

## A History Lesson Designed with the Digital Storytelling Method: *Kara Fatma* Example

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### ABSTRACT

Due to the reflections of the changes and developments in science and technology in the field of education, students need educational opportunities that can meet their changing learning needs. Based on this need, the main purpose of this study is to evaluate the digital storytelling process in history teaching and the contribution of this method to history teaching through the views of students. To achieve this goal, a history lesson about “Kara Fatma”, one of the heroines of the National Struggle in the 12<sup>th</sup> Grade Turkish Republic History of Revolution and Kemalism course, was designed using the digital storytelling method. A seven-week-long study was planned. The qualitative research method was used in the study. The study group consisted of 15 volunteer 12th-grade students. A semi-structured interview form was used to determine the evaluations of the students about the digital storytelling process, and a checklist was employed to evaluate students’ digital stories. The study data were analyzed with content analysis. As a result, it was found that students only used internet sources during the evidence search process, their knowledge of history was enriched with digital storytelling, and that they had difficulty eliciting material for their stories from a huge stack of information. It was concluded that this application contributed to making history lessons fun and could contribute to the presentation of brief and concise, but not long and boring, information and the use of critical thinking skills in lessons. Thus, it has been understood that digital storytelling may contribute to the development of historical literacy in students.

**Key words:** Historical Literacy, Digital Storytelling, Digital Material, History Teaching, History Course

### INTRODUCTION

The 21<sup>st</sup> century is called the digital age, the information age, or the technology age. Today, there is a rapid change and transformation process in social life with developments in information and communication technologies. Depending on the change of time and conditions, individual and social needs and priorities also change, and the skills that individuals need to gain through education also differ. In today’s world, where digitalization has increased its impact on all areas and has become an indispensable part of life, there is an intense digital transformation in the field of education. In this transformation environment, information sharing has increased, access to information has become easier, and information has begun to spread rapidly.

New digital technologies and multimedia have also rapidly changed how we learn and teach (Weis et al., 2002). Even PowerPoint presentations, which are a technological presentation method, have started to become a traditional method for students. One of the most fundamental questions in the classrooms of the 21<sup>st</sup> century is how students’ technological

knowledge can be included in the learning process (Lanszki, 2022). Therefore, the most general aim of education today is to raise individuals with the skills defined as 21<sup>st</sup>-century skills. Jakes (2006) grouped these skills into four categories: digital literacy, creative thinking, effective communication, and high productivity. Twenty-first-century skills have generally been expressed as digital literacy, global literacy, technology literacy, visual literacy, information literacy, creative thinking, effective communication, and high productivity (Jakes, 2006; Robin, 2008; Robin, 2006).

One of the new methods widely used in education today to equip students with 21st-century skills is digital storytelling (Jakes, 2006). Digital storytelling has recently become one of the important methods that is used effectively in many fields from preschool to adult education and combines the digital world with education. According to Ohler (2008), digital storytelling is a creative process in which a traditional story is combined with personal digital technologies such as computers, video cameras, and sound recorders. Digital storytelling, on the other hand, has emerged by transferring traditional storytelling to digital media thanks to developing

technology. Although storytelling is not a new idea, the idea of digital storytelling is new (Meadows, 2003). It includes traditional storytelling and multimedia techniques (Fisanick & Stakeley, 2020).

Digital storytelling is the process of presenting narration based on sound, image, video, music, and text in an interactive digital environment (Figa, 2004). Digital stories are short (typically 4-7 minutes) multimedia videos that combine photographs, simple animations, sounds, and musical narrative voiceover (Gernes & Belanger, 2019). It is the work of putting these multimedia elements together using computer software to tell a story, usually revolving around a certain theme or topic, and often containing a certain point of view (Robin, 2016).

One of the pioneers of digital storytelling, Lambert (2003) stated in his book "Digital Storytelling Cookbook and Traveling Companion" that digital storytelling allowed changing materials available for storytelling to use them for a different purpose. Digital storytelling is the process of synthesizing and preparing a story written on any subject with visual and auditory elements. It is a form of storytelling, using soundtrack, narration, and other components, not only to enhance the story but to fundamentally change the process and product. Digital storytelling is about utilizing technology to enable people with limited multimedia skills and resources to tell and share powerful stories from their own perspective and in their own words (Fisanick & Stakeley, 2020). There is research on the use of digital storytelling in education. In these studies, the effects of digital storytelling on student success, motivation, and technology skills in social and science courses were discussed (Demirer, 2013; Göçen, 2014; Karakoyun, 2014; Robin, 2016; Gernes & Belanger, 2019; Buldur, 2019; Yazıcı et al., 2020; Fisanick & Stakeley, 2020; Saritepeci & Çakır, 2017; Kırıkçı et al., 2020; Lanszki, 2022).

Digital storytelling has emerged with the synthesis of content knowledge, pedagogical knowledge, and technological knowledge. Therefore, the use of this method also provides the acquisition of skills required today. Jakes (2006) stated that with the digital storytelling process, students used almost all of the skills expected of them in the 21<sup>st</sup> century. According to some studies, digital storytelling is an effective method that increases students' problem-solving skills, critical thinking skills, academic success, and learning motivation. Media literacy of students who consciously search and sort out relevant sources also increases (Hung et al., 2012; Yang & Wu, 2012; Lanszki, 2022).

The rapid development of educational technology has allowed the use of these technologies from pre-school to higher education. Many courses benefit from appropriate educational technologies according to their content. It is necessary to benefit from these technologies to prevent history course, which is full of events and facts from the past that cannot be repeated, from becoming monotonous. Thus, students gain both the knowledge and skills targeted by history teaching and digital skills. The purpose of using digital storytelling in history lessons is to find and use relevant written and visual material on the one hand, and to establish a

personal connection with a historical figure or event on the other hand (Lanszki, 2022). Digital storytelling provides excellent opportunities to engage students in a variety of practical and theoretical questions central to historical analysis: What is historical truth? What is valid historical evidence? What is the objective stance? What are the traditions of history? The skills gained from the digital storytelling process (writing, processing, and sequencing of still images and video clips, basic film editing, oral narration, sound recording, and presentation on social media) can be easily transferred to other classes and to students' own lives in general (Gernes & Belanger, 2019).

### Historical Literacy

There are a number of basic skills and pieces of knowledge that students should acquire through history teaching. History course has some goals that are known to everyone, such as raising good citizens in general and transferring cultural heritage. In fact, its goals are more than these. The knowledge and skills that are planned to be acquired by students at the end of the history education process are designed within the scope of "historical thinking skills". The aim of historical thinking skills, which include chronological thinking, historical grasping, historical analysis and interpretation, historical problem analysis and decision making, and research skills based on historical inquiry, is to enable students to have historian skills (National Center for History in the Schools, 2020). The concept of historical literacy, which is considered new for history education, the goals of this literacy, and the goals of historical thinking skills overlap. Scheiber (1978), who used historical literacy for the first time, defined it to solve the methodology problem of the history course.

According to him, content and teaching methods do not match. Making use of sources other than the textbook in history lessons and bringing different elements such as paintings and music to the lesson is essential to achieve permanent learning. Scheiber put forward the necessity of inquisitive history education so that students could develop skills such as research and problem-solving. Taylor and Young (2003) recently made the definition of historical literacy. According to them, historical literacy includes some processes, such as dealing with historical events with an investigative and critical perspective, identifying contradictory statements between different sources, using the possibilities of technology in learning historical events, thinking chronologically, dealing with events in a cause-effect relationship, and comparing past and present events with historical thinking and historical empathy by taking into account the conditions of the age in which events occurred. Maposa and Wasserman (2009), on the other hand, are of the opinion that historical literacy consists of the dimensions of knowledge, conceptual understanding, historical method, historical consciousness, and historical language. It is possible to say that there is no single definition of historical literacy. However, it is understood that these definitions make students active in the history teaching process and express historical thinking skills and historical consciousness. Therefore, it is a concept that confirms the goals that historical thinking skills want

to achieve in a very broad understanding such as historical consciousness. It is known that historical literacy is used in the history teaching programs of countries, such as America, Canada, and England, to achieve the aforementioned objectives (Keçe, 2013).

In order to prevent history lessons from being boring, unpopular, and incomprehensible, different methods, techniques, and practices should be brought to the class. Thus, both a student-centered and a skill-based understanding can be developed. Students need to see historical documents, examine them, and comprehend how the historical narrative is formed and that there can be different narratives. Historical literacy develops students' ability to distinguish between true and false to produce historical narratives and analyze historical texts by critically evaluating their current knowledge of history (Lee, 2005: 3). It is very important for students to encounter historical evidence in historical literacy. Thus, the development of students' analytical thinking skills is also supported. According to O'Connell et al., (2005), it is expected that the student will gain chronological thinking skills in historical literacy based on research and analysis activities. It has been determined that historical literacy is effective in chronological thinking, historical empathy, and the ability to use information and communication technologies (Keçe, 2013). It has already been mentioned that digital storytelling may contribute to students' doing research, seeing evidence, and creating their own historical narrative by passing the evidence through the filter of criticism. Based on these common goals, it is expected that digital storytelling will contribute to the development of historical literacy.

The process of creating a digital story consists of some stages, such as creating the storyboard, adding visuals with the help of software, doing voiceovers, adding music to the background, and editing the digital story. Digital storytellers learn how to make choices about how to use multimedia methods to tell their stories. They must learn how to tell an effective digital story and make critical decisions about background music. Throughout the story creation process, they learn how to navigate software and social media platforms. In addition to learning how to be more effective consumers of digital media, they also learn how to be producers (Fisanick & Stakeley, 2020; Lanszki, 2022). The process of presenting the digital story ends with sharing (Robin, 2016).

Software packages, such as Photo Story, Storyjumper, Moviemaker, Storybird, Powtoon, and Animato, are among the alternatives that can be used in creating digital stories (Robin, 2016).

### **Purpose of the Research**

With the start of using technology in education all over the world, especially during the COVID-19 pandemic, the digital transformation aimed at students' needs to be given priority. As a result of the reflections of the developments in the 21<sup>st</sup> century on education, history education has also been influenced by this change. Due to these developments, the main purpose of this study is to provide some insights into the applicability of the digital storytelling method, which has not been studied much in Turkiye, in history lessons. Thus,

digital materials and applications will be included in the history teaching process. The digital storytelling method will contribute to the formation of a teaching process in which students will blend both evidence and their digital skills, instead of traditional teacher-centered history classes. Thus, it can be said that digital storytelling is an application that supports student-centered activities, chronological thinking, researching, questioning, and creating a new historical narrative, which are the aims of historical literacy. This study was planned to evaluate the digital storytelling process in history teaching and the contribution of this method to history teaching through student opinions. The main research question of this study is "How does digital storytelling contribute to history teaching?"

To find answers to this basic question, the following research questions were posed:

1. What are the students' views on the use of digital storytelling in history teaching?
2. What are the digital stories produced by students like?

## **METHODS**

### **The Research Model**

This study was conducted to determine high school students' experiences with the digital storytelling method that they applied for the first time in the history course. The survey model was used in the study since the effects of digital storytelling on the history teaching process were observed and the situation was reflected as it was. A case study design, which is one of the qualitative research methods, was used in this research. Unlike traditional methods (such as experimental, descriptive, and historical research), a case study allows a holistic and in-depth examination and exploration of current and complex events or phenomena in their real environment, in relation to contextual elements (Baxter & Jack, 2008; Cohen, Manion & Morrison, 2018; Freebody, 2003; Hamilton & Corbett-Whittier, 2013; Yin, 2018). It has been preferred in many educational studies in recent years due to its high potential to affect educational theories and practices with its results. According to Uçan (2021), a case study has the potential to help understand the complexity of learning and teaching processes and environments and to influence educational theory and practice by obtaining important results.

### **Study Group**

The study group of this research consisted of 12<sup>th</sup>-grade students at a high school in Turkiye. A total of 15 students, including six males and nine females, participated in this study voluntarily.

### **Data Collection Tools**

Data were collected with two different tools in the study. The first was a semi-structured interview form developed by the researchers. With this form, the experiences and opinions of students regarding the digital storytelling technique were



collected. The interview form was created by the researchers following a review of the literature (Smith, 2003). In semi-structured interviews, it is necessary to conduct a pilot study on a small-scale sample before the main application is initiated with the study group, and if necessary, expressions on the form can be modified and new questions can be prepared (Yıldırım & Şimsek, 2003). For this reason, one of the researchers conducted a preliminary interview with five 12th-grade students. Semi-structured interviews allow researchers to ask sub-questions and obtain in-depth information according to the course of the interview (Yalçın, 2006). The semi-structured interview form was prepared by two history educators (academics) and one history teacher who were experts in their field. This interview form was prepared in three parts: a) evidence search process; b) digital story creation process; c) general evaluation. Interview forms were applied to the students separately at the end of each process. The second source of data was the digital stories created by students. A checklist was developed by the researchers to find out whether students' digital stories contained the basic elements of digital storytelling.

### Data Collection Process

To achieve the aim of the study, the subject of "Kara Fatma", one of the heroines of the National Struggle, which is included in the 2<sup>nd</sup> unit of the 12<sup>th</sup> Grade Turkish Republic History of Revolution and Kemalism course, the subject of the National Struggle, was chosen for digital storytelling method, and a seven-week history lesson was designed for this study. One of the researchers was involved in this process and guided students during the storytelling process.

First of all, digital storytelling tools were introduced, and the students were informed about the installation of the Photo Story software and the process of creating a digital story. At the next stage, the subject of the story was determined. The task of creating a digital story about the life of Kara Fatma, a heroine who could not find a place in history textbooks, and her contributions to the Turkish national liberation was given to the students as a group activity. After the subject was determined, the students were asked to form groups of three, to do a search for their stories, and to collect information and visuals about the subject.

Students created their digital stories in the following seven steps as listed below and as illustrated in Figure 1:

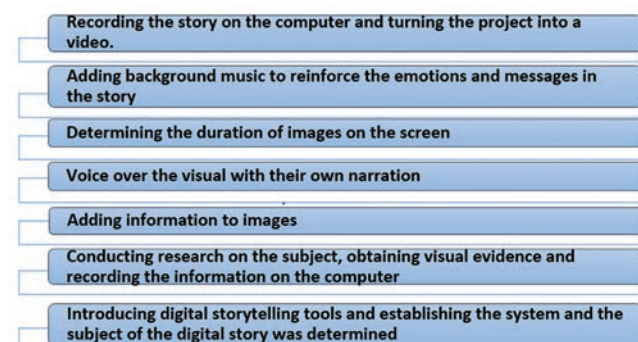


Figure 1. Stages of creating digital stories

- In the study, first of all, digital storytelling tools were introduced and the installation of Photo Story software and the process of creating a digital story were explained to students. The subject of the digital story was determined.
- After the subject was determined, students were asked to do a search and collect information and visuals about the subject. At the end of the evidence search process, they were asked to save the visuals and other information they found on the computer.
- These visuals (pictures, photographs, drawings, graphics, etc.) were selected for storytelling and students were asked to add them to their stories. After the arrangement of the images was completed, students were asked to add information to the desired image using the evidence they collected.
- In the next step, they were asked to do voiceovers reflecting their own narratives to each image.
- At this stage, students were asked to determine the on-screen time of the visuals.
- Then, they were asked to select and add background music to reinforce the emotions and messages in the story.
- As the last step, the story was saved on the computer, that is, the project was converted into a video.

Completed digital stories were presented during classes. During and after the digital story creation process, students' evaluations regarding this process and practice were collected using a semi-structured interview form.

### Data Analysis

Data were collected with two different tools. The first of these tools was the semi-structured interview form through which the opinions of students, who created their own stories with digital storytelling in the history lesson, were obtained. The data obtained using the interview form were subjected to content analysis. Another data collection tool was the checklist developed by the researchers to evaluate students' digital stories. According to Yılmaz (1998), a checklist helps to determine to what extent students' products are compatible with certain criteria. It is also an assessment tool used to detect the presence or absence of expected behavior (from the student). From this point of view, the checklist was used to determine the existence of basic elements in students' digital stories. The elements whose presence was questioned using the checklist were as follows: the name of the story, visuals, voiceovers, the harmony of voiceovers and visuals, music, music and text harmony, and references. The presence or absence of these elements questioned using the checklist were analyzed and tabulated according to their frequencies.

### RESULTS

The first question of the research was "What are the students' views on the use of digital storytelling in history teaching?" In this part, the findings about students' evaluation of the digital storytelling process, which were obtained using the semi-structured interview form, were given. The interview

form consisted of three parts: evidence search process, digital story creation process, and general evaluation. The first findings were about the evidence search process. The first question that students were asked was “What is the most important thing that you have learned about Kara Fatma during the evidence search process?” Table 1 summarizes the answers obtained.

As seen in Table 1, the most important information that students learned about Kara Fatma during the evidence search process was a soldier with a rank ( $f=8$ ), a great heroine ( $f=5$ ), and Fatma Seher, her real name ( $f=2$ ). Students' statements about the most important information they found were as follows: “She was a commander of a large number of troops.” (S2); “She was not only a person who voluntarily supported the national struggle but also someone who was given the first lieutenant rank.” (S9); “She was a soldier with a rank with dozens of men under her command.” (S15); “I found out that she was a very brave and great heroine.” (S12); and “I learned her real name.” (S8).

The second question directed to the students was “What sources did you use on the subject?” The findings regarding the sources used by the students are shown in Table 2.

All of the students had used internet sources for their digital stories. Three students had utilized online scientific publications in addition to these sources. Some students' statements about the use of sources were as follows: “I did a search on search engines using the keyword ‘Kara Fatma’ and obtained some results.” (S4); “In general, I collected information from online newspapers and Wikipedia.” (S7); “I typed a keyword into the search engine and used the information that the engine returned.” (S10); and “Search engines directed me to online scientific articles. I also utilized those articles out of curiosity.” (S9).

The last question about the evidence search process was “What are your feelings and thoughts about the evidence search process?” Categories were created according to students' responses, and their frequency distributions were determined.

**Table 1.** Frequency of the most important information about Kara Fatma that students learned during the evidence search process

Categories	Participants	f
A soldier with a rank	S2, S3, S5, S6, S9, S10, S13, S15	8
A great heroine	S1, S7, S4, S12, S14	5
Fatma Seher (her real name)	S8, S11	2
Total		15

**Table 2.** Types and frequency distributions of sources that students used

Categories	Participants	f
Websites	S1, S2, S3, S4, S5, S6, S7, S8, S9, S10, S11, S12, S13, S14, S15	15
Online scientific publications	S2, S9, S13	3
Total		18

The findings about students' evaluation of the evidence search process are given in Table 3. Students' feelings and thoughts about this process were grouped under four categories: increase in the sense of curiosity ( $f=6$ ), gaining new knowledge ( $f=4$ ), difficulty sorting out pieces of information ( $f=3$ ), and raising awareness ( $f=2$ ). Students' evaluations about the evidence search process were as follows: “I became more curious about the subject as I came across new and different pieces of information.” (S4); “Doing search stimulated my sense of curiosity.” (S14); “Doing search and analyses allowed me to gain a lot of new knowledge.” (S7); and “There was a lot of information on the subject evaluated. It was very difficult for me to sort out so much information.” (S1).

Students were asked three questions regarding the digital story creation process, which was the second part of the interview form. The first question in this section was “What was the most difficult thing while creating your digital stories?” Categories were created according to students' responses, and their frequency distributions were determined.

As seen in Table 4, areas that students had the most difficulty during the digital storytelling process were grouped into four categories: encountering too much information ( $f=5$ ), encountering long and unnecessary information ( $f=4$ ), encountering often similar information ( $f=3$ ), and creating a story for voiceovers ( $f=3$ ). Students' statements about difficulties while creating a digital story were as follows: “There was a lot of information about Kara Fatma on many different sites on the Internet. I got tired of reading all of it.” (S6); “I had difficulty handling too much information.” (S9); “It was challenging for me to see long articles about Kara Fatma.” (S11); “There were many websites about the topic, but the information on these sites was almost the same, which was a waste of time.” (S4); and “I had the most difficulty doing the voiceovers because I had to tell Fatma's story appropriately and effectively.” (S8).

**Table 3.** Distribution of students' feelings and thoughts about the evidence search process

Categories	Participants	f
Increase in the sense of curiosity	S4, S5, S6, S8, S14, S15	6
Gaining new knowledge	S2, S7, S11, S13	4
Difficulty sorting out pieces of information	S3, S9, S12	3
Raising awareness	S1, S10	2
Total		15

**Table 4.** Frequency of areas where students had difficulty while creating a digital story

Categories	Participants	f
Encountering too much information	S1, S6, S9, S14, S15	5
Encountering long and unnecessary information	S2, S7, S11, S13	4
Encountering often similar information	S4, S10, S12	3
Creating a story for voiceovers	S3, S5, S8	3
Total		15

The second question of the second part of the form, in conjunction with the previous question, was “How did you overcome these challenges?” The data obtained from students are presented in Table 5.

Table 5 gives students’ ways of overcoming difficulties they had during the digital story creation process: by comparing the sources (f=6), by reflecting on contradictory information (f=5), and by eliminating similar information (f=4). Some of the students’ expressions about ways of overcoming difficulties were as follows: “I tested the accuracy of the information by comparing it from different sources. When I found the same information in different sources, I used that information.” (S2); “I read the sources that I came across. I reflected on the differences and contradictions between the pieces of information and the reason for these contradictions.” (S5); “I generally eliminated similar information. I completed my project with the remaining information.” (S10); and “During my search, I came across the same information in different sources. I used the most comprehensive one.” (S12).

The third question of the second part of the form was “Which characteristic of Kara Fatma did you bring to the fore while creating your digital story?” Table 6 shows the data obtained from students.

Table 6 shows Kara Fatma’s characteristics that students emphasized in digital stories and frequency distributions. As seen in the table, Kara Fatma was mostly described as patriotic (f=5). This description was followed by others, such as fearless (f=4), warrior (f=4), and mother (f=2), respectively. Students’ statements about Kara Fatma’s characteristics that were highlighted in the digital stories were as follows: “It is very important that she fought on the front lines with her husband and put her pain aside by saying “homeland first”, despite the fact that her children had become martyrs in the war.” (S4); “A woman who helps soldiers and supplies weapons during a war is very fearless in my opinion.” (S11); “She was a warrior and a woman who took a gun and fought

**Table 5.** Frequency of the ways of overcoming difficulties

Categories	Participants	f
By comparing the sources	S1, S2, S3, S9, S14, S15	6
By reflecting on contradictory information	S5, S6, S7, S11, S13	5
By eliminating similar information	S4, S8, S10, S12	4
Total		15

**Table 6.** Frequency of Kara Fatma’s characteristics that were emphasized in digital stories

Categories	Participants	f
Patriotic	S2, S4, S9, S14, S15	5
Fearless	S6, S8, S11, S13	4
Warrior	S3, S7, S10, S12	4
Mother	S1, S5	2
Total		15

on the front lines. She was a true warrior who struggled with life despite the martyrdom of her family.” (S7); and “Kara Fatma is one of the thousands of mothers whose children became martyrs for the country. However, her success on the front lines prevented more children from being motherless and more mothers from being childless, and she became the mother of many children.” (S5).

In the third part of the interview form, three questions were asked to students as a general assessment. The first question in this section was “How has this study contributed to you?” Categories were created according to the answers given by students and their frequency distributions were determined (Table 7).

Areas that digital storytelling contributed to students and their frequency distributions are shown in Table 7. As seen in the table, these areas and their frequency were gaining new knowledge (f=6), increased interest in female heroines (f=4), developing empathy (f=3), and learning to make films/videos (f=2). The question related to this part was answered by the students as follows: “I tried to read everything I found while browsing the sources. I also came across new information. I found historical information that I did not know.” (S5); “I used to think that war was only men’s business. I learned that there were also female heroines thanks to this project. The presence of female heroines increased my interest in such life stories.” (S12); “Trying to put myself in Kara Fatma’s shoes, I wondered if I could do the same.” (S10); and “I learned how to make movies and videos. In this way, I will try to make my own movie.” (S6)

The second question asked in this section was “Can digital storytelling be an effective tool for history lessons and why?” Categories were created according to students’ responses and their frequency distributions were determined as shown in Table 8.

**Table 7.** Frequency distribution of areas in which digital storytelling developed students

Categories	Participants	f
Gaining new knowledge	S3, S5, S7, S8, S11, S13	6
Increased interest in female heroines	S1, S4, S12, S15	4
Developing empathy	S2, S10, S14	3
Learning to make films/videos	S6, S9	2
Total		15

**Table 8.** Students’ views about why digital storytelling could be effective in history lessons and frequency distributions

Categories	Participants	f
Fun	S1, S4, S6, S15	4
Short and concise information	S3, S7, S10, S11	4
Critical thinking	S2, S12, S13	3
Technology use	S5, S14	2
Not sticking to the textbook	S8, S9	2
Total		15



As seen in Table 8, opinions about why digital storytelling could be effective in history lessons were grouped into five categories. Students' opinions on the subject and the frequency of distribution were as follows: fun ( $f=4$ ), short and concise information ( $f=4$ ), critical thinking ( $f=3$ ), use of technology ( $f=3$ ), and not sticking to the textbook ( $f=2$ ). Some students' statements were as follows: "This course, which has abstract content like history, has become very entertaining in this way." (S4); "I never thought I would have so much fun in this class." (S6); "A lot of different information has been put together in a short and concise way. It has not been boring at all." (S7); "I think it has strengthened my investigative side by providing a critical perspective." (S2); and "It brings technology to the lesson and prevents from sticking to the textbook. I discovered that there could be history outside of textbooks." (S9).

The last question of the study and this part was "What was the most entertaining part during the study?" Categories were created according to students' responses and their frequency distributions were determined.

Table 9 shows the distribution of students' answers about the most entertaining part of digital storytelling. As seen in the table, they had the most fun while searching for visual material ( $f=5$ ). Finding music ( $f=4$ ) and making voiceovers ( $f=4$ ) were other aspects of digital storytelling that students enjoyed. Another fun aspect of this activity was being surprised at what had been learned ( $f=2$ ). Students expressed the aspects of the activity they enjoyed the most as follows:

"Every new image I found on the subject excited me and I had a lot of fun progressing from one to the next as I found new images." (S5); "I tried very hard to ensure that the music I found was relevant to the subject. The subject was very important and not all music would fit. It was a lot of fun to find a lot of pieces of music that could be used for this kind of work, listen to them, and think about how they would fit the story." (S4); "Doing voiceovers was a different experience." (S9); and "As I saw what I could do and discovered about myself, I was very surprised. I was also surprised in the face of a lot of new knowledge I gained. I wondered why I had not learned it until then." (S14).

The second question of the research was "What are the digital stories produced by the students like?" In this part of the study, the digital stories produced by the students were analyzed using the checklist developed by the researchers. A total of five digital stories were obtained from the students working in groups of three. Whether these products had the basic elements of digital storytelling was determined using the checklist. Table 10 shows the findings of the checklist.

As seen in Table 10, all of the digital stories were named, visual materials were used in all of them, and four of them had voiceovers but one did not. Of the stories with voiceovers, three had voiceover and visual flow harmony, but one did not. Background music was used in all stories, four of them had music and story harmony but one did not, and references were included at the end of all digital stories. It was found that visuals were not relevant to the story in the story that did not have voiceover and visual flow harmony and that lively background music accompanied a serious and

**Table 9.** Frequency distributions of the most entertaining part for students while preparing the digital storytelling project

Categories	Participants	f
Searching for visual materials	S3, S5, S7, S8, S10	5
Finding music	S1, S4, S6, S12	4
Doing a voiceover	S9, S11, S13, S15	4
Being surprised at what has been learned	S2, S14	2
Total		15

**Table 10.** Checklist of the basic elements of digital storytelling

Basic elements in storytelling	Yes	No
Naming the story	5	-
Using visual material	5	-
Voiceover	4	1
Ensuring voiceover and visual flow harmony	3	1
Using background music	5	-
Harmony of music and story	4	1
Using references	5	-

emotional narrative in the story that did not have music and story harmony.

## DISCUSSION AND CONCLUSION

As a result of the seven-week digital storytelling study carried out with high school students, the following results were obtained by examining both the student views and the resulting products:

It was found that while searching for materials, students learned new things about the subject, all of the students searched for materials on the Internet and that they utilized the websites to collect information and materials. Very few students benefited from scientific articles published online. It is noteworthy that none of the students did a search in the library (including e-libraries) and books. In addition, almost none of the students used scientific articles in their products. These results can be explained by the fact that students have been in a digital world since they were a child and that they have done almost all of their work on the Internet. According to Presky (2001), these young people are "digital natives," who have been intertwined with technology since the day they were born. This may be due to the distant stance of these young people toward libraries and books. In addition, students' lack of interest in online scientific articles may be a result of their age and perspectives. These students, who are at the end of their adolescence, may want to reach their goals in the shortest way and may get bored with long historical explanations. The language of scientific articles may have been difficult for them to understand, which can be seen as another reason. Students stated that the process of searching for evidence increased their sense of curiosity and allowed them to gain new knowledge. The digital storytelling method

allows students to use both their historical and technological skills together (Şeker, 2016). In the stories created based on evidence, students use evidence and their skills. According to Doğan (2008), evidence-based history courses enable students to learn much better and to be more motivated for lessons. In studies conducted on the use of evidence in history teaching, it has been concluded that the use of evidence is necessary, it has benefits for the whole teaching process, and it affects learning positively (Dilek, 2009; Doğan, 2008; Kabapınar, 2012; Akbaba, 2014; Canpolat, 2016; Kabapınar & Yetiş, 2019; Bekret, 2019; Dere & Gökçınar, 2021).

During the digital storytelling process, students were overwhelmed by seeing too much and unnecessary information. They tried to solve this problem by comparing the sources and thinking about the contradictory information. These solutions found by the students seem to have encouraged them to test the reliability of the evidence and to use their critical thinking skills. The results of some studies have shown that digital storytelling improves students' critical thinking and research skills (Ünlü & Yang, 2020; Walters & von Gillern, 2018; Gernes & Belanger, 2019). Students highlighted Kara Fatma's patriotic, fearless, and warrior characteristics. All the sources that students found were about Fatma's life as a woman in the context of the war. In fact, Fatma made sacrifices for herself and for her country after the war, too. All of the students' stories focused on the war years but touched on her later life briefly. This showed that students' stories revolved around Fatma as a soldier and a heroine.

According to students who did a general evaluation of this seven-week process, digital storytelling enabled them to learn new things. In addition, it was emphasized that the heroines, whom students had not been interested in before, attracted their attention. From this point of view, digital storytelling not only contributed to students' in-depth acquisition of new knowledge but also helped them discover the topics that were interesting to them. The results obtained by Brennan, (2005), Robin (2008), Robin (2016), and Yiğit (2020) are similar to the results obtained in this study. According to students, this application contributed to making history lessons fun, providing brief and concise information together, and using critical thinking. It was determined that students had fun while searching for visual material, background music, and making voiceovers in the process of digital storytelling. It can be said that digital storytelling provides students with an enjoyable experience (Demir, 2019; Lanszki, 2022).

At the end of the process, a checklist was used to determine whether the digital stories produced by the students had the basic elements of storytelling structurally. It was concluded that most of the stories ( $f=3$ ) created by the students had the features questioned with the checklist. This result shows that high school students can produce qualified digital storytelling videos in history course.

These results obtained in the research showed that the use of digital storytelling as a teaching tool was positive for both students and history teaching. Students' use of historical sources, criticizing the sources, and using the right source

in this process coincide with the objectives of historical literacy. In addition, according to Graff (2003), historical literacy is an interdisciplinary understanding beyond being an approach related to history education because, thanks to the knowledge, skills, and values required by means of historical literacy, students take part in various activities by making use of the data of different disciplines, such as literature, geography, politics, economy, and technology education. Also, the digital storytelling application contributes to the development of students' technology skills. Digital storytelling may be used to contribute to the development of historical literacy.

It was concluded that students only used internet sources for the evidence search process, historical knowledge was enriched by digital storytelling, and students had difficulty sorting out huge piles of information for their stories. This application made history lessons fun and contributed to the provision of concise information and the use of critical thinking skills in the lesson.

The increase in course applications using technological tools can help teachers create their own teaching and learning models. Digital storytelling is a new method and can be used to develop contemporary skills and increase learning motivation.

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