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Araştırma Makalesi

AN INVESTIGATION IN TO THE STUDENT OPINIONS AND OBSERVATIONS TOWARDS ANIMATION-SUPPORTED INSTRUCTION IN SOCIAL SCIENCES LESSON[*]

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Abstract

This study aims to investigate the student views and observations towards animation-supported instruction in social studies lessons. The study group consisted of 20 2nd grades in a primary school in the Eğil district of Diyarbakır in the 2018-2019 academic year. The case study design, one of the qualitative research methods, was used in the research. In this qualitative research in which semi-structured interview form, observation form, and outcome evaluation form used as the data collection tools, Content analysis method was used to analyze the data. The results indicated that the students' interest and love for the lessons increased with animation-supported instruction. Moreover, it was concluded that the students found animation-supported education different, interesting, and fun, supporting their permanent learning.

Keywords: Animation, social science lesson, primary school, technology.

HAYAT BİLGİSİ DERSİNDE ANİMASYON DESTEKLİ ÖĞRETİMİN ÖĞRENCİ GÖRÜŞ VE GÖZLEMLERİ AÇISINDAN İNCELENMESİ

Öz

Araştırmanın amacı animasyon destekli hayat bilgisi dersi öğretiminin öğrencilerin görüş ve gözlemleri açısından incelenmesidir. Araştırmanın çalışma grubunu 2018-2019 eğitim-öğretim yılında Diyarbakır ili Eğil ilçesine bağlı bir ilkokulda 2. sınıfa devam 20 öğrenci oluşturmaktadır. Araştırmada nitel araştırma yöntemi desenlerinden olan durum çalışması deseni kullanılmıştır. Veri toplama aracı olarak yarı yapılandırılmış görüşme formu, gözlem formu ve kazanım değerlendirme formu kullanılmıştır. Elde edilen verilerin analizinde içerik analizi yöntemi kullanılmıştır. Animasyon destekli sunulan dersle ilgili araştırma sonuçlarına göre; öğrencilerin animasyon

destekli eğitimi farklı, ilgi çekici ve eğlenceli buldukları öğrenmelerini destekleyici ve öğrenmelerini uzun süreli hale getirdiği sonucuna ulaşılmıştır. Öğrencilerin derslere ilgileri ve sevgileri arttıkça derslerde öğretilen konuların akıllarında daha kalıcı olduğu sonucuna ulaşılmıştır.

Anahtar Sözcükler: Animasyon, hayat bilgisi dersi, ilkokul, teknoloji.

Introduction

Rapid developments in science and technology have affected the field of education. Especially with the developments in recent years, the number of studies integrating technology into education has increased (Aslan, 2020). Technology is a facilitator for innovation and change for children. Therefore, the curriculum should include up-to-date information. Technology enables young people to use it effectively in the future (Kaya, 2020). The course contents of the constructivist education system, which aims at the knowledge constructed by the individual, not by rote, are also prepared with the use of computers (Tombul, 2019). Learning environments directed to various sensory organs facilitate students' learning by activating their cognitive schemes (Büyükikiz, Dölek and Kızdırıcı, 2019). Computers and computer-based materials, tasks, and exercises that appeal to more than one sensory organ are preferred by most teachers to attract students' attention in the educational environment. They also contribute to the realization of whole learning (mastery learning) by stimulating the student during the learning process. For this reason, through the use of multi-media elements (audio, visual, etc.), children can perceive and learn the concepts correctly in the education process (Batdı and Anıl, 2021). The use of visual elements also helps to increase students' interest in the lesson by attracting their attention (Bağcı and Başaran, 2019). Technology that facilitates learning and teaching is essential for students and teachers. The use of technology in lessons is a time-saver and serves practicality and motivation (Kalkanoğlu and Albuz, 2019).

The animations that children watch are reflections of verbal and drawing expressions (Bapoğlu Dümenci, Dilli and Sicim Sevim, 2019). Due to the effects of animations on children, animations used in education should be chosen carefully in terms of content and physicality (Murat, Doğan and Öner, 2019). In the literature, it has been concluded that animation applications increase the learning of students and contribute to permanent learning (Büyükikiz et al., 2019; Göllü, 2019; Akdoğan, 2019; Pem, 2019).

Education and technology are so interwoven that they closely affect each other. Since educational technologies create change by enriching the existing classroom environments, teachers and students also need to use and learn from this technology (Yanpar Yelken, 2015). For this reason, one of the skills included in today's skill-based social sciences lesson curriculum is "using information and communication technologies" (MEB, 2018). The use of animations in education facilitates understanding of the complex information presented and positively affects the memorability of the concepts by appealing to more than one sensory organ, supported by auxiliary elements such as color and sound (Gürbüz, 2020). The current research aims to examine student views and observations towards animation-supported teaching in the Social Sciences lesson. To this end, the following research questions guided the current study:

1) What are the students' views on the teaching process and applications with animation?

2) How is the teaching process with animation according to observations?

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Method

Research Design

The case study design, one of the qualitative research methods, was used in the examination of animation-assisted teaching in the social sciences course to examine the opinions and observations of the 2nd-grade students.

In case studies, causes and effects can be examined with an in-depth understanding in their real context (Cohen, Manion and Morrison, 2021). The analysis unit determines the case studies. It is an in-depth scan and analysis of a system with defined boundaries. For this reason, the limits of research should be clear (Merriam, 2015). In this research, the students in a certain number of study groups and the experiences of the students during the application process were taken as a subject and formed the analysis unit.

"Well-designed case studies draw on multiple sources of evidence" (Yin, 2017, p.10). In this study, participant observation and interviews from multiple sources of evidence were used, focusing on animation-assisted social sciences teaching and the situation was tried to be explained. In the research, one case study design, one of the case study designs, was used.

Participants

The study group of the research included students in the second grade of a primary school in the Eğil district of Diyarbakır in the 2018-2019 academic year. The demographic characteristics of the study group are given in Table 1 below:

Table 1: Demographic Characteristics of the Study Group

Variables		Frequency	Percentage
Gender	Girl	12	60
	Boy	8	40
Educational Status of the Mother	Illiterate	11	55
	Literate	8	40
	Primary school	1	5
Educational Status of the Father	Illiterate	3	15
	Literate	3	15
	Primary school	11	55
	Middle School	3	15
Number of Siblings	1	1	5
	2	2	10
	3	2	10
	4 and above	15	75

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 1, the number of female students is more than male students in terms of gender distribution. The rate of illiterate people is high regarding mothers' education level. Regarding the father's education level, primary school graduates are the highest. As for the number of siblings, the number of siblings of 4 or more is the highest.

The study group is the researcher's class. To conduct the study with the students in the study group, necessary permissions were obtained from the Diyarbakır Provincial National Education Directorate. In addition, voluntary consent forms were sent to the parents of the students, and necessary permissions were obtained. Since the students in the study group did not receive an animation-supported education before, they were informed about what to do about the process, and basic education was carried out with sample animations as a preliminary study. For confidentiality purposes, coding such as S1 and S2 was used rather than the students' real names.

Data Collection Tools

Three types of measurement tools were used to collect the research data. First, an observation form consisting of 10 items about the social sciences lesson duration, which was prepared by the researcher based on expert opinion, was created. To get the opinions and feelings of the students, the draft interview form prepared in a semi-structured form was presented to 6 field experts (two information technology teachers and four classroom teachers), and a semi-structured interview form consisting of 10 questions was created by making final adjustments in line with the feedback given. These interviews were conducted with the parents' permission and recorded with a voice recorder. Finally, the outcome evaluation form, which was prepared based on the learning outcomes of the safe life unit of the lesson created by the researcher, was created to support the research. The evaluation phase of the form was filled by the lesson's teacher (observation), taking into account the level of students' answering the activity questions in the course and their participation. Following the examinations made by the Fırat University Social and Human Sciences Research Ethics Committee, the ethical suitability of the research was approved with decision number 11 of the 15th meeting, dated 28.12.2018.

Research Process

In the application process for the animation-supported social sciences lesson, the "safe life" unit was determined for animation-supported teaching by examining the 2nd-grade social sciences curriculum based on expert opinions. Then, scenes were prepared for the animations following the determining unit. An internet-based animation program named www.powtoon.com has been chosen to prepare the animations. Experts checked the prepared animations. The implementation process of the research lasted for 6 weeks. The lesson plans and activities of the animation-supported lessons were created by the 6 learning outcomes of the relevant unit. Parents and students were informed about the applications made before the animation-supported teaching. The students were given basic information about the animations and the lessons to be taught with these animations. Scenes were created in the chosen animation program with the support of the 2nd-grade social sciences lesson textbook and different sources. After animations were created according to the topics of vehicles, safe travel, let's cross the road together, emergency numbers, technology is everywhere, and safe playgrounds are waiting for us, end-of-topic evaluation questions were prepared in accordance with the learning outcomes. Ten minutes of each lesson is reserved for animation-supported instruction. A white screen with a projector was used for the presentation of the animations to the students. These applications continued for 6 weeks. The observations of the students were recorded on the observation form by the researcher after each lesson. At the end of 6 weeks, the students were interviewed using a voice recorder according to the semi-structured interview form. Student learning outcomes evaluation forms were filled in by taking into account the answers given by the students to the end-of-course evaluation questions and their participation in the activities.

Data Analysis

The content analysis method, one of the qualitative analysis methods, was used to analyze the data. Content analysis is followed in the following order. First, the data is coded, and themes are created according to the coded data; then, the codes and themes are arranged, and the findings are created and interpreted. The use of qualitative data obtained with different data collection tools increases the validity and reliability of the results obtained (Yıldırım and Şimşek, 2018).

Therefore, the study used multiple data collection tools for validity and reliability: observation, interview, and outcome evaluation forms.

To ensure descriptive validity in this study, instead of reflecting a single researcher's point of view, the researcher created codes and themes that multiple researchers agree on. Then, within the scope of interpretive validity, direct quotations from the participants were divided into codes and themes, and the texts were determined. These texts were reviewed by the researcher. Finally, the results obtained in the evaluation validity were interpreted and evaluated. To ensure the study's reliability, in the data analysis, firstly, the codes were obtained from the data, themes were determined based on the common codes, and findings were interpreted. Independent coding of the data was done by the researchers, and cross-checking was provided by cross-coding. The tables used in the research were adapted from the master's thesis of Yasak Cevizci (2021).

Findings

In this section, the findings obtained by analyzing the data obtained with the measurement tools in examining the opinions and observations of the students about the animation-supported social sciences lesson teaching are presented. First, the findings obtained from the semi-structured interview form created according to the 10 questions carried out with the students are given below. Then, according to the answers to the questions asked in the interview, the content analysis results were presented by creating a table for each question.

The findings obtained from students' answers to the question of, "What do you think about the lesson presented with animation?" are given in Table 2.

Table 2: Opinions on the Animation-Supported Social Sciences Lesson

Theme	Code	Students
Liking	Love	S1, S2, S3, S4, S7, S8, S10, S11, S13, S14, S16, S17, S18, S19, S20
	Computer	S9
	Enjoyable	S3, S5, S6, S8, S14, S15, S16, S18
	Different	S2, S6, S7, S11, S12
	Interesting	S10
Education	Permanent	S2, S5, S6, S8, S13, S19
	Learn	S1, S4, S8, S9, S11, S12, S13, S15, S16, S17, S19

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 2, two themes named "liking and education" were determined. When the "liking" theme with the highest number of opinions was examined, it can be concluded that the students liked the lessons and expressed them as different and interesting. On the other hand, it is clear from the codes under the "education" theme, the subjects in the lesson were learned permanently.

The themes and codes obtained from students' answers to the question of "What do you remember from the animated lesson?" are given in Table 3.

According to Table 3, When the answers provided by the students are examined, the codes formed are shaped according to the subjects explained in the lesson, so the formation of the themes consisting of the codes was created in parallel with the subjects. While 6 themes consisted of the main topics followed in the lesson, a total of 13 codes were formed in parallel with 6 themes. The students state that vehicles and transportation types remain in their minds under the theme of vehicles. After the vehicles theme, the ones that students remember the most during the lesson were the safe playgrounds. While the students expressed them as playgrounds in general, some

students separated them as "park, garden, school garden, street". Emergency numbers remained in their minds during the lesson. One student also stated the numbers of the police and ambulance separately. On the safe travel theme, while two students expressed their opinions, it was observed that one student stated "...the seat belt was fastened in the school bus".

Table 3: What Students Remember From the Animated Lesson?

Theme	Code	Students
Vehicles	Vehicle	S1, S3, S4, S5, S6, S7, S8, S9, S11, S12, S13, S15, S16, S17, S18, S20
	Land road	S1, S2, S5, S18, S19
	Airline	S1, S5, S14, S17, S18, S19
	Seaway	S1, S2, S18
Safe Travel	Safety belt	S6, S9
Let's cross the road together	Traffic signs	S10, S14
Emergency numbers	Emergency Number	S3, S4, S7, S8, S10, S16, S20
	Police-Ambulance	S14
Technology is everywhere	Technology	S7, S11, S12
	TV, Tablet, Computer	S17
Safe Playgrounds	Playgrounds	S1, S2, S4, S9, S11
	Parks Gardens	S1, S2, S12, S18
	Schoolyard Street	S13

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

The themes and codes obtained from students' answers to the question of "Were there any points that attracted your attention in the education with animation? If so, what are they?" are given in Table 4.

Table 4: Points That Attract the Attention of Students in Education with Animation

Theme	Code	Students
Security	Safe Playgrounds	S1, S5
Animation	Moving Picture	S2, S3, S4, S6, S10, S20
	Smiling face	S3, S4, S6, S7, S9, S10, S14, S20
	Car	S6
	New Information	S14
	Speech Bubbles	S3
No	No	S8, S11, S12, S13, S15, S16, S17, S18, S19

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

When Table 4 is examined, it is seen that most of the students stated that animations attracted their attention and 9 students shortly answered the question as "no" and stated that nothing caught their attention. Two students said in the safe playground code, "The ball was thrown into the street...." which caught their attention. However, students stated that this was wrong. The code, expressed as a smiling face in the animation theme, is the "smiling face" that students encounter when they answer the end-of-topic evaluation questions correctly.

The themes and codes obtained from students' answers to the question of "Did the education with animation increase your curiosity towards social science lesson?" are given in Table 5.

Table 5: The Curiosity of the Students towards the Animation-Supported Social Sciences Lesson

Theme	Code	Students
Curiosity	Yes	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12 S13, S14, S15, S16, S17, S18, S19, S20

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 5, under the theme of "curiosity", a single theme, 20 students gave a common answer of "yes".

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The themes and codes obtained from students' answers to the question of "Would you like the animations to be used in all lessons? Why?" are given in Table 6.

Table 6: Opinions of Students on the Use of Animation in Other Lessons

Theme	Code	Students
Yes	Good	S1, S7, S9, S10, S11, S12, S14, S15, S17, S19
	Love	S8
	Enjoyable	S4, S10, S13, S18, S20
	Animation	S2
	Learning	S5, S7, S16
No	Social Sciences Lesson	S6

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 6, 6 codes were created from 2 themes: "yes" and "no". The student who expressed an opinion on the "social studies " code under the "No" theme wanted the animations to be "…only in the lesson of the social science". Nineteen students expressed their opinions on the "Yes" theme. They mostly stated that the lesson was "good and enjoyable".

The themes and codes obtained from students' answers to the question of "Does education with animation have an effect on your understanding of the lesson?" are given in Table 7.

Table 7: The Effects of Education with Animation on the Understanding of the Lesson

Thema	Code	Students
Yes	Yes	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15, S16, S17, S18, S19, S20
	Learning	S1, S3, S10
	Book	S3

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

All 20 students stated that animation-supported education positively affected their understanding of the lesson.

The themes and codes obtained from the answers of students to the question of "Do you think there are negative (bad) aspects of education with animation? If so, what are these negative (bad) aspects?" are given in Table 8.

According to Table 8, 8 students stated that there was no negative aspect, and 12 students stated that there should be more questions and more time in the education given. The students stated that the duration of the animation-supported lesson should be longer and the number of questions should be increased because they like the lessons with animation.

Table 8: Negative Aspects of Education with Animation

Theme	Code	Students
Yes	Insufficient Question Number	S3, S5, S8, S9, S10, S11, S12, S18
	Insufficient Time	S2, S3, S8, S10, S11, S12, S14, S15, S17, S18
No		S1, S4, S6, S7, S13, S16, S19, S20

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 8, Ten students mentioned their opinions under the "Insufficient Time" code. Regarding this, the opinions of S8 and S18 students are as follows:

S8: *"Yes. There could have been more questions, and it could have taken longer."*

S18: *"Yes. It was too short. I wish it had taken longer."*

The themes and codes obtained from students' answers to the question of "Did you find the education with animation fun? What did you like?" are given in Table 9 below.

Table 9: Whether the Training with Animation Is Fun and What They Like About It.

Theme	Code	Students
	Vehicles	S1, S4, S5, S6, S7, S9, S11, S12, S13, S14, S15, S16, S19, S20
	Smiling face	S3, S6, S8, S9, S14, S16, S17, S18, S19, S20
Liking	Picture	S3, S7, S9, S10, S16
	Safe playgrounds	S13
	Technology is everywhere	S4
	Emergency numbers	S2, S18

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 9, the students expressed their favorites in this question as "vehicles and smiling faces", and stated that these are the things that they mostly remembered. All students gave their opinions on this question. No student has an opinion that the lesson is not fun. They also expressed that they liked the "pictures" used in animations very much.

The themes and codes obtained from students' answers to the question of "Which subject/s did you like more in the lessons with animation?" are given in table 10.

Table 10: Subjects That the Students Like Most in the Animated Lesson

Theme	Code	Students
	Vehicles	S1, S3, S5, S6, S8, S9, S11, S12, S13, S14, S15, S16, S18, S19, S20
	Safe travel	S16
Loving	Let's cross the road together	S11, S12, S20
	Emergency numbers	S7, S10, S15, S17
	Technology is everywhere	S4, S5, S13, S16
	Safe playgrounds	S2, S6, S13, S19, S20

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

When the students' opinions are examined according to Table 10, it is seen that they gave similar answers to the question of the subject they liked most in the lesson, as well as the aspects that they remembered and liked. For example, the students stated that they liked the subject of "vehicles" the most.

The themes and codes obtained from students' answers to the question of "What are the positive aspects of the lessons offered with animation?" are given in Table 11.

Table 11: Positive Aspects of the Lesson Presented with Animation

Theme	Code	Students
Learning	Understanding	S3
	Permanent	S1, S2, S3, S4, S5, S9, S14, S18
	New information	S6, S8, S11, S12, S16, S17, S20
Liking	Enjoyable	S3, S4, S5, S6, S7, S9, S10, S11, S12, S13, S14, S19, S20
	Different	S8, S10, S14, S15, S20
	Good	S1, S3, S5, S9, S13, S15, S16, S17, S18
	Picture	S15, S17

Note: Adapted from the master's thesis of Yasak Cevizci (2021).

According to Table 11, under the learning theme, they stated that the positive aspects of the animation-supported lesson were the permanence of information presented in the lesson, the help they provide for understanding the subjects presented, and understanding and better learning of the new information. Nineteen students expressed their opinions on the theme of liking. Thirteen students commented on the code of "Enjoyable". Regarding this, the opinions of S7 and S19 students are as follows:

S7: It wasn't as boring as the book, and I had a lot of fun.

S19: The lesson was a lot of fun. Time passes so quickly, and I am not bored.

When the opinions given by the students about the animation-supported teaching process are examined, the thoughts about the lessons are generally in the direction of liking and education. While it was observed that their curiosity towards the lesson increased and the scenes created were different and interesting, they expressed their opinion that it should be used in all lessons. Among the subjects, the students mostly remembered were vehicles and safe playgrounds. It is a remarkable finding that the subjects that the students enjoy and have fun with most are the subjects that they remember most. Thoughts on the positive aspects of the course support these findings. The positive aspects of animation-supported social science lessons that the students mentioned are the permanency of the content, new information, and enjoyment.

Based on the observations, nine themes emerged at the end of the analysis; participation in the lesson, situations encountered, motivation, communication, answering questions, participation in activities, logical inference, mood, and following the lesson. The evaluations of 20 students as a result of the 6-week observation forms are given below.

S1: When the data on the student observation form was examined for 6 weeks, it was observed that the student participated in the lesson, and there was no change in her participation and lesson follow-up within weeks. It was observed that there was a slight decrease in her motivation in the last three weeks compared to the first weeks. She was attentive, excited, and enthusiastic in lessons. She was open to communication and sharing. She regularly participated in answering questions and activities. She could make logical deductions.

S2: While attendance was low in the first week, it was observed that she was willing, interested, and able to make logical inferences in the following weeks. When her motivation was examined, it was seen that it decreased towards the 4th week, and her interest in the lesson decreased. While there was a lack of communication in the first week of the course, it was seen that she only participated in collective participation in the following weeks.

S3: During the 6 weeks, she attended classes and activities and followed her lessons. The motivation was observed at a high level after the first week. In communication, while it was low in the first week, communication was realized only with collective participation in the following weeks.

S4: The student's participation in the lesson, following the lesson, and motivation remained at a high level without changing within weeks. It was observed that she participated in discussions and shared in the following weeks of the implementation process in terms of communication. She was willing to answer questions and was persistent in realizing participation. Changes in logical inferences were observed in some weeks. In general, she was curious about the course and eager to learn.

S5: She was willing to participate in the course. She followed her lessons constantly, and her motivation did not decrease within weeks. In communication, she was willing to answer questions. In general, it was observed that she was happy in the lesson and excited about her participation.

S6: She was interested in taking part in the lessons. Her participation and motivation in lesson activities were low in the 2nd week. However, it increased gradually over the other weeks. She was active in sharing and communication. She answered the questions truthfully and willingly. It was observed that she could make logical deductions over the last weeks.

S7: In general, she was a passive listener in class and mostly participated in activities in a collective form. The lowest week in communication and motivation was the 2nd week. She participated collectively in answering the questions. It was observed that she participated in the activities collectively but willingly. It was observed that she made no logical inferences in the process.

S8: It was observed that her participation was occasional. Her motivation in the lessons was normal; some weeks she was a passive listener. Her communication was mainly in collective participation. It was observed that she did not make logical inferences. However, she gave correct answers to the questions with collective involvement. She followed the lessons continuously over the weeks.

S9: She was willing and curious to participate in the lesson. It was observed that her motivation did not change within weeks and was consistently high. She was interested in answering questions. She attended the lessons and activities continuously over the weeks. It was observed that she did not make logical inferences except for the 2nd and 3rd weeks. She was able to follow the course within weeks without any change.

S10: There was a decrease in class participation in the last weeks. Her motivation was normal. Her communication took place more collectively. She gave correct answers to the questions. However, she did not make logical inferences. A decrease was observed in the 2nd and 4th weeks of the course follow-up.

S11: She was excited and willing to participate in the lesson. Her motivation was observed to be high within weeks. She is willing to participate in lesson activities. She made logical inferences only in week 2. She followed the course continuously over the weeks.

S12: Her class participation was usually in the form of occasional participation. Her motivation was consistently normal within weeks. Her communication was collective. She gave correct answers to questions. She was willing to participate in lesson activities. However, she did not make any logical inferences during the lessons. She followed the course constantly.

S13: His class participation was usually in the form of occasional participation. His motivation was normal. He participated in activities with good communication. He did not make any logical inferences during the lessons. He followed the course constantly.

S14: His participation in the course was willing. He was interested in participating in the lessons. In the lessons, careful and collective communicative involvement took place. No logical inferences were made at 1, 4, and 5 weeks. He followed the course constantly. His motivation was high.

S15: He was interested and excited in-class participation. His motivation increased in the last week. He participated in the classroom activities willingly, and his communication was well. Except for the first week, he did not make logical inferences during the lessons. However, he answered the questions truthfully and willingly.

S16: He was interested and willing to participate in the course. His motivation was high. His participation was collective. He did not make any logical inference. He followed the lesson constantly and answered the questions correctly.

S17: He was interested in following the lesson, but he was a passive listener when following the lessons. It was observed that his motivation increased in the last week. His answers to the questions were correct. His communication was primarily through collective participation. He made no logical inferences.

S18: He was eager and excited to participate in the lesson. His motivation increased in the last week. He was involved in collective interaction. He did not make any logical inferences. He followed the course consistently.

S19: He was interested and willing to participate in the course. His motivation increased in the last week. In communication and participation in activities, he was involved in collective interaction. He made no logical inference. He followed the lessons constantly but was observed to be distracted for some weeks.

S20: He was excited and willing to participate in the lesson. His motivation decreased in the 3rd and 4th weeks. He was willing to answer questions and gave correct answers to the question. He made logical inferences in the 2nd and 5th weeks. He was generally happy and excited. He followed the course constantly.

Based on the 9 themes that emerged from the observation form according to the weeks when the animation-supported teaching process is examined, in the theme of participation in the lesson, it was observed that the students followed the process as an observer and participated as a listener in the first week and actively participated in the process starting from the second week. In general, it was seen that the students were interested, willing, and curious in the process. When the encountered situation's theme is examined, it was observed that the students were generally willing, excited, and interested, but it was also observed that they were distracted, passive, and reluctant to the process for some weeks. When the motivation theme is examined, students' motivation is generally normal and high. However, it was observed that some students experienced some motivation decreases and increases within weeks. When the communication theme is examined, it was observed that 2 students did not communicate with their friends during the process and behaved as listeners, while 18 students were active during the process, and they communicated with their friends throughout the process, shared information, and made evaluations. In the theme of answering the questions, it was observed that the students generally answered the questions in the activities and answered what they learned by reflecting on the questions in the end-of-topic evaluation activities. In the theme of participation in the lesson activities, it was observed that 4 students did not participate in the activities in the first weeks, and 3 students had a changing pattern in terms of participating in the activities (increase and /or decrease) throughout the process, while 13 of the students participated in the lessons all in all activities. When the logical inference theme is examined, it has been observed that students generally made logical inferences by associating the information they have learned with daily life. In the emotional state theme, it was observed that students' emotional states changed according to the weeks. While it was observed that they were interested, eager, excited, and curious in some weeks, it was also observed that they were disconnected from the process in some weeks and lost interest. When the theme of following the lesson is examined, it was observed that 18 students followed the lesson throughout the process and did not get distracted, while it was observed that 2 students were distracted in some weeks and were busy with other things during the lesson. In line with the outcome evaluation form prepared based on observations, it was observed that 6

students grasped the unit's outcomes at the "very good" level, 13 students grasped the outcomes at the "good" level, and 1 student comprehended them as "should be improved" level.

Discussion and Conclusions

Today, technology and education are essential aspects of human life. While education enables people to become more creative and mature by revealing their latent powers and abilities, technology helps the efficient and systematic use of the knowledge and skills obtained through education (Alkan, 2011). Classroom technologies are needed in the educational process to keep students' attention alive, to attract their attention, and to respond to various learning expectations The most basic element in technology integration is the good planning of teaching and the integration of technology into the teaching process (Borich, 2017). In this context, animations increase the effectiveness of learning by reducing the learning mistakes of the students, improving their perception skills, attracting their attention, and helping them to draw their attention to the lesson (Demirci, 2011). In the current study, animation-supported social studies lesson was examined in terms of students' opinions and observations. As a result of the research, it was concluded that animation-supported social studies lessons made significant contributions to students.

In the semi-structured interview form, when the students' answers to the question of "What do you think about the lesson presented with animation?" were examined, it was seen that the students liked the lessons very much and found them fun, different, and interesting. Also, they thought that they learned the new information better and permanently. This result is similar to Öztürk's (2014) study in which students, teachers, and candidates thought that "the targeted achievements are achieved, and it is a fun and useful education" in the animation-supported lesson. Daşdemir, Uzoğlu, and Cengiz (2012) examined the use of animation according to students' opinions. They found that animations increase the students' success, permanence, and scientific process skills and provide a better understanding of the subjects, similar to the current research findings. As a result of his animation-supported research for 5th-grade students, Demirkan (2020) concluded that education with animation fills the students' knowledge gaps. Çelik and Ütkür Güllühan (2022) conducted a study on primary school students about virtual museum visits and reported that all the participants except one student found virtual museum visits beneficial. According to the current research, it can be concluded that animation-supported education makes the lesson interesting and different and helps students learn new information.

In line with the answers given by the students to the question of "What do you remember from the animated lesson?", it was concluded that many of the subjects were remembered well, and they used positive expressions about these subjects. Many scholars (Aslan Efe, 2015; Çelik and Gündoğdu, 2020; Berney and Bétrancourt, 2016; Çelikler, Güneş, and Güneş, 2011; Bayram and Koçak, 2013; Er ve Alyılmaz, 2022; Temur, Erdemir and Artun, 2017; Gürgil, 2019; Öner and Yaman, 2020) have reported numerous positive effects of animation-supported education on students, especially on their academic success. Imawati and Shubchan (2018) examined the effects of the Scratch application on students' mathematics learning and concluded that "students learn mathematics better and understand the subjects better with Scratch application". In line with the findings of the studies in the literature, it can be concluded from the findings of the current study that animation-supported social studies lessons help students learn permanent since students could give accurate information on the given subjects with the animation-supported lessons, showing that students learned the lesson subjects permanently.

When students' answers to the question of "Were there any points that attracted your attention in the education made with animation? If so, what are they?" are examined, most of the students said that animations attracted their attention more. In contrast, some students said nothing caught their attention in the education. Yücelyiğit (2014) conducted animation-supported research on kindergarten students and examined the effects on students' visual perception development. It has been concluded that while it affects the visual perception development of children in some dimensions, it does not affect some dimensions; however, it creates differences in the visual motor skills of the training group. In their experimental research in the science lesson, Evrekli and Balım (2015) examined the effect of animation-supported concept cartoons on the perception of inquiry learning skills in 6th-grade students. According to their findings, the post-test score of the experimental group that received animation-supported education was significantly higher than the pretest score. The reason for this difference could be the positive effects of animations, which is in line with the current study's findings.

When the students' answers to the question of "Did the education with animation increase your curiosity towards social sciences lesson?" were analyzed, it was seen that all of the students gave positive answers and stated that their interest in the lessons increased. When the answers of the students to the question of "Would you like the education provided with animation to be used in all lessons? Why?" were examined, it was clear that the students want to see aminations in other lessons and think that animations make the lesson nice and fun. They also add that they help permanent learning. Research on animation-supported teaching revealed that (Ertuğrul Akyol, Kahyaoğlu and Köksal, 2017; Geçal and Eldeniz Çetin, 2018), animations increase students' interest in the lesson, are fun, and help students love the lesson. Accordingly, it can be concluded that education with animations attracts students' attention and increase their curiosity and interest in the lesson. It can be suggested that teachers can benefit from animations in lesson subjects that are difficult to understand for their students and when they experience difficulty concentrating on the subjects.

Based on the students' answers to the question of "Does education with animation affect on your understanding of the lesson?", it was concluded that animation helped students learn and understand. In Akdoğan's (2019) research, teaching with animation is reported to be better and more memorable than the traditional method, especially in learning and understanding abstract concepts that are difficult to understand.

Based on students' answers to the question of "Do you think there are negative (bad) aspects of education with animation? If so, what are these negative (bad) aspects? the students found the duration and number of questions in the animation-supported education inadequate, and they reported no other negative opinions about the lessons. Yavuz (2019) examined the effects of animation-supported education on students' conceptual learning and attitudes and found no difference in the conceptual learning of the students with short-term-used animations. Süral and Girmen (2019) evaluated the students in the social sciences course with digital assessment tool. Due to the lengthy application period and the low level of computer literacy, the targeted learning outcomes could not be achieved. Dilber Özer and Baysal (2022) examined the methods used by the teachers in the social sciences course (sachunterricht) in German primary schools and found that teachers included computer-assisted education in their course but mostly used it when needed. Accordingly, animation-supported education should be spread throughout the course and should

support it. In further animation-supported studies, the application periods can be spread over a longer period.

Based on the analysis of the answers of the students to the question of "Did you find the education with animation fun? What did you like?", the students found the education enjoyable. This result is supported by Kazancı's (2019) research, concluding that games with animations are more fun and instructive.

Based on students' answers to the question of "Which subject/s did you like more in the lessons with animation?", it is noteworthy that the students did not leave this question unanswered and remembered all the topics covered in the lesson. This result is in line with the findings of Karet (2020) that the students' interest in science subjects and their motivation increase in animation-supported lessons. Another result reached in the current research is that the most memorable topics for the students and the ones they like the most are the same, showing that students' liking the lessons can make their learning more memorable. Teachers can help students make their learning more memorable by supporting the lessons with activities that students love, such as animation-supported activities.

Based on students' answers to the question of "What are the positive aspects of the lessons offered with animation?", it is concluded that students thought positively about the lessons, especially in terms of the permanence of information and better learning of new information. They also found the lesson enjoyable, different, and good. Accordingly, while animation-supported education makes lessons enjoyable and different, they also have an instructive aspect. Gök and Akcan (2022) examined the differences in teachers' attitudes towards information and communication technologies in social sciences course during the pandemic process and found that the teachers tend to animation-like applications while teaching their students.

According to the observation results in the animation-supported social science lessons, although some of the students experienced decreases in class participation from time to time, all of them followed their lessons during the application. On the other hand, all students followed the lesson with good motivation and willingly and curiously answered the questions correctly. On the other hand, it was observed that some students fell behind in making logical inferences, and some students were distracted during the lesson. In his research, Avcı (2018) took the opinions of the students about animation-supported education, and the researcher concluded that the students followed the lesson with interest, which is similar to the results of the current research. He also added that the students were eagerly waiting for the next animations, and that they found the lesson fun and interesting. Yarar Kaptan (2019) concluded that there were positive changes in the attitudes of the students in the course based on computer-assisted activities. Tay and Ak Tefek (2018) examined the concept of "openness to innovation" on primary school students. One of the results obtained as a result of the interview with the students and the painting application was "technological innovations and invention". Although the students in this study had their first interaction with technology, they were able to keep up with the innovation by participating and following the applications with interest and willingness. The observation results obtained in this research support the views of the students in the current research. It was concluded that the students liked the lesson with growing attention and the lesson accelerated their learning.

According to the learning outcome evaluation form created based on the researcher's observations, it was seen that 6 students comprehended the unit's outcomes at "very good" level,

13 students grasped the outcomes at "good" level, and 1 student understood it as "should be Improved" level. Therefore, it can be concluded that all students except 1 student achieved the lesson's learning outcomes. Yıkmış, Kurtoğlu, and Toprak (2021) examined the technology and computer-assisted studies on reading disability, which is one of the special learning difficulties. As a result of this research, it was concluded that positive contributions were made to reading skills in all technology and computer-assisted studies on students aged 6-17. Gezer and Ersoy (2021) concluded that mobile application supported social studies teaching contributed positively to students' motivation, academic achievement and critical thinking skills.

The current research was carried out in the social sciences lesson for 6 weeks with an education supported by animations prepared in line with the 6 learning outcomes. After the education, the opinions and observations of the students were examined. As a result, it was concluded that the students found animation-supported education different, interesting, and fun, supporting their learning and making it long-lasting. However, since it is seen that some students were distracted within weeks and animations did not attract their attention, activities and studies can be carried out for such students in future research. Furthermore, as the students' interest and love for the lessons increased, it was concluded that the subjects taught in the lessons were more permanent in their minds. Therefore, it may be more effective to spread the time allocated for animations throughout the academic year rather than the short-term use.

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