Values Education Using the Digital Storytelling Method in Fourth Grade Primary School Students

Başak Kasa Ayten[1]*, Canan Polater[2]

[1]Faculty of Education, İnönü University, Malatya, Turkey
[2]Faculty of Education, Bartın University, Bartın, Turkey
Corresponding author: Başak Kasa Ayten, E-mail: basak.kasa@inonu.edu.tr

ARTICLE INFO

ABSTRACT

In today's world where technology develops rapidly and young people keep up with this technology, students should both improve their digital literacy and make their learning permanent. Digital storytelling is also a method where the student is active in the learning environment and improves his technological literacy. The present study aims to investigate the use of digital storytelling method in values education in primary school fourth grade. The study was conducted with a case study design, one of the qualitative research methods. The participants of the study consist of 31 students studying in the fourth grade of a primary school in the northwest of Turkey in the spring semester of the 2018-2019 academic year. The data were collected through observations, semi-structured interviews with students and teachers, products produced in the digital storytelling process, and the diaries kept by the second author and students. The descriptive analysis method was used for the analysis of the data. The data obtained in the digital storytelling stages were analyzed using students' products, video recordings, observations, and the diaries kept by students and the second author while the data obtained from the interviews were analyzed by showing themes, sub-themes, frequencies, and percentages in tables. As the results indicated, the students expressed that their use of technology and story writing skills developed during the digital story process and that they liked dubbing and the picture drawing processes but experienced difficulties due to not being equipped. In addition they underlined that the story presentations allowed them to reinforce and internalize their knowledge about the value of justice.

Key words: Primary school, Digital storytelling method, Values education, Case study

INTRODUCTION

Values are all the judgments emphasizing unity, order, collective consciousness, and decency, and creating a social reflex in situations that may lead to chaos (Kılınç & Akyol, 2009). Every society defines the good and the bad, the beautiful and the ugly, and what should be prioritized. Therefore, values must be taught from a young age for social norms to be perceived easily by people and social happiness to take place. Individuals' understanding of society's self-control system will benefit them in their future lives (Tepecik, 2008). Healthily achieving all these is only possible with an effective values education (Tokdemir, 2007).

Values education aims to teach students universal virtues, raise awareness of values in students, and enable them to turn values into behavior (Kara, 2017). Values education is very important as it offers a positive model to society, ensures the integration of individuals in a society, improves individuals and society, and guides them towards correct and positive attitudes (Gülmüş, 2015). In values education, methods, and techniques such as modeling, positive and negative reinforcement, games, simulations, role-playing, and discovery learning are used (Aslan, 2011). Besides, with the developing technology, it is now possible to use methods, and techniques supported by technological devices in values education as well as in other educational processes.

With internet technology where mobile devices such as computers, tablets and mobile phones can exchange data (Aktay, 2017), technology has taken over a wider use of literacy in today's digital world. In addition to having basic literacy skills, it also needs today's information technology skills (Duran & Ertan Özen, 2018). Therefore, studies on teaching generally aim to organize educational settings that will create permanent and high-level learning products in a short time with less effort (Yiğit & Akdeniz, 2003). With the advancing time and developing technology; methods, and techniques that are supported by technological devices and that encourage the student to think, learn, and produce new knowledge have begun to be used instead of traditional teaching methods, where the teacher is active and students are passive (Morgil et al., 2004). The digital storytelling method, which has started to be widely used in education

recently, is applied effectively from preschool to adult education and combines the digital world with education. Digital storytelling is defined as the idea of combining the art of telling stories with a variety of digital multimedia, such as images, audio, and video, to give information to students on various topics (Robin, 2006). These technologies are indeed quite effective in attracting students' attention, facilitating their learning, and increasing their motivation (Şen, 2001).

The digital storytelling method enables the development of many qualifications in educational settings. By taking a more active role in the digital storytelling process, students become aware of their characteristics and start to use technology more effectively (Göçen, 2014; Başdaş, 2017). They can also feel more comfortable and motivated by using digital tools. Compared to traditional teaching methods, writing a digital story containing digital images, drawings, and video clips increase students' awareness of learning (Robin, 2008; Kaya, 2014; Kurudayıoğlu & Bal, 2014). As a result of such a process, students can achieve deep and meaningful learning (Akgül, 2018; Göçen, 2014).

The digital storytelling process begins in a similar way to the traditional story-writing process and continues with subject selection, drafting, and brainstorming. In this study, the process of creating a digital story is discussed in six steps: writing, script, storyboarding, locating multimedia, creating the digital story, and sharing (Jakes & Brennan, 2005). In the better the writing step of the digital story, the better the final version. Therefore, to write a good digital story, students must, first of all, be able to write quality stories (Yamaç, 2015). In this step, first, the subject is determined. Subject selection may vary according to students' preferences. Individuals who want to write informative stories or stories about historical events do research on the relevant subject; besides, those who want to write personal stories create their stories based on their experiences. In the script stage, the script to be created is shaped around the determined theme. The script is regarded as the basis of the digital story and gives an idea about the multimedia elements to be used in the story and how these multimedia components will be used. Creating digital stories from scripts helps multimedia elements add more meaning and depth to the story, rather than making the story more interesting (Jakes & Brennan, 2005). In the 'locating multimedia' stage, students research visual (videos, images, photographs) and auditory (music, sound) elements to make their scripts meaningful and ensure that they employ enough content without unnecessary components (Yavuz Konokman, 2015). They can obtain visuals suitable for their story by using search engines or drawing the images themselves and then transferring them to a computer with a scanner or shooting with a camera. Storyboarding allows a visual story to be planned in two dimensions. The first of these dimensions is chronology (what happens and when) and the second is interaction (how audio information interacts with the images). These dimensions require the writer to consider how effects, transitions, and sound would be sequenced (Kajder and Swenson, 2004). In the 'creating the digital story' stage, students combine all the components such as text, voice-over, visuals, graphs, animations, photos, and music through various software (Kajder & Swenson, 2004). In this step, free software such as Microsoft Photo Story, Movie Maker, İmovie, Pinnacle Studio 9, or Wevideo (www.wevideo.com) can be employed (Göçen, 2014; Karakoyun, 2014). Finally, in the 'sharing the digital story' step, digital stories are shared. It is the most critical stage of the whole process. This is because, in this stage, students take pride in their products and feel the excitement of sharing. Students can present their stories to their friends in the classroom environment or share them online (Jakes & Brennan, 2005).

As a result, digital storytelling can be an effective application in education in teaching students many skills such as selecting subjects for their digital story, researching this subject, using the information they obtained to write a script and turn this into a remarkable story as a whole, and combining this story with multimedia elements such as voice-over, visuals, graphs, animations, photos, and music to make it a short film (Kotluk & Kocakaya, 2015). Therefore, it will be easier for students who can establish a relationship between values and digital stories that deal with events that have happened or are likely to happen to realize the relationship between values and life and appreciate these values in real life. Taking these as a starting point, the present study aimed to investigate the use of digital storytelling in values education in fourth grade primary school. To this end, answers to the following questions were sought.

1. In the process of using the digital storytelling method in values education in primary school fourth grade;
   a. How was the value of justice taught?
   b. How was the digital storytelling method implemented?
2. What are the teachers' and students' views about the use of the digital story method in values education in primary school fourth grade?
3. What are the teachers' and students' views about values education in primary school fourth grade?
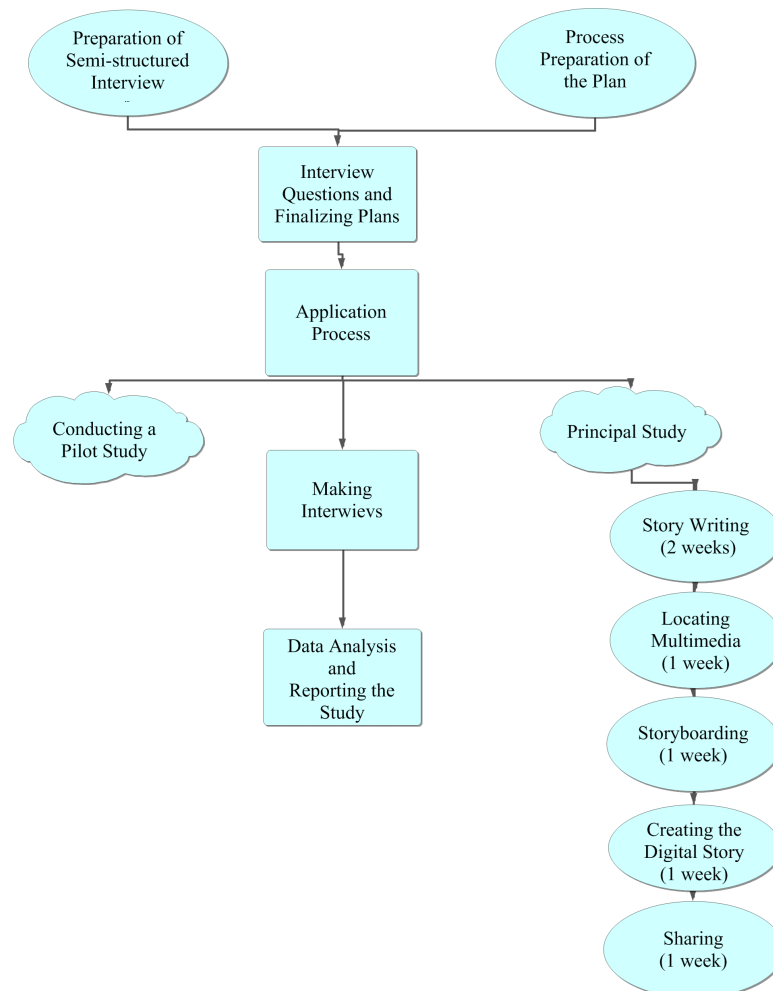
METHOD

The present study, investigating the effects of the digital storytelling method on values education in primary school fourth grade, employed the case study design, one of the qualitative research methods. The case study approach is one of the qualitative research methods where the studied phenomenon can be both the product and the subject of the research. In other words, a case study enables the researcher to collect detailed and in-depth information about real life, an existing system, or several restricted cases in a certain period through observations, interviews, documents, and reports (Creswell, 2018). In this context, this study, using the case study design, sought to explore in-depth with digital storytelling method in values education. The flow chart of the implementation process is given in Figure 1:

Study Group

The study group consists of a fourth-grade classroom teacher working in a primary school in the northwest of Turkey

Figure 1. The Flow Chart of the Implementation Process

in the spring semester of the 2018-2019 academic year and 31 students studying in this teacher's classroom. The study group was chosen by the criterion sampling method, one of the purposive sampling methods. Criterion sampling involves selecting cases that meet a predetermined criterion or criteria created by the researcher (Yıldırım & Şimşek, 2011). In the present study, the criteria that were predetermined were being from a similar socio-economic and cultural background and not having participated in an application using the digital storytelling method.

A total of 31 students participated in the study. The demographic information of the participants is given in Table 1.

According to Table 1, it is seen that the study enrolled a total of 31 students (15 females, 16 males). Of the students, 7 are 9 years old, 23 are 10 years old, and 1 is 11 years old. Four students cannot use a computer at all, 2 can use it a little, 15 can use it moderately well, 9 can use it well, and 1 can use it very well. Eight students have an internet connection at their homes, whereas 23 do not. Regarding the students' internet usage skills, 3 students do not know at all how to use the internet, 5 know it very little, 11 know it moderately well, and 12 know it very well. None of the students can use the internet very well. Nine students have a computer at home while 22 students do not. Regarding the frequency

of computer use of the participants, 1 uses it every day, 18 students a few days a week, 4 students a few days a month, and 8 students do not use it at all.

The teacher working in the classroom where the study was conducted is a 51-year-old male classroom teacher with 26 years of professional experience. He graduated from Marmara University, Faculty of Arts and Sciences, Department of History.

Data Collection and Analysis

The data were collected through observations, semi-structured interviews, documents, personal information forms, and diaries kept by the researcher and students. The personal information form was filled in by the students before the application to obtain personal information such as age, computer and internet usage skills, etc. Since the classes were taught and the digital storytelling process was organized by the researcher, the researcher was in the same environment as the people he observed throughout the research process. Hence, the researcher collected data on digital storytelling through participant observation. During the application, all the classes were recorded by a video camera, and these video recordings were regularly transferred to the computer

Table 1. Demographic information of the participants

Demographic information		*Frequency*
Gender	Female	15
	Male	16
Age	9	7
	10	23
	11	1
Computer Usage Level	I don't know	4
	I know very little	2
	Medium-level	15
	Good Level	9
	Very Good	1
Internet Connection at Home	Yes	8
	No	23
Internet Usage Level	I don't know	3
	I know very little	5
	Medium-level	11
	Good Level	12
	Very Good	0
Owning a Computer	Yes	9
	No	22
Computer Use Frequency	Everyday	1
	A Few Days a Week	18
	Few Days a Month	4
	No	8

environment and backed up every day. Observation data were obtained by watching the video recordings. Semi-structured interview questions were developed to collect data from the teacher and students, and for the questions, opinions were taken from two experts working Classroom Education Department. The researcher edited and finalized the questions according to the feedback obtained from the experts. The interviews made at the end of the application were recorded with a voice recorder. The interviews were also transferred to the computer environment. An expert was asked to confirm the accuracy of the interviews by making random selections from the interviews. Besides, throughout the process, both the teacher and the students kept diaries and wrote about the problems encountered in the process, solution suggestions for the problems, etc. The diaries where students wrote their experiences and evaluations from their point of view were collected at the end of the application process and transferred to the computer. Besides, 10 digital products produced by the students during the application constitute the documents of the study.

Regarding the data analysis, data obtained from observations, semi-structured interviews, diaries kept by the researcher and students, video recordings, and documents were analyzed by the descriptive analysis method. The descriptive analysis method involves summarizing and interpreting the obtained data according to predetermined themes. The collected data can be organized depending on the themes revealed by the research questions, as well as based on the questions used in interviews and observation process (Yıldırım & Şimşek, 2011). In the present study, coding was performed using students' views, observations, digital products, and diaries kept by the researcher and students.

FINDINGS

As a result of data analysis, the findings were analyzed under two headings: findings regarding the digital storytelling method and findings regarding the value.

Digital Storytelling Method

The findings regarding the digital storytelling method were examined under two headings: findings regarding the digital storytelling process and findings regarding the use of the digital storytelling method.

Findings regarding the digital storytelling process

Findings regarding the digital storytelling process in values education in primary school fourth grade were examined based on the steps of the process of creating a digital story: Writing, Locating Multimedia, Storyboarding, Creating the Digital Story, and Sharing.

Under the "Writing" theme, two sub-themes emerged: Difficulties of Story Writing and Feedback on the Story. One of these sub-themes, "Difficulties of Story Writing" involves difficulties related to not knowing spelling rules, typos, and fatigue. Some of the excerpts from students' diaries and views related to this sub-theme are as follows:

> *We wrote a story today. We had a good day today. We wrote a story about justice, the teacher (researcher) said, "Do it again." So, we revised and showed it to the teacher. The teacher again said "Do it again," and we revised it again.* (S8, Diary)
> *Writing stories. Because I'm trying very hard, but I'm also a little bored. My hand is also getting tired.* (S5, Interview)

The researcher also expressed his observations about the difficulties the students experienced in the story writing process:

> *The groups that finished their research on the concept of justice started to write their stories. While writing stories, students have difficulties completing sentences and continuing their stories. Nevertheless, they do not lose their excitement. While writing their stories, students also check them by reading the stories to each other. When they thought they completed the story, they showed it to me.*

Another sub-theme that emerged under the theme of "Writing" was "Feedback on the Story". This feedback was given by the researcher to enable the students to correct their spelling mistakes, use correct punctuation marks, edit incomprehensible sentences, and arrange the plot of the story. In the introduction, body, and conclusion parts of the story, the story plot was arranged. Feedback on the story was expressed as follows in a student diary:

> *We wrote our stories today. They were quite nice, but our teacher said there were things to be corrected. We had to correct them. We revised our stories according to our teacher's remarks* (S14, Diary).

As can be inferred from student's remark, the researcher tried to show the students the mistakes in their stories and asked them to correct them.

Under the theme of "Locating Multimedia" two sub-themes emerged: "Drawing Pictures" and "Transferring Pictures to Computer". In the "Drawing Pictures" stage, the students drew pictures for the story they wrote. Also, in this stage, the groups divided labor among themselves and tried to complete tasks such as drawing pictures and coloring the pictures. Some excerpts from the students' diaries related to this stage are as follows:

Today, we had a lovely day because we drew pictures for our story and then colored them (S9, Diary).

Today we drew pictures for our story. I think all but one of the pictures was nice (S15, Diary).

As can be inferred from students' remarks, students drew pictures based on the plot of their stories and thought that these pictures reflected their stories and that they enjoy drawing pictures and coloring them. Some of the remarks expressed by students related to this are as follows:

Drawing pictures and then coloring them. Because it is a lot of fun and I like drawing pictures like that (S21, Interview).

Drawing pictures ourselves. Because I liked to draw my own character (S2, Interview).

Students' remarks mentioned above reveal that the students drew pictures for their stories themselves.

Another sub-theme that emerged under the theme of "Locating Multimedia" was "Transferring Pictures to Computer". The researcher took photos of the pictures drawn by the students and transferred these photos to groups' computers. Some excerpts from the students' diaries related to this stage are as follows:

Hello. Today we drew pictures for our stories and the teacher took photos of those pictures. After we drew the pictures and took photos, a file for pictures was opened on the computer (S19, Diary).

As can be inferred from the student's note, students' pictures were transferred to a computer using a phone. This made it easier for students to use photographs while preparing their storyboards and digital stories. Besides, the researcher tried to teach students how to transfer pictures to the computer and create folders on the computer.

Under the "Storyboarding" theme, two sub-themes, namely "Positive Aspects" and "Difficulties" emerged. The storyboarding stage is where the text of the story is checked and the necessary arrangements are made before combining it with visuals in the digital environment. In this stage, students can review whether the visuals and story scenes are appropriate, as well as decide on the flow and voiceover tones of the story (Göçen, 2014). Some excerpts from the students' diaries related to "Positive Aspects" are as follows:

Today we created our storyboard and I had a lot of fun (S9, Diary).

And the miracle of the 4th day is "creating a storyboard." What's storyboarding? Storyboarding is to write the appropriate text under pictures (S10, Diary).

As can be inferred from the above excerpts, the students enjoyed storyboarding. With storyboarding, the students completed all the processes before the digital storytelling program. Besides, the students made a division of labor while storyboarding.

Another sub-theme that emerged under the "Storyboarding" theme is "Difficulties". While storyboarding, the students had difficulties using the Microsoft Word software, dividing the text of the story according to pictures, and saving what they typed. Some excerpts from the students' diaries related to this are as follows:

We had a hard time rotating the photos. Photos were deleted while rotating; we tried hard to adjust the photos. It was the hardest part (S19, Diary).

Today we created our storyboards. It was my task to use the computer. We transferred the pictures to the computer. My hands ached, but it was worth it. It is finally over. We had so much fun (S4, Diary).

As can be inferred from students' remarks, during the storyboarding stage, they had difficulties using the computer. Besides, it can be understood that they had fun while storyboarding. The reason why the students had fun throughout the process despite having difficulties may be that they saw their stories and pictures as a whole. Also, the fact that students practiced using computers contributed to their computer skills.

Under the "Creating Digital Story" theme, two sub-themes, namely "Positive Aspects" and "Difficulties" emerged. One of these sub-themes, the sub-theme of "Positive Aspects" includes improving students' ability to guess the plot, facilitating learning, making classes fun, and increasing students' involvement in the class. Regarding this, the teacher said the following:

It can be made more fun through visuals and music. This is an advantage. Children can understand a subject better with visuals. Children may get bored while reading a story, but by looking at a visual, they can guess the story. And when it is combined with music, this helps students to focus on the class.

Students also mentioned the positive aspects of creating the digital story in their diaries:

Today we prepared our presentations. We selected our song and then prepared it. We will present it next week. I am very excited. Our song, everything was beautiful. Our group finished the fastest (S2, Diary).

As can be inferred from students' remarks, they enjoyed the digital storytelling process a lot. A student's remarks regarding this are as follows:

(The digital storytelling process) improved my skills such as painting and selecting music. I was already able to use a computer but now I can use it better. I hadn't written any stories before. It was my first story and now I can write stories on my own (S1, Interview).

Looking at the students' remarks, the positive aspects of the digital storytelling process were that the students themselves did all the stages of the digital storytelling process (such as writing the story, locating multimedia, voice-over, etc.), that they were able to produce an original product, and that at the end of the six-week process, the story, visuals, music, and voice-over all became a whole as a product.

Another sub-theme of "Creating Digital Story" is "Difficulties". While creating their digital stories, the students had difficulties saving their files, doing the voice-overs,

and cropping the pictures. Some students stated the following regarding this:

> We added the pictures, cropped the pictures and it was our turn to do voice-overs. We did quite well, but our voices could not be heard. We did it again… (S31, Interview).
>
> The problems I experienced... I forgot to save it (at first), (but) we saved it later (S30, Interview).
>
> I had problems with doing the voice-over (S28, Interview).

Looking at the students' views, it can be understood that they did not have any serious problems.

Under the "Sharing" theme, two sub-themes, namely "Presentation" and "General Evaluation" emerged. Students shared the work that they created in five weeks with other groups by making presentations. Some excerpts from the students' diaries related to this are as follows:

> Today, I was so excited. Because we made a presentation. After watching everyone's presentation, it was our turn to make a presentation (S21, Diary).
>
> The 6th day is the easiest day for me. Because we made a presentation today. Today, we watched and interpreted everyone's stories. They were all very beautiful (S10, Diary).

As can be inferred from the students' remarks, they shared with their classmates the digital stories they prepared in groups. Each group waited in front of the board while others watched their digital story.

Another sub-theme that emerged under the theme of "Sharing" is "General Evaluation". The General Evaluation sub-theme includes the evaluation of digital stories in terms of content, duration, visuals, voice-over, and music. The following comments were made regarding the story of a group in video recordings:

> I liked your story from beginning to end. It is difficult to draw animals (S4, Interview).
>
> Your story was very good, the pictures were also beautiful (S29, Interview).

The students' remarks regarding the general evaluation are as follows:

> We made a presentation today. Some liked it, but they didn't like the music (S4, Dairy).
>
> We presented our stories today. It was beautiful. I liked my friends' stories, too (S9, Dairy).

Findings regarding the use of the digital storytelling method

Findings regarding the use of the digital storytelling method were analyzed under 8 themes: "Definition", "Skill Development", "Funny Aspects", "Boring Aspects", "Working Style", "Preference for Using the Digital Storytelling Method in Different Classes", "Problems Experienced", and "Solution Suggestions". Findings regarding the use of the digital storytelling method are shown in Table 2.

According to Table 2, it is seen that students perceive the concept of digital storytelling as stories written on the computer (57.14%), creating a technological story (32.15%),

Table 2. Findings regarding the use of the digital storytelling method

Code	Category	f	%
Definition	Written on the computer	16	57.14
	Creating a technological story	9	32.15
	Presentation	1	3.57
	Film making	1	3.57
	Easy method of teaching	1	3.57
Skill Development	Story writing skill	18	36
	Reading skill	1	2
	Technological skills	19	38
	Drawing skill	9	18
	Speaking skill	1	2
	Creativity	1	2
	Teamwork skill	1	2
Liked Stages	Voiceover	16	45.72
	Story writing	7	20
	Drawing	6	17.14
	Using computers	2	5.71
	Creating a digital story	4	11.43
Boring Aspects	No boring aspect	19	61.29
	Story writing	4	12.90
	Lack of equipment	6	19.35
	Problems caused by students	1	3.23
	Repetition	1	3.23
Working Styles	İndividual	7	22.59
	Collaborative	24	77.41
Preference to be Used in Different Courses	Traffic	2	3.86
	Human rights and democracy education	3	5.78
		3	5.78
	Music	9	17.30
	Social studies	14	26.92
	Turkish	10	19.23
	Mathematics	6	11.53
	Science	2	3.84
	Computer	1	1.92
	English	2	3.84
	All Classes		
Problems Experienced	Problems related to computer use	11	36.66
	Story writing	1	3.35
	Voice-over	2	6.66
	Drawing pictures	5	16.66
	Disagreement within the group	2	6.66
	Lack of equipment	1	3.35
	No problems	8	26.66
Solution Suggestions	Division of labor	6	24
	Getting help	9	36
	Repetition	5	20
	Talking	1	4
	Attention	3	12
	No suggestions	1	4

presentation (3.57%), film making (3.57%), and an easy method of teaching (3.57%). The majority of the students define digital storytelling as writing stories on the computer (57.14%) and using technology to write a story (32.15%). Some of the students' views on the definition of the digital storytelling method are as follows:

> To create something by transforming something we experienced or thought about into a technological story.

(It's like) making a story but a technological story (S7, Interview).

Digital storytelling is like writing a story on the computer. We can write a story on the computer and present it to children or our parents (S21, Interview).

When the students' views are examined, it is seen that the students are informed about the definition of digital storytelling.

Students' views on the contribution of digital storytelling method to skill development led to the emergence of seven sub-themes: "story writing skill", "reading skill", "technological skills", "drawing skill", "speaking skill", "creativity", and "teamwork skill". According to Table 2, the digital storytelling method most developed students' story writing skills. Some of the students' views on the contribution of the digital storytelling method on skill development are as follows:

(The digital storytelling process) improved my skills such as painting and selecting music. I was already able to use a computer but now I can use it better. I hadn't written any stories before. It was my first story and now I can write stories on my own (S1, Interview).

It improved (me), I learned more. For example, I learned to create a storyboard on the computer and do a voiceover. It improved my story writing skills (S3, Interview).

When the students' remarks are examined, it is seen that they think that digital storytelling was very effective in developing their story writing and technological skills.

The teacher stated the following about the contribution of the digital storytelling method to students' skill development:

It can be made more fun through visuals and music. This is an advantage. Children can understand a subject better with visuals. Children may get bored while reading a story, but by looking at a visual, they can guess the story. And when it is combined with music, this helps students to focus on the class.

The teacher stated that the use of multimedia in the digital storytelling method makes classes fun and that visuals, music, and voice-over enable students to better understand the subject, thus enabling them to focus on the lesson.

Students' views on the most liked stages of the digital storytelling method led to the emergence of five sub-themes: "voiceover", "story writing", "drawing", "using computers", and "creating a digital story". Some of the students' views on the most liked stages of the digital storytelling method are as follows:

Voice-over. Because I like reading. I liked that stage because I like reading books, reading something (S30, Interview).

Drawing pictures, coloring them, and then uploading them to the digital story. Because it is a lot of fun and I like drawing pictures like that (S21, Interview).

I liked writing stories very much. I would like to write again and again. Because it improved my imagination (S4, Interview).

Students' views on the boring aspects of the digital storytelling method led to the emergence of five themes: "no boring aspect", "story writing", "lack of equipment", "problems caused by students", and "repetition". Some of the students' views on the boring aspects of the digital storytelling method are as follows:

I don't think it's boring; it's quite funny (S3, Interview).

Writing stories. Because I'm trying very hard, but I'm also a little bored. My hand is also getting tired (S5, Interview).

Boring aspects; it's hard to remove background noise while doing voiceovers (S11, Interview).

Not being able to write a story, although I tried a few times. But I liked it (S24, Interview).

Students' views on working styles led to the emergence of two sub-themes: "individual" and "collaborative". One of the views of the student who want to work collaboratively in the digital storytelling process are as follows:

I wouldn't like to do (digital storytelling) individually. One can find better ideas while working with friends (S24, Interview).

Looking at the views of the students who want to work collaboratively, the students emphasized that when they work in groups, they work more easily, faster, and have more fun. Besides, one of the student preferred working individually. The view is as follows:

I would like to work alone. Because my friends were asking too many questions, I got confused (S28, Interview).

Just like the student who wants to work collaboratively, the students who want to work individually also noted that they would create a digital story more easily and faster if they work individually. Besides, students who want to work individually stated that they would be happier if they carried out all the stages of digital storytelling on their own. The teacher also stated the following regarding the students' working styles in the digital story creating process.

Teamwork in the digital storytelling process is good for student interaction, but at some stage, they should work individually. It would be better if they are separated into groups and then they get together as groups.

Students' views on which classes they would like the digital storytelling method to be used led to the emergence of ten sub-themes: "traffic", "human rights and democracy education", "music", "social studies", "Turkish", "mathematics" "science", "computer", "English", and "all classes". Some of the students' views related to this are as follows:

Social studies and science because they are my favorite lessons (S5, Interview).

Maybe math classes. Because I don't like math classes, and it (digital storytelling) can make me like the lesson (S12, Interview).

English (classes). Because I don't like English (classes) (S13, Interview).

Maybe in Turkish, math, social studies, and science classes. I love Turkish classes and I think I can do better in Turkish classes (with this method) (S22, Interview).

Regarding the use of the digital storytelling method in different classes, the students stated that it can be used in Turkish classes. The reason why the students wanted digital stories to be used in Turkish classes may be that they thought

that story writing, which is one of the stages of the digital storytelling method, is appropriate for Turkish classes.

The teacher stated the following about the use of the digital storytelling method in different classes:

I think it (the digital storytelling method) should be used in all classes. For example, it can be used when teaching students patriotism in social studies classes, maybe responsibility in math classes, empathy within the family in life sciences classes, love for one's siblings, love for minors, etc. I mean it should be applied in different classes. It can be used in subjects other than values education and it will be very effective.

The teacher stated that the digital storytelling method can be used in all classes for not only teaching values but also other subjects to students.

Students' views on the problems experienced in the digital storytelling process led to the emergence of seven sub-themes: "problems related to computer use", "story writing", "voice-over", "drawing pictures", "disagreement within the group", "lack of equipment", and "no problems". A student's view on the problems encountered in the digital storytelling process are as follows:

Yes, for example, we forgot to save it on the computer. That's why we did it all over again when everyone was finished (S16, Interview).

Regarding the problems experienced, it is observed that students generally experienced technological problems. Besides, some students stated that they did not experience any problems:

It was okay (S6, Interview).

The teacher's views on the problems encountered in the digital storytelling process are as follows:

Children should be self-confident, for example, they try to draw the visuals themselves. While doing that, those who do not have drawing skills immediately withdraw themselves. The child should also find the picture to use it. For example, students experienced some problems with the devices when doing the voiceover. The child can find the picture on the internet instead of drawing/painting it him/herself, or he/she can draw/paint a picture on the computer using a painting program.

The teacher stated that the self-confidence problems of the students affected their drawing/painting skills. He stated that the students should use painting/drawing software in addition to drawing/painting the pictures themselves.

The analysis of the students' solution suggestions for the problems experienced in the digital storytelling process led to the emergence of six sub-themes: "division of labor", "getting help", "repetition", "attention", "talking", and "no suggestions". Some of the students' views on the problems encountered in the digital storytelling process are as follows:

My friends who cannot write stories can improve themselves by constantly writing stories (S1, Interview).

We solved the problem by dividing labor (S20, Interview).

(To solve the problem) we decided to do it one by one. As a solution suggestion, (we said) "Let's let everyone do whatever they want, but not play it by ear, in a way our friends accept (S21, Interview).

The students (36%) stated that the problems encountered in the digital storytelling process can be solved with help from the teacher or classmates. The reason why the students offered as a solution suggestion seeking help from the teacher or classmates to solve the problems encountered in the digital storytelling process may be their low level of self-confidence in creating digital stories individually and their underdeveloped computer skills.

The teacher's solution suggestions for the problems encountered in the digital storytelling process are as follows:

There must be absolutely an infrastructure (Computer labs) in schools. There should not be more than 20-25 students or 30 students in classrooms. If these are provided, the digital storytelling method will be more effective.

The teacher stated that for the digital storytelling method to be more effective, computer laboratories should be established in primary schools, and there should be a maximum of 30 students in classrooms.

Findings Regarding the Value

Findings regarding the value are discussed and interpreted as themes and sub-themes under the headings of "the teacher's views" and "students' views."

The teacher's views

The teacher's views on the value were examined under three themes: Value, Values Education, and Use of Values Education in Classes. One of the sub-themes of the "value" theme is Definition. The teacher's views on the definition of value are as follows:

When it comes to value, the first thing that comes to my mind is morality and the elements that organize social life and unify society. When respect and tolerance or the desire to live together disappears in a society, that society faces the risk of disappearing.

Looking at the teacher's views on the concept of value, it is seen that he thinks that values increase a sense of belonging within a society, unite the members of society, and ensure the existence of a society.

Another sub-theme of the theme of "Value" is Examples. Regarding this, the teacher said the following:

The most important values within society should be moral values, respect, and tolerance. When these are lost, we may witness the collapse of societies. Indeed, we have witnessed this throughout history.

When the teacher's views are examined, it is understood that the values to which he attaches importance are moral values, respect, and tolerance. It is understood that the teacher regards these values as unifying elements within society.

One of the sub-themes of the theme of "Values Education" is its Definition. Regarding the definition of values education, the teacher stated the following:

Values education involves learning what makes human beings human beings. Let me give an example from my childhood; in my childhood, we were all like brothers, we risked death for each other, but the prevailing social

understanding today is unfortunately not the same. Everyone has withdrawn into their shell; they may exclude each other. There is isolation, there is no acceptance. This is reflected in children, as well. The most important factor that is causing social degeneration is television. It started in the '80s and is continuing on a large scale.

As can be inferred from the teacher's views, he defined the concept of values education as learning the elements that make human beings human beings. The teacher stated that the values are gradually losing their importance, that values such as brotherhood and good relations among neighbors that existed in the past are seldom seen today, and that the negative effects of the media have an important role in the disappearance of these values and the emergence of the mean world syndrome.

Another sub-theme of the theme of "Values Education" is Solution Suggestions. The teacher's solution suggestions are as follows:

Schools should provide values education. Because, unfortunately, values have started to disappear because of social media; the values of our country, that is, the values that make us who we are and unite the members of society, have started to disappear. Values such as good relations among neighbors and brotherhood are disappearing. If the family and society are made aware, we can go back to the old times.

Accordingly, the teacher thinks that it is important for schools to provide values education and that families and society should be made aware of the importance of values.

One of the sub-themes of the theme of "Use of Values Education in Classes" is the Preference for Classes. The teachers' views on which classes should include values education are as follows:

I give values education in all classes. Because there should be values in every area of life. Some values must be taught to students in math, music, or physical education classes. Values education should be provided in different classes.

Looking at the teacher's views on which classes should include values education, he thinks that values education should be included in all classes because there are values to be taught in all classes.

Another sub-theme of the theme of "Use of Values Education in Classes" is the Methods and Techniques Used. The teacher stated the following about the methods, and techniques he uses in values education:

The method I use the most is the drama method. For my classroom, I mean, for primary schools, the drama method is more effective. Giving children values education through play is more effective. Apart from that, learning by doing and making observations&researching can be used.

Considering the teacher's views about the methods, and techniques he uses in values education, it is seen that he most prefers the drama method and thinks that apart from the drama method, learning by doing and making observations can be effectively used in values education. The teacher's

preference for the drama method in values education may be related to the fact that the said method requires the student to be active, that is, learn by doing.

The final sub-theme of the theme of "Use of Values Education in Classes" is the Application of the Digital Storytelling Method. Regarding this, the teacher stated the following:

It can be used. I have listened to your work, it will be nice. I mean, if the child storifies a value, he/she will learn it more effectively. It will contribute a lot. As I have just said, when children write these digital stories, when they write stories related to different values, permanent learning will occur. The child uses many elements such as painting and music to support that story.

The teacher stated that the digital storytelling method can be used in values education and that permanent learning can be achieved if students storify values.

Students' views

Analysis of students' views on the concept of value led to the emergence of four sub-themes: "a comprehensive word (f=1)" "a way of approaching people (f=8)", "responsibility (f=4)" and "respect (f=13)". Besides, they stated that values organize the relationships among people and guide people towards being good. Some of the students' views on the concept of value are as follows:

I think the word value is a word that covers all the beautiful words (S19, Interview).
Value is a way of approaching a person with love, tolerance, and responsibility. For example, some of the students in our classroom are not very responsible. Let's say we are doing a project in the classroom and some of my classmates raise their hands and promise to bring to the classroom what is necessary for the project. For example, for the telephone experiment, they say they will bring a cup but they don't. So, this is quite irresponsible of them (S1, Interview).
Our values determine what kind of people we are (S24, Interview).

As can be understood from the students' views, they are informed about the concept of the value and they define it as a concept that organizes relationships among people and determines what kind of people we are. They also associated it with words such as respect and love.

Analysis of the students' views related to the examples of value led to the emergence of twelve sub-themes: "integrity (f=1)", "peace (f=1)", "courage (f=1)", "independence (f=1)", "solidarity (f=1)", "reconciliation (f=3)", "love (f=17)", "tolerance (f=13)", "respect (f=15)", "empathy (f=4)", "justice (f=17)", and "hospitality (f=1)." Accordingly, love is the value with the highest frequency. Some examples of values students gave are as follows:

Lots of stuff like tolerance, respect, love, justice (S19, Interview).
Love, respect, tolerance, integrity, friendship, tolerance, courage, justice (S23, Interview).
Solidarity, reconciliation, tolerance, empathy (S27, Interview).

Analysis of the students' views on the concept of justice led to the emergence of four sub-themes: "equality (f=10)", "observance of rights (f=7)", "non-discrimination (f=12)" and "rules (f=3)". Accordingly, the concept mostly associated with justice is "non-discrimination", followed by "equality". Some of the students' views on the reflection of the concept of justice on the student are as follows:

> *The concept of justice means distinguishing between right and wrong* (S30, Interview).
> *To me, justice means rules and peace. Without justice, there would be no peace, and everyone would fight* (S23, Interview).
> *To me, justice means respect, tolerance, and love. Justice means observing everyone's rights and laws* (S21, Interview).

Analysis of the students' views on the importance of being fair led to the emergence of three sub-themes: "important (f=30)", "not important (f=0)", and "no comment (f=1)". Accordingly, it is seen that students attach great importance to being fair. The reason why the students attach so much importance to being fair may be related to the stories, pictures, and digital stories they prepared themselves. This is because students obtained information about the value of justice as a result of their efforts and that such self-learning made it easier for students to internalize this value. Some of the students' views on the importance of being fair are as follows:

> *It is important to be fair. If we are not fair, we can be excluded from society* (S9, Interview).
> *(Being fair is) important. There will be a disorder (if there is no justice); if we are fair, we will be happy, and we will have more friends* (S12, Interview).
> *(Being fair is) important. If two of our friends are fighting, we shouldn't take sides. We should be neutral. If one of our friends is telling the truth and the other is lying, we should question them* (S23, Interview).

Analysis of the students' views on the qualities that fair people should have led to the emergence of eight sub-themes: "being benevolent (f=3)", "being good (f=4)", "distinguishing between right and wrong (f=2)", "treating others equally (f=6)", "being respectful (f=14)", "empathizing with others (f=2)", "neutral (f=2)", "investigative (f=1)", "don't discriminate (f=3)". Accordingly, the quality with the highest frequency and percentage (37.83%) is "being respectful". Some of the students' views on the qualities that a fair person should have are as follows:

> *(A fair person) doesn't show a wrong person right or the right person wrong* (S4, Interview).
> *(A fair person) should be calm, determined, and neutral* (S23, Interview).
> *(A fair person) produces solutions, finds the right way. (A fair person) does not discriminate* (S20, Interview).
> *For example, let's say two people got into a conflict. If a person is fair, he/she doesn't make judgments without gathering information (about the conflict). A fair person is neutral* (S16, Interview).

Analysis of the students' views on whether the digital storytelling method was effective in their learning the value of justice led to the emergence of two sub-themes: "effective (f=31)" and "ineffective (f=0)". All students think that the digital storytelling method was effective in their learning value of justice. The reason why the students think that the method was effective may be associated with the fact that the method enabled the students to actively participate in classes, that they obtained information about the value of justice as a result of their efforts, and that they internalized the value through the stories, pictures, and digital stories they prepared themselves. Some of the students' views on the effect of the digital storytelling method on their learning the value of justice are as follows:

> *(It was) effective. We made the value of justice more meaningful through stories and presentations. We have made justice more apparent in our own lives* (S14, Interview).
> *(It was) effective. For example, I may not sometimes have been fair to other people in the past, but now I started (being fair) because of the digital story. And also, remember I said that there were conflicts in the group? We solved these conflicts thanks to digital storytelling. Our story was a very good story about justice. My friendship with group members got better while writing the story. Storyboarding contributed the most. Because we could see our whole story there. And when we saw it, we also had to read it (again and again). I learned (in storyboarding) what justice includes, what it covers, etc* (S19, Interview).

Analysis of the students' views on which digital storytelling stage helped them most to learn the value of justice led to the emergence of six sub-themes: "writing the story (f=15)", "drawing/painting (f=4)", "voice-over (f=2)", "presentation (f=4)", "storyboarding (f=3)", and "all stages (f=3)". Accordingly, the digital storytelling stage with the highest frequency and percentage (48.41%) is the "writing the story" stage. The fact that the students researched the concept of justice and that they transformed the value of justice into a story plot might have been effective in their learning the value of justice most in the story writing process. Some of the students' views on which digital storytelling stage helped them most to learn the value of justice are as follows:

> *I learned something at all stages* (S12, Interview).
> *Presentations helped me learn the most* (S20, Interview).
> *Story writing (stage) because we thought a lot, I needed to know what justice is because I was going to write stories about justice so I did a lot of research* (S4, Interview).

Analysis of the students' views on the comparison between previous methods used in values education and the digital storytelling method led to the emergence of four sub-themes: "the digital storytelling method is more effective (f=19)", "previous methods were more effective (f=1)", "no difference (f=10)", and "no comment (f=1)". Accordingly, most of the students (61.29%) stated that the digital storytelling method is more effective in values education than the previous methods. This finding might be associated with the students' active involvement in the digital storytelling process, their self-learning about the value of justice by researching it, and their internalization of the concept through

visuals, voice-overs, and presentations. Besides, a student stated that there was no difference between the previous methods used in values education and the digital storytelling method:

> *We learned about values in our social studies or human rights classes. There were books on the subject in our class, we were learning from them. There was no difference. I learned from both (methods)* (S23, İnterview).

Unlike those students who stated that there was no difference between the previous methods used in values education and the digital storytelling method, a student stated that the digital storytelling method was more effective:

> *We used to learn about values in human rights and social studies classes. The teacher was explaining (the value), and we were asking questions. But in this method, we worked ourselves. You helped only a little. But (in the previous method) we were just listening while the teacher was explaining. Here (in the digital storytelling method), we wrote the story and found the visuals ourselves. We did the work ourselves. Since we did the work ourselves, it was more effective. I learned better in the digital storytelling method* (S24, Interview).

Analysis of the students' views on whether digital storytelling is appropriate for use in values education led to the emergence of two sub-themes: "appropriate (f=29)" and "inappropriate (f=1)". Accordingly, a great majority of the students (96.66%) stated that digital storytelling is appropriate for use in values education. Some of the students' views on whether digital storytelling is appropriate for use in values education are as follows:

> *I think it is appropriate (for use in values education). Because (in this method) everyone is working with tolerance and respect for each other and writing a story* (S2, Interview).
>
> *It is appropriate. You learn about the value being explained from stories. Even those who aren't able to write stories understand what justice is. Although the work is bad* (S26, Interview).

As can be inferred from the students' views, the vast majority of students learned about the value of justice through digital stories and enjoyed this process. While the vast majority of the students stated that digital storytelling is appropriate for use in values education, one student stated that it is not. The student stated the following:

> *It should not be used. (Because) there is not much focus on the value being taught. I understand better when the teacher explains. I learned (about the value of justice) while writing stories and while my friends were presenting, but I learn better when my teacher is explaining* (S28, Interview).

The reason why the student is not in favor of digital storytelling may be that the student does not like group work, is not sociable, or was not happy with the group members.

DISCUSSION AND CONCLUSION

Regarding "Writing Story" through the stages of digital storytelling, the students stated that they had difficulties in the story writing process because they did not know the story writing rules, the elements of a story, and the spelling rules. Similar to our results, Baki (2015) concluded that the reasons why students have difficulty in the story writing stage are mostly due to physical difficulties arising from using paper and pencil and not being able to organize their paper. The opposite of this, Yamaç (2015) reported that creating versatile texts enables students to improve the quality of their writing, increase the number of words they use in a story, and use story items more effectively, and thus to create more comprehensive and detailed texts. Like Yamaç (2015), Dayan (2017) concluded that showing students their mistakes and providing students with feedback on their mistakes reduces the number of mistakes in the writing process.

Under the theme of "Locating Multimedia", the students stated that they improved their drawing/painting skills by making pictures suitable for their stories and thus had more fun in classes. Özsoy (2012) concluded that children's pictures can be used to reveal children's knowledge, misconceptions, and perceptions about a certain subject. Besides, Baki (2015) concluded that students liked the visualization stage most in the digital storytelling process. Tabak (2017) concluded that thanks to visuals, students can make sense of texts more easily and form their images and by constructing their meanings through visuals, they can easily retrieve information and store it in long term memory.

Regarding the difficulties the students had in storyboarding, they had a hard time using the word processing software (Microsoft Word). However, using computers helped students gain practice before digital storytelling. They also stated that they enjoyed creating storyboards. Similarly, in a study conducted by Ulum (2017), the students like regarding the storyboarding stage. Tunç Ayvaz (2016) concluded that it is important to create a storyboard. In contrast, Karakoyun (2014) stated that the participants did not particularly like to create storyboards, although they had different opinions.

Under the "Creating Digital Story" theme, the students emphasized that they did not have any problems with adding visuals and texts, doing voice-over, and selecting music in Microsoft Photo Story 3 software, but they had difficulties saving their digital stories. Regarding the positive aspects, the students stated that thanks to the digital storytelling software, they improved their computer skills. Kaya (2014) concluded that with the digital storytelling software, students improved their keyboard and computer skills. Similarly, Özkan (2016) found that the practices using the digital storytelling program improved students' writing skills and increased their level of using story components in their stories and their knowledge of story writing.

Under the "Sharing" theme, the students noted that the presentation of digital stories helped them reinforce their knowledge of the value of justice and internalize it. In their general evaluations of the digital stories, the students stated that they were successful in writing the story, drawing/painting pictures, doing the voice-over, and locating multimedia and that their stories were generally able to reflect the value of justice. Çıralı (2014) found that using the digital storytelling method in the educational context contributes to students. Tunç Ayvaz (2016) concluded that the digital

storytelling method promotes cooperation, cooperation, idea sharing, and communication among students and improves their learning skills by enabling students to ask questions about a topic and express their thoughts freely. Similarly, Ciğerci and Gültekin (2017) found that digital stories have positive effects on students' attitudes towards listening, motivation, and involvement in classes. They concluded that the visuals, music, effects and voice-over used in digital stories helped students understand the stories better and that the activities were fun and enjoyable.

It was found that the students liked the voice-over stage the most among the stages of digital storytelling. Demirer (2013) found that regarding the digital storytelling method, the students liked the fact that digital stories are on the Internet, that they are informative and entertaining, and that they help them to communicate and they liked making and watching videos, doing voice-overs, sharing their stories with their classmates, watching their classmates' digital stories and thus learning new things. In contrast, in one study carried out by Baki and Demirer (2018), prospective teachers stated that they liked the visualization stage most among the digital storytelling stages.

The majority of the students stated that they would not prefer to create digital stories individually, that it is more enjoyable to do this as a group, and that they complete the digital storytelling stages in a shorter time by exchanging ideas and through a division of labor. Dayan (2017) concluded that in two-person and three-person teams formed in the digital storytelling process, students who are academically more successful and have a good command of technology interacted with students who are less skilled in using technology, which improved students' knowledge of how to use technological materials.

Regarding the use of digital stories in different classes, Yılmaz et al. (2017) concluded that using the digital storytelling method in teaching Turkish has a significant effect on students' reading skills. Kahraman (2013), Büyükcengiz (2017), and Tunç Ayvaz (2016) emphasized the positive results of using the digital storytelling method in different courses.

Most of the students stated that they would get help from their classmates or from the teacher to resolve the problems encountered in the digital storytelling process. It is thought that their insufficient computer skills were the reason why they preferred getting help from others to resolve the problems. Similar to our results, Karakoyun (2014) concluded that students were able to solve problems by making suggestions to and helping each other and cooperating actively.

The teacher's view that values increase a sense of belonging within society and ensure the existence of that society, similarly Kınacı (2018) stated that values should be taught to students to raise good citizens, provide unity within society, and ensure that children respect the history, and ensure socialization among students.

Suggestions

To ensure that teachers apply this method effectively in classes, necessary technological equipment can be provided

and training on the digital storytelling method can be developed for teachers.

Due to the lack of time and equipment, participating students could only work in groups to create digital stories. However, teachers can enable students to create and present digital stories individually, as well.

Further research using mixed methods can be conducted to investigate the use of digital stories in values education. Besides, by using quantitative and qualitative research approaches, practical studies can be conducted on the use of the digital storytelling method in values education.

A similar study can be carried out at the secondary school level and research results can be compared. Thus, the level of use of the digital storytelling method in values education can be determined.

REFERENCES

Akgül, G. (2018). *Fen ve teknoloji dersinde dijital öyküleme sürecinde yaratıcı drama kullanımının başarı, tutum ve bilimsel yaratıcılığa etkisi* [Unpublished master's thesis]. Mersin University, Mersin.

Aktay, S. (2017). *Öğrenciler ve aileler için internet el kitabı.* Eğiten Kitap.

Aslan, M. (2011). *İlköğretimde karakter eğitimi ve öğrencilere kazandırılması gereken değerler* [Unpublished master's thesis]. Osmangazi University, Eskişehir.

Baki, Y. (2015). *Dijital öykülerin altıncı sınıf öğrencilerinin yazma sürecine etkisi* [Unpublished PhD thesis]. Atatürk University, Erzurum.

Baki, Y. & Demirer, V. (2018). Türkçe öğretmeni adaylarının dijital öyküleme sürecine ilişkin görüşleri ve algıları. *Journal of Theoretical Educational Science, 11*(4), 718-747. doi:10.30831/akukeg.392654

Başdaş, F. (2017). *Drama temelli dijital hikâye anlatıcılığı programının 6 yaş çocuklarının bazı sosyal becerilerinin gelişimine etkisi* [Unpublished master's thesis]. Adnan Menderes University, Aydın.

Büyükcengiz, M. (2017). *Dijital öyküleme metodunun ortaokul öğrencilerinin fen bilimleri dersi akademik başarı, bilimsel süreç becerileri ve derse yönelik tutumlarına etkisi* [Unpublished master's thesis]. Akdeniz University, Antalya.

Ciğerci. F. M. & Gültekin, M. (2017). Use of digital stories to develop listening comprehension skills. *Issues in Educational Research, 27*(2), 252-268.

Çıralı, H. (2014). *Dijital hikâye anlatımının görsel bellek ve yazma becerisi üzerine etkisi* [Unpublished master's thesis]. Hacettepe University, Ankara.

Creswell, J. W. (2018). *Qualitative inquiry & research design.* (M. Bütün, S. B. Demir, Trans.). Siyasal Kitabevi.

Dayan, G. (2017). *İlkokul öğrencilerinin Türkçe dersinde dijital öyküleme çalışmaları* [Unpublished master's thesis]. Eskişehir Osmangazi University, Eskişehir.

Demirer, V. (2013). *İlköğretimde e- öyküleme kullanımı ve etkileri* [Unpublished PhD thesis]. Necmettin Erbakan University, Konya.

Duran, E. & Ertan Özen, N. (2018). Türkçe Derslerinde Dijital Okuryazarlık. *Turkey Education Journal, 3*(2), 31-46.

Göçen, G. (2014). *Dijital öyküleme yönteminin öğrencilerin akademik başarı ile öğrenme ve ders çalışma stratejilerine etkisi* [Unpublished master's thesis]. Muğla Sıtkı Koçman University, Muğla.

Gülmüş, R. (2015). *İlkokul 4. sınıf Sosyal Bilgiler dersi tarih konularında değer öğretimine ilişkin sınıf öğretmeni görüşleri* [Unpublished master's thesis]. Mehmet Akif Ersoy University, Burdur.

Jakes, D.S. & Brennan, J. (2005). Capturing stories, capturing lives: An Introduction to digital storytelling. Accessed from http://www.jakesonline.org/dst_techforum.pdf on 5 March 2019.

Kajder, S. & Swenson, J. A. (2004). Digital images in the language arts classroom. *Learning & Leading with Technology, 31*(8), 18-46. doi:10.13189 / ujer.2019.070108

Kara, B. (2017). *İlkokul ve ortaokullarda değerler eğitimi uygulamalarına ilişkin öğretmen görüşleri* [Unpublished master's thesis]. Uşak University, Uşak.

Kahraman, Ö. (2013). *Dijital hikâyecilik metoduyla hazırlanan öğretim materyallerinin öğrenme döngüsü giriş aşamasında kullanılmasının fizik dersi başarısı ve motivasyonu düzeyine etkisi* [Unpublished PhD thesis]. Balıkesir University, Balıkesir.

Karakoyun, F. (2014). *Çevrimiçi ortamda oluşturulan dijital öyküleme etkinliklerine ilişkin öğretmen adayları ve ilköğretim öğrencilerinin görüşlerinin incelenmesi* [Unpublished PhD thesis]. Anadolu University, Eskişehir.

Kaya, O. (2014). *Yabancı dil öğretiminde (Almanca) dijital hikâye anlatım yönteminin araştırılması: Lise öğrencileriyle eylem araştırması* [Unpublished master's thesis]. Bahçeşehir University, İstanbul.

Kılınç, A. & Akyol, Ş. (2009, 1-3 May). *İlköğretim 6. sınıf Türkçe ders kitaplarında yer alan sevgi temasının değerler eğitimi açısından incelenmesi.* The First International Congress of Educational Research, Çanakkale 18 Mart University, Çanakkale.

Kınacı, M. K. (2018). *Sosyal bilgiler öğretmen adaylarının değerler eğitimine ve sosyal bilgiler öğretim programında yer alan değerlere yönelik görüşleri* [Unpublished master's thesis]. Fırat University, Elazığ.

Kurudayıoğlu, M. & Bal, M. (2014). Ana dili eğitiminde dijital hikâye anlatımlarının kullanımı. *Sakarya University Journal of Education Faculty, 28*, 74-95.

Kotluk, N. & Kocakaya, S. (2015). 21. Yüzyıl becerilerinin gelişiminde dijital öykülemeler: ortaöğretim öğrencilerinin görüşlerinin incelenmesi. *Journal of Research in Education and Teaching, 4*(2), 354-363.

Morgil, İ., Oskay, Ö. Ö. & Erökten, S. (2004, 24-26 November). Kimya eğitiminde bilgisayar destekli modül hazırlama ve hazırlanan modüllerin başarıya etkileri. 4th International Educational Technology Conference, Sakarya University, Sakarya.

Özkan, Ö. (2016). *İlkokul dördüncü sınıf öğrencilerinin öykü yazma becerilerinin geliştirilmesi* [Unpublished master's thesis]. Adnan Menderes University, Aydın.

Özsoy, S. (2012). İlköğretim öğrencilerinin çevre algılarının çizdikleri çizimler aracılığıyla incelenmesi, *Educational Sciences: Theory and Practice, 12*(2), 1117-1139. doi:10.24315 / trkefd.366693

Robin, B. (2006). The educational uses of digital storytelling. *Technology and Teacher Education Annual, 1*, 709.

Robin, B. (2008). Digital Storytelling: A powerful technology tool for the 21st century classroom. *Theory into Practice, 47*(3), 220-228. doi:10.1080 / 00405840802153916

Şen, A. İ. (2001). Fizik öğretiminde bilgisayar destekli yeni yaklaşımlar. *Gazi University Journal of Gazi Educational Faculty, 21*(3), 61-71.

Tabak, G. (2017). *Türkçenin yabancı dil olarak öğretiminde dijital öykü kullanımı* [Unpublished PhD thesis]. Erciyes University, Kayseri.

Tepecik, B. (2008). *Sosyal Bilgiler dersinde sorumluluk değerinin kazandırılmasına ilişkin öğretmen görüşleri* [Unpublished master's thesis]. Anadolu University, Eskişehir.

Tokdemir, M. A. (2007). *Tarih öğretmenlerinin değerler ve değer eğitimi hakkındaki görüşleri* [Unpublished master's thesis]. Karadeniz Teknik University, Trabzon.

Tunç Ayvaz, Ö. (2016). *Dijital teknolojiler bağlamında dijital öyküleme yaklaşımının güzel sanatlar eğitimine entegrasyonu* [Unpublished PhD thesis]. Ondokuz Mayıs University, Samsun.

Ulum, E. (2017). *Yedinci sınıf öğrencilerinin fen bilimleri konularında dijital öykü hazırlama deneyimleri* [Unpublished master's thesis]. Mersin University, Mersin.

Yamaç, A. (2015). *İlkokul üçüncü sınıf öğrencilerinin yazma becerilerinin gelişiminde dijital hikâyelerin etkisi* [Unpublished PhD thesis] Gazi University, Ankara.

Yavuz Konokman, G. (2015). *Araştırma temelli öğrenme yaklaşımına dayalı dijital öykü oluşturmanın öğretmen adaylarının direnç davranışlarına ve öğrenme yaklaşımlarına etkisi* [Unpublished PhD thesis]. Mersin University, Mersin.

Yıldırım, A. & Şimşek, H. (2008). *Sosyal Bilimlerde Nitel Araştırma Yöntemleri.* (7th ed.). Seçkin Publishing.

Yılmaz, Y., Üstündağ, M. T., Güneş, E. & Çalışkan, G. (2017). Dijital hikayeleme yöntemi ile etkili Türkçe öğretimi. *Journal of Educational Technology Theory and Practice, 7*(2), 254-273. doi:10.17943 / etku.322366

Yiğit, N. & Akdeniz, A. R. (2003). Fizik öğretiminde bilgisayar destekli etkinliklerin öğrenci kazanımları üzerine etkisi: Elektrik devreleri örneği. *Gazi University Journal of Gazi Educational Faculty, 23*(3), 99-113.