analysis

Since the study used a mixed method, data analysis was performed in two different ways. In the analysis of quantitative data, t-test analysis of the sample was used, total and average values were used with the SPSS program, and in the analysis of qualitative data, induction and content analysis was used. Descriptive statistics were also used in the analysis of the pre- and post-test results of each student regarding the dimensions and total number of the attitude scale toward the English lesson. All results were both tabulated and expressed graphically. In addition, the studies obtained as a result of the activities carried out with the students were both tabulated and conveyed descriptively.

### Results

In this section, the pretest and posttest results of the scale that determine the students' English language attitudes and the results of the eight-week technology-supported English activities applied to the ITDP (Individual Talent Discovery Programme) group students were given.

### Findings on Attitudes towards English Lessons

In this section, related sample t-test analyzes were conducted to describe students' attitudes towards the lesson before and after the technology-supported English teaching application, and the results were presented in Table 2. In addition, descriptive statistics of factor scores and scale sums were calculated and the results were shown in Figure 1.

Table 2.

*English Attitude Scale Related-Sample t-Test Results*

| <b>Factors</b>       | <b>n</b> | <b><math>\bar{X}</math></b> | <b>S.s</b> | <b>sd</b> | <b>t</b> | <b>p</b> |
|----------------------|----------|-----------------------------|------------|-----------|----------|----------|
| Affective pre-test   | 30       | 26,03                       | 2,76       | 29        | -1.975   | 0.058    |
| Affective post-test  | 30       | 27,60                       | 2,73       |           |          |          |
| Behavioral pre-test  | 30       | 22,00                       | 4,46       | 29        | 0.567    | 0.575    |
| Behavioral post-test | 30       | 22,53                       | 3,91       |           |          |          |

Looking at Table 2, the pre-test mean of the affective component of the scale is  $\bar{X}=26.03$ , the post-test mean is  $\bar{X}=27.60$ . While the pre-test mean of the behavioral sub-factor of the scale is  $\bar{X}=22.00$ , the post-test mean is 22.53. According to the results of the t-test analysis of the related sample, there was no significant difference in the pre-test and post-test averages of the students' attitude scale towards the English lesson. [ $t(29)=-1.975$ ,  $p>0.05$  ve  $t(29)=0.567$ ,  $p>0.05$ ]. However, it was found that the post-test averages and scale sum obtained from the factors are higher than the pre-test averages.

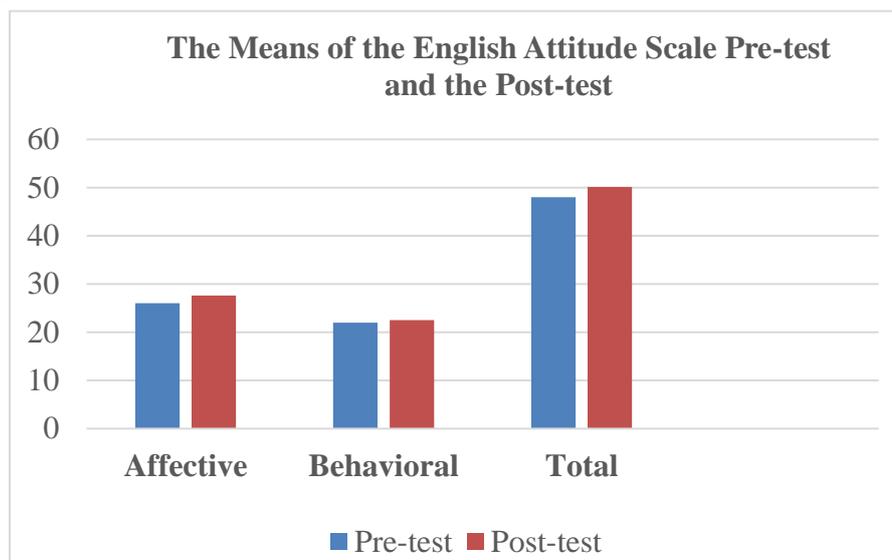


Figure 1. The Means of the English Attitude Scale Pre-test and the Post-test.

### Findings on the Technology Supported English Activities

This section presents the online technological tools used in the application process for technology-supported English teaching and evaluations of the information obtained in the application process. Technical tools: storybird, voscreen, worart, quizziz, lyricstrainings, cram, storyjumper and mentimeter were used in technology-supported English teaching with students. The products obtained with the mentioned online technological tools were presented accordingly.

#### Storybird

Firstly, the "Storybird" technological tool was used in technology-supported English language teaching for gifted individuals. It was aimed to provide students with grammar, vocabulary, speaking, writing and reading skills by using the storybird website for physical appearance and personality traits topic. In line with this aim, the digital stories created by the students on this site about "physical appearance and personal quality" as a result of the warm-up, language focus, main task and evaluation processes were shown in Table 3.

Table 3.

*Digital Stories Created by Students on the Topic of 'Pyhsical Apperance And Personal Quality'*

| <b>Students</b> | <b>n</b>  | <b>Title</b>                   |
|-----------------|-----------|--------------------------------|
| Ö6,Ö5           | 2         | Super Child                    |
| Ö18,Ö11         | 2         | Hiking                         |
| Ö2,Ö7           | 2         | Little Fox and Bear go camping |
| Ö20,Ö12         | 2         | In the Space                   |
| Ö9,Ö8           | 2         | A lion and its Cub             |
| Ö14,Ö13         | 2         | Zombie's Physical Appearance   |
| Ö21,Ö22         | 2         | Animals and Their Family       |
| Ö19,Ö16         | 2         | Appearance of Animals          |
| Ö23, Ö24        | 2         | At the Zoo                     |
| Ö15,Ö17         | 2         | Play with Me                   |
| Ö25,Ö26         | 2         | Future City                    |
| Ö29,Ö30         | 2         | Sweety Boy                     |
| Ö27,Ö28         | 2         | Scary Night                    |
| Ö1,Ö4           | 2         | King of Mice                   |
| Ö3,Ö10          | 2         | Libery War                     |
| <b>Total</b>    | <b>30</b> | <b>15</b>                      |

Table 3 shows 15 different digital stories covering target topic created by students as a result of forming groups of two. The name of digital stories are; Super Child, Hiking, Little Fox and Bear Go Camping, In The Space, A Lion and its Cub, Zombie's Pyhsical Appearance, Animal and Their Family, Appearance of Animals, At the Zoo, Play with Me, Future City, Sweety Boy, Scary Night, King of Mice and Liberty War.

**Voscreen.** Secondly, the technological tool "voscreen" was used in the process of technology-supported English teaching for gifted individuals. It was aimed to provide students with grammar, vocabulary, speaking, writing and reading skills by using the voscreen website for transportation topic. In accordance with this goal, as a result of the warm-up, language focus, the main task and the assessment process, it was ensured that the students get to know the topic of transportation through the activities on this site. The points obtained by the students as a result of the activities performed at the site were shown in Figure 2.

| Observee | Success | Fails | Score |       |   |
|----------|---------|-------|-------|-------|---|
| Ö1       | 72      | 36    | 1663  | ×     |   |
| Ö2       | 129     | 61    | 1412  | ×     |   |
| Ö3       | 53      | 37    | 959   | ×     |   |
| Ö4       | 137     | 51    | 1230  | ×     |   |
| Ö5       | 46      | 9     | 777   | ×     |   |
| Ö6       | 28      | 4     | 425   | ×     |   |
| Ö7       | 39      | 20    | 295   | ×     |   |
| Ö8       | 72      | 36    | 1663  | ×     |   |
| Ö9       | 129     | 61    | 1412  | ×     |   |
| Ö10      | 53      | 37    | 959   | ×     |   |
| Ö11      | 213     | 62    | 6013  | ×     |   |
| Ö12      | 177     | 39    | 4054  | ×     |   |
| Ö13      | 141     | 25    | 2083  | ×     |   |
| Ö14      | 81      | 25    | 1738  | ×     |   |
| Ö15      | 41      | 10    | 524   | ×     |   |
| Ö16      | 18      | 15    | 145   | ×     |   |
| Ö17      | 10      | 4     | 54    | ×     |   |
| Ö18      | 60      | 16    | 1016  | ×     |   |
| Ö19      | 43      | 38    | 508   | ×     |   |
| Ö20      | 17      | 3     | 384   | ×     |   |
| Ö21      | 96      | 19    | 2210  | ×     |   |
| Ö22      | 143     | 49    | 2089  | ×     |   |
| Ö23      | 86      | 37    | 1412  | ×     |   |
| Ö24      | 58      | 22    | 1201  | ×     |   |
| Ö25      | 56      | 33    | 965   | ×     |   |
| Ö26      |         | 526   | 87    | 11046 | × |
| Ö27      |         | 220   | 39    | 3061  | × |
| Ö28      |         | 51    | 11    | 1089  | × |
| Ö29      |         | 64    | 34    | 965   | × |
| Ö30      |         |       |       |       |   |

Figure 2. Students' Points from Voscreen Activities Related to Transportation.

Figure 2 shows the results of the students' activities on the voscreen website. The reason for the difference in scores shown in Figure 2 is that the person who translated the videos shown on the site the fastest scored them differently in terms of timing. In addition, students' practice of using this site outside of school, after the class application process, is another reason that explains the difference in their results.

### Wordart

In this part it was aimed to teach gifted students about health and disease using Wordart technology tools. In this context, warm-up, language focus, main task and assessment processes and activities were applied to teach health and illness topic supporting grammar, vocabulary, speaking,

writing and reading skills by using a wordart website. Figures 3 and 4 show some of the visuals created as a result of the activities done by the students on the wordart website.

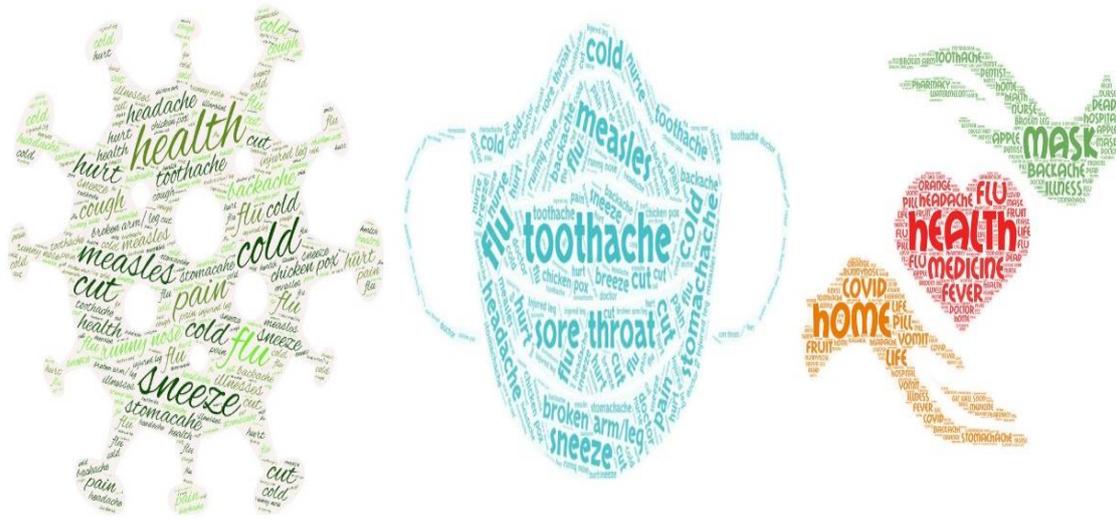


Figure 3. Wordclouds Created by Students on 'Health And Illness'.

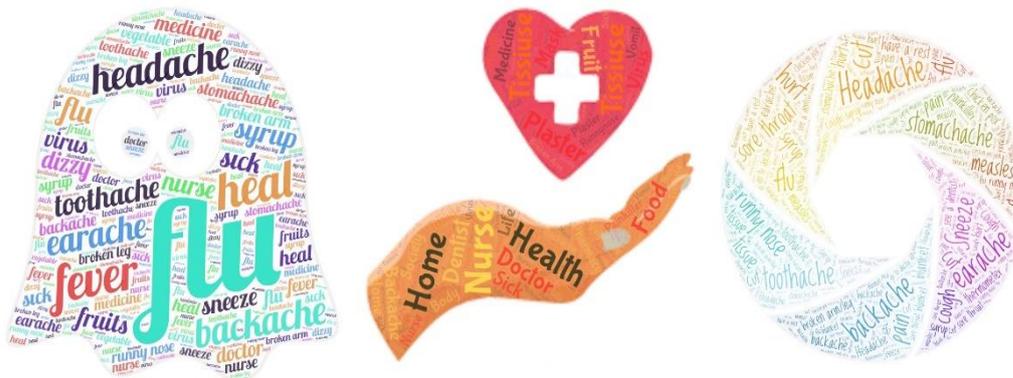
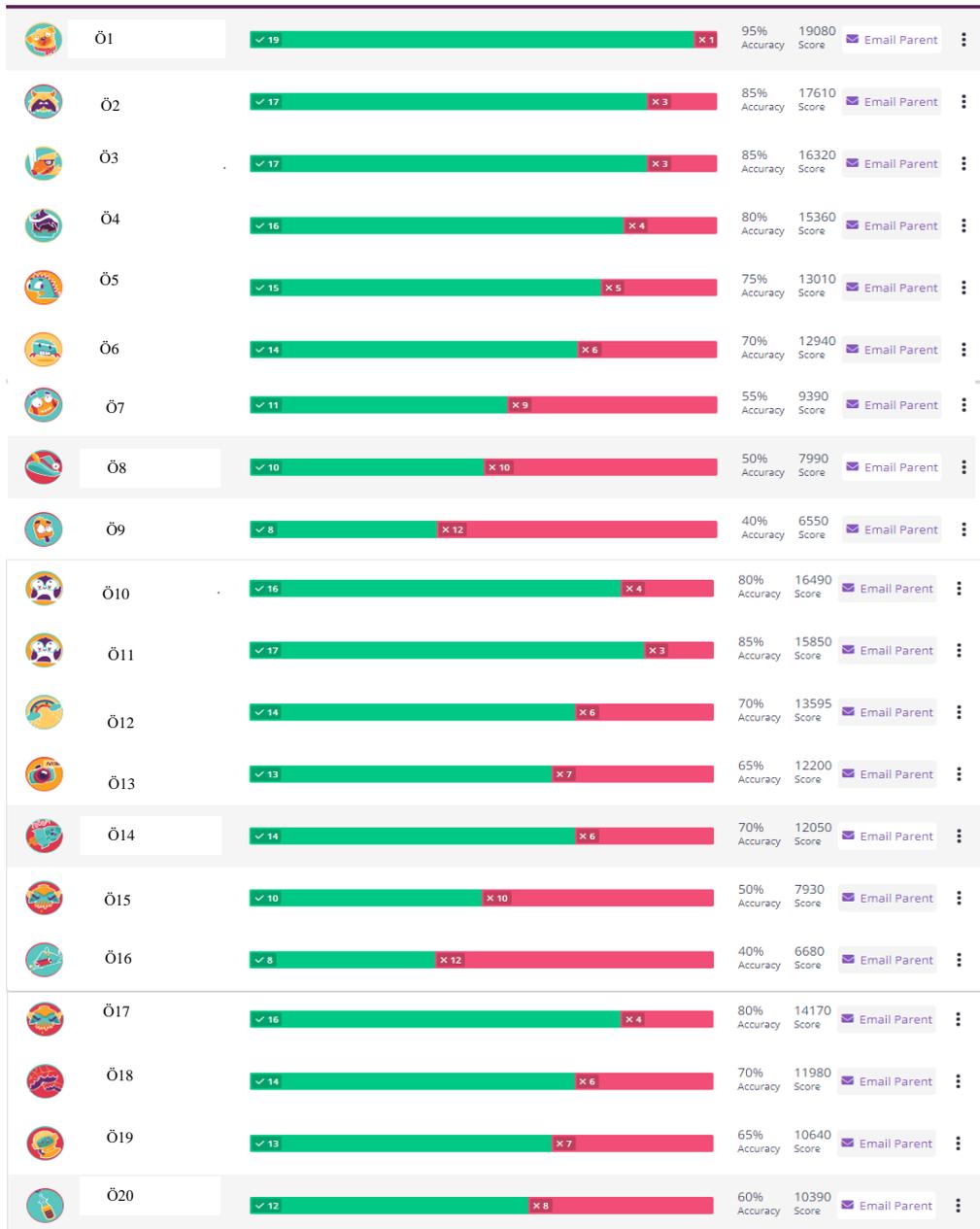


Figure 4. Wordclouds Created by Students on 'Health And Illness'.

In Figure 3 and 4, the words that the students wrote on the pictures about "Health and Illness" on the Wordart site are as follows; health, measles, sneeze, cut, flu, cold, backache, hurt, pain, cough, stomache, toothache, söre throat, broken arm/leg, breeze, nurse, headache, medicine, fever, mask, home, covid, life, vomit, pill, fruit, illness, apple, dead, orange, heal, sick, dizzy, earache, doctor, virus, vegetable, runny nose, heal, tissue, syrup, painkiller ve chicken pox.

## Quizizz

The fourth technological tool in the application of technology-supported English teaching to gifted students was a Quizizz. With the help of this site, warm-up, language focus, main task and assessment processes and activities were applied to teach animal kingdom, endangered animals topic supporting grammar, vocabulary, speaking, writing and reading skills by using a wordart website. As a result of the implemented activities, the score of the 20-question test on the quiz website for Animal Kingdom, Endangered Animals, is shown in Figure 4.



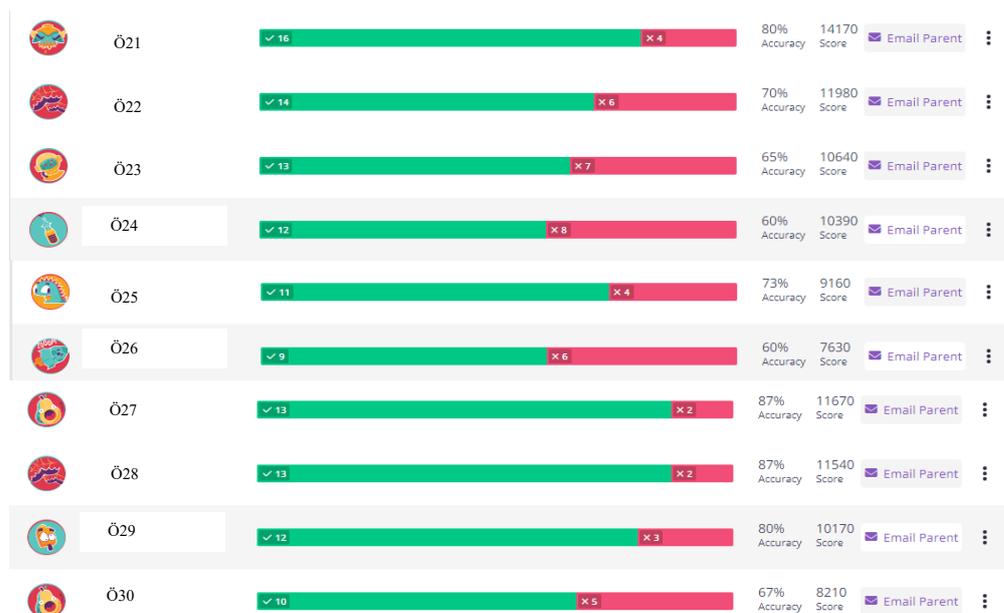


Figure 5. Scores of the 20-Question Test on the Quizizz Website for Animal Kingdom, Endangered Animals.

Figure 5 shows the results of online tests done by students on the quizizz website. The best result obtained as a result of the exam belongs to the student coded Ö1 with 1 error. According to the test results, 11 students gave more than 80% correct answers, 14 of them more than 60% and 4 more than 40% correct answers. Since more than half of the students gave more than 50% of the correct answers, it can be said that the activity was successful. The reason for the difference in the scores the students received was the speed at which the students answered the questions, the additional points offered in the test, such as various bonus points, were effective.

### Lyricstrainings

The fifth technological tool used in the application of technology-supported English language teaching to gifted students has been lyricstrainings. With the help of this site, warm-up, language focus, main task and assessment processes and activities were applied to teach nature and environment topic supporting grammar, vocabulary, speaking, writing and reading skills by using a wordart website. As a result of the implemented activities, Figure 5 shows the result of searching words activities on the "Happy World Environment Day" video for the main task about Nature and environment topic in the lyricstraining website.

| Student ID | Score       |
|------------|-------------|
| Ö1         | 2860 points |
| Ö2         | 2765 points |
| Ö3         | 2755 points |
| Ö4         | 2752 points |
| Ö5         | 2748 points |
| Ö6         | 2748 points |
| Ö7         | 4250 points |
| Ö8         | 4250 points |
| Ö9         | 4250 points |
| Ö10        | 4250 points |
| Ö11        | 4250 points |
| Ö12        | 4250 points |
| Ö13        | 2380 points |
| Ö14        | 1516 points |
| Ö15        | 1512 points |
| Ö16        | 1180 points |
| Ö17        | 932 points  |
| Ö18        | 871 points  |
| Ö19        | 2430 points |
| Ö20        | 2330 points |
| Ö21        | 2316 points |
| Ö22        | 2286 points |
| Ö23        | 2262 points |
| Ö24        | 2241 points |
| Ö25        | 1942 points |
| Ö26        | 1939 points |
| Ö27        | 1918 points |
| Ö28        | 1895 points |
| Ö29        | 1847 points |
| Ö30        | 1817 points |

Figure 6. The Result of Searching Words Activities on the "Happy World Environment Day" Video For the Main Task About Nature and Environment.

Figure 6 shows the results of the activity related to the 'Happy World Environment Day' video on the students' lyricstraining website. During the exercise, students received different scores because the scoring was done according to each student's response speed. The students' highest score was 4250 and the lowest was 871. It would be more accurate to say that the student with the lowest score has a low response rate instead of that the student failed.

## Cram

The sixth technological tool that has been used in the application of technology-supported English teaching to gifted students has been cram website. This site has taught students both vocabulary and comparative grammar on the topic "Free Time Activities". With the help of this site, warm-up, language focus, main task and assessment processes and activities were applied to teach free time activities topic supporting grammar, vocabulary, speaking, writing and reading skills. The activities performed at Cram's site are shown in figure 6.



Figure 7. The Flashcard Activity on the Cram Site about 'Free Time Activities'.

In Figure 7, it was presented as a part where students prepare flashcards for the topic of free time activities either in Turkish or visually based on the English. On one side of the cards can be written in English and on the other side in Turkish. It is also possible to add images related to the word.

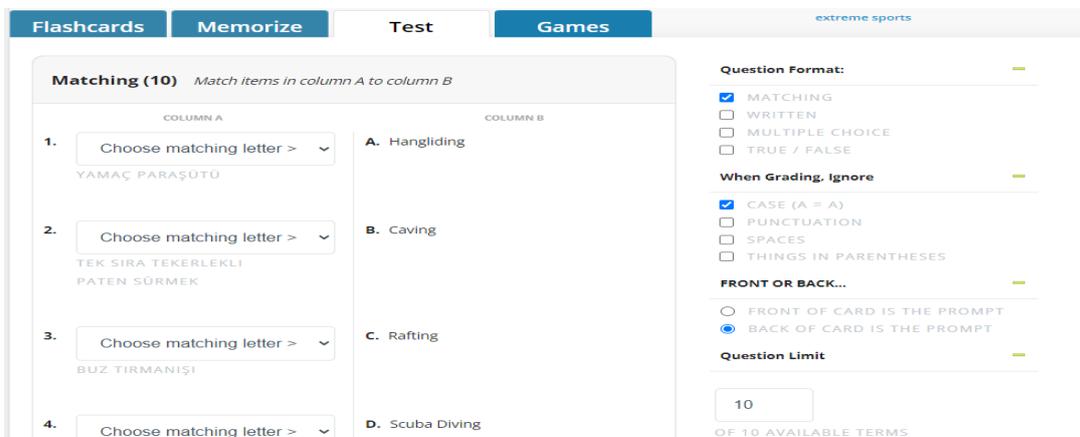


Figure 8. Test Exercise About 'Free Time Activities' on Cram.

Figure 8 shows that the students created a test about free time activities words prepared the tests in any format they wanted. The Cram site has activities to help students memorize free time activities word.



Figure 9. Games about 'Free Time Activities' on Cram.

Figure 9 shows two different games that students can prepare for the words learned in the 'free time activities' topic using the cram technology tool. The students have played these games with word sets they have prepared, but if they wish, they have the opportunity to play two different games with word sets made by different users. In the first game shown in Figure 8, students scored by matching the English and Turkish words of the words 'free time activities'. In the second game, they tried to collect English words about "free time activities" that were given in Turkish with incoming letter sets and were scored for their performance. It can be said that Cram website provides students with an opportunity to memorize new words, practice with them and play games in a fun way.

### Storyjumper

The seventh technological tool used in the application of technology-supported English teaching to gifted students is the storyjumper website. On this site, students completed activities related to "Narration". On this subject warm-up, language focus, main task and assessment processes and activities were applied to support grammar, vocabulary, speaking, writing and reading skills. The stories that the students have written as a result of the story creation activity on the Storyjumper website are shown in Table 4.

Table 4.

*Stories Written About 'Narration' on Storyjumper Site*

| <b>Students</b> | <b>n</b>  | <b>Title</b>                      |
|-----------------|-----------|-----------------------------------|
| Ö6,Ö5           | 2         | My Childhood Dreams               |
| Ö18,Ö11         | 2         | Minecraft                         |
| Ö2,Ö7           | 2         | Fortnite                          |
| Ö20,Ö12         | 2         | Valorant                          |
| Ö9,Ö8           | 2         | The Exam Guy                      |
| Ö14,Ö13         | 2         | Butterflies                       |
| Ö21,Ö22         | 2         | Halloween                         |
| Ö19,Ö16         | 2         | Big Kingdom Wars                  |
| Ö23, Ö24        | 2         | Barbie in the 12 Dancing Princess |
| Ö15,Ö17         | 2         | Best Icon Players' Lives          |
| Ö25,Ö26         | 2         | Predatory Animals                 |
| Ö29,Ö30         | 2         | The man and his Fault             |
| Ö27,Ö28         | 2         | Evils at Harry Potter             |
| Ö1,Ö4           | 2         | The World of Wizard               |
| Ö3,Ö10          | 2         | K-Pop Group                       |
| <b>Toplam</b>   | <b>30</b> | <b>15</b>                         |

Table 4 shows a total of 15 digital stories created by students on the Storjumper website. The names of the stoies that created in pairs are; My Childhood Dreams, Minecraft, Fortnite, Valorant, The Exam Guy, Butterflies, Halloween, Big Kingdom Wars, Barbie in the 12 Dancing Princess, Best Icon Players' Lifes, Predatory Animals, The man and his Fault, Evils at Harry Potter, The World of Wizard ve K-Pop Group.

### **Mentimeter**

The latest technological tool used in the application of technology-supported English teaching to gifted students is the Mentimeter website. The subject "Universe" was studied with the students through the Mentimeter website. On this subject warm-up, language focus, main task and assessment processes and activities were applied to support grammar, vocabulary, speaking, writing and reading



*“It would be both fun and a little scary because it involves eternity”*

*“It’s scary because there’s nothing in space”*

*“It wouldn’t be enjoyable because it’s possible to get lost in space and die”*

*“I find it scary because there is nothing around you”*

*“I think it’s a bad idea because this kind of darkness is scary and dangerous”*

*“I think it’s a good idea because it’s fun to discover something new”.*



Figure 12. Activities about ‘Universe’ on Mentimeter Site.

In the Figure 12, vote was taken by the question ‘Is astronomy interesting?’ and the result was shown. 27 students participated in voting. Looking at the analysis of the responses on the Mentimeter website, 15 students answered yes, 9 answered no, and 3 were unclear.

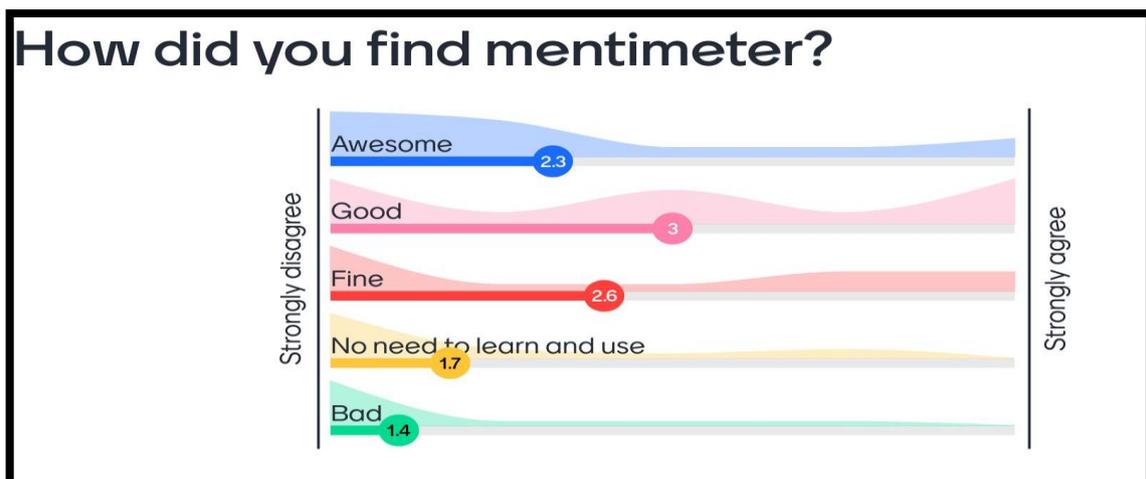


Figure 13. Activities about ‘Universe’ on Mentimeter Site.

In Figure 13, students were asked to rate how they found the mentimeter site and the scoring results were presented. Based on the average of the results, the students rated the Mentimeter position as mostly good. By looking at this result, it can be said that the students see the Mentimeter website as a positive tool in the foreign language teaching process supported by technology.



Figure 14. Activities about 'Universe' on Mentimeter Site.

Students were asked to classify the online tools used in technology-supported English teaching on the Mentimeter website, and the results are shown in Figure 14. According to the results, the students placed lyrics trainings in first place, voscreen in second place, quizizz in third place, wordart in fourth place, cram in fifth place, mentimeter in sixth place, storyjumper in seventh place and storybird in eighth place. Based on these results, it can be said that the students liked the lyrictraining website the most, but the storybird website the least.

### Discussion and Conclusion

This study was conducted to investigate the effect of teaching English on the English attitudes of English students through online technological tools. For this purpose, the English language acquisitions of the ITDP (Individual Talent Recognition Program) group students in the curriculum were implemented in an 8-week program with the help of technological online tools. At the end of the application, according to the average of the students' English attitude pre and post-test results the average of the pretest results of the affective subfactor of the students' English attitude scale was  $\bar{X}=26.03$ , the posttest result was  $\bar{X}=27.60$  while the average of behavior subfactor on the English attitude scale was found to be the  $\bar{X}=22.00$ , the posttest results was found to be  $\bar{X}=22.53$  (Table 2 ).

According to the results of the sample t-test analysis of the students' attitude scale towards the English lesson, there was no significant difference in the pre-test and post-test averages of the students' attitude scale towards the English lesson [ $t(29)=-1.975$ ,  $p>0.05$  ve  $t(29)=0.567$ ,  $p>0.05$ ]. However, according to the arithmetic mean results, technology-assisted English activities improved the English attitude of gifted individuals in a positive way.

In terms of the first question of the study, the results of the study are similar to previous studies on the effect of technology-supported English teaching on students' attitudes. As a result of his research on the advantages and barriers of technology-assisted language learning, Ali (2010) found that most teachers and students develop positive attitudes towards language teaching and learning. Likewise, there are many studies show that most teachers and students are positive about technology integration (Albirini, 2006; Brantmeier, 2003; Bulut & AbuSeileek, 2007; Eswaran, 2008; Teo, 2008). However, in Dinçer's (2014) study on the effect of media and technology-supported vocabulary teaching in foreign language classes, it was found that there was no significant change in students' attitudes towards vocabulary learning via Facebook.

When looked at the findings obtained during the application process for technology-supported English teaching, it is seen that the students created 15 English stories on the storybird website. The names of the stories are; Super Child, Hiking, Little Fox and Bear go camping, In the Space, A lion and its Cub, Zombie's Physical Appearance, Animals and Their Family, Appearance of Animals, At the Zoo, Play with Me, Future City, Sweet Boy, Scary Night, King of Mice, Libery War. As a result of using the Voscreen website, the highest score the students got for the site's operation was 6013 and the lowest score was 54. The reason for the difference in scores between the students is due to the difference in the time-based scores of the person who translated the site's videos the fastest. Furthermore, after the evaluation process, students' practice of using this site outside of school is another reason that explains the difference in their scores. On the Wordart site, students created different word clouds containing words related to the topic health and illnesses (Figure 2 & 3). As a result of the 20-question test made on the Quizizz site, it was seen that 11 of the students answered more than 80%, 14 of them gave more than 60% correct answers and 4 of them gave more than 40% correct answers. Since more than half of the students answered more than 50% of the correct answers, it can be said that the activity was successful (Figure 4). The Results of the activity on finding the words in the 'Happy World Environment Day' video in Lyricstrainings site according to their levels, the students' highest score was 4250 and the lowest was 871 (Figure 5). The reason for the high score difference between the students was the response speed and how many times they found the correct

answer to the scoring task. Given these factors, it would be more accurate to say that the student with the lowest score had a slow response time or had difficulty finding the correct option the first time, rather than failing. On the Cram site, students prepared flashcard related to the topic free time activities, created different activities with the words they learned (multiple choice, matching, etc.) and played two different games with the words they learned (Figure 6, 7 and 8). On Storyjumper, they wrote stories about narration. The stories that the students created in pairs are as follows; My Childhood Dreams, Minecraft, Fortnite, Valorant, The Exam Guy, Butterflies, Halloween, Big Kingdom Wars, Barbie in the 12 Dancing Princess, Best Icon Players' Lives, Predatory Animals, The man and his Fault, Evils at Harry Potter, The World of Wizard, K-Pop Group. The students created a total of 15 digital stories (Table 4). Finally, brainstorming was done on the topic "Universe" on the Mentimeter website and the most mentioned words were generated as; galaxy, earth, planet, astronaut, star, black hole ve World (Figure 9). In addition, various activities were organized with open questions and voting (Figure 10, 11, 12 and 13). In the final activity, which was held as a voting on the Mentimeter website, it was concluded that the students ranked lyricstraining, voscreen and quizziz in the top three during the 8 weeks of technology-supported English teaching application process. Based on this result, it can be said that the site that the students liked the most during the process was the lyricstrainings site.

In terms of the second question of the study, previous studies on tasking gifted individuals with technological tools are compatible with the results obtained. Zakaria et al. (2016) have come to the conclusion that using Storybird in the lesson helps students to acquire reading habits, improve their writing skills and active learning among students. Similarly, there are other studies showing the positive effects of technological applications (Voscreen, WordArt, Quizziz, Lyricstrainings, Cram, Storyjumper & Mentimeter) in teaching and learning processes (Ekinci & Ekinci, 2020; Taylan, 2018; Yüçetürk & Bergil, 2021; Nezhyva, Palamar & Marieanko, 2022; Babushkira et al., 2022; Inayati & Waloyo, 2022; Fakhuriddin, Nurhidayat & Rof's, 2022; Musadiq, Kamaluddin & Mursalim, 2021; Garcia, 2015; Ezeh, 2020; Muhtarıs & Ziemke, 2015; Picardo et al., 2021). However; as there are no studies on the Cram site in the literature, this study will be a source to literature in this sense.

### **Recommendations**

As it has been found that technology-supported foreign language teaching has a positive effect on the English language attitude of gifted individuals, it is recommended to use technology-supported

activities in teaching English to gifted individuals in order to have a positive effect on their foreign language attitude.

In general, this study shows that technology-based and supported language learning methods are better in studies where technology is a goal rather than just a tool. For this reason, it is recommended that English teachers who are practitioners enrich their lessons with technology. In our era, it is important to incorporate technology into educational models.

As a result of the study, when evaluating the students' studies and products on listening, speaking, reading, writing and grammar skills by using technological tools, it shows that English teachers can benefit from these methods to improve their students' listening skills, speaking, reading, writing and grammar. In this direction, the use of technology within the framework of listening, speaking, reading, writing and grammar skills can significantly increase student success.

The English curriculum developed in the study was implemented in a science and art center in Bilecik province. In future researches similar studies can be applied with different groups of gifted students or in different educational institutions in different provinces and regions of Turkey.

The participants of the study were 6th and 7th grade students diagnosed as gifted. Similar studies can be conducted with gifted students at different grade levels.

## About Authors

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**First Author:** Cavide Demirci is a Professor at Osmangazi University of Faculty of Education, she is currently working at the Educational Sciences Department. She completed his doctorate at Hacettepe University.

**Second Author:** Sedef Çelik is an English teacher at Ministry of Education in Turkey. She works at Bilecik Borsa İstanbul Science and Art Center. She is also currently a MA student at Eskişehir Osmangazi University, Turkey.

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## ORCID

Cavide Demirci  <https://orcid.org/0000-0003-4789-4286>

Sedef Çelik  <https://orcid.org/0000-0003-4793-3070>

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