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E. Özlem Yiğit  
Bolu Abant İzzet Baysal University

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## Digital Storytelling Experiences of Social Studies Pre-Service Teachers

E. Özlem Yiğit

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### Abstract

The purpose of the present study is to determine the pre-service social studies teachers' opinions about digital storytelling process that they were experienced. Mainly, their attitudes towards learning and teaching are tried to determine according to their opinions after their digital storytelling experiences. This study employed an Interpretative Phenomenological Analysis (IPA) as a framework. Pre-service teachers were encouraged to create their own digital stories by telling the story along with the pictures through programs like windows movie maker, iMovie and so on. Data were collected through a survey and with semi-structured face to face interviews. A survey developed by researcher was given to all students who were enrolled to the democracy and human rights course in 2018-2019 fall term and a total of 37 students completed it. Six pre-service social studies teachers in the group were selected for face to face interviews depended on their answers to survey questions. Three of them who generally stated most positive views towards the digital storytelling process and other three who generally reflected the challenges and difficulties during the process were interviewed.

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### Introduction

As Harari (2018) says in his bestseller book “*21 Lessons for the 21st Century*”, everybody has a story and stories make the world more meaningful for the people. Stories are what we do as humans to make sense of the world. We are perpetual storytellers, reviewing events in the form of re-lived scenes, nuggets of context and character, actions that lead to realizations (Lambert, 2013). As stated by Erstad and Wertsch (2008), the power of expression is a basic element of human development and starting from paintings made on cave walls human represented their world and gave a meaning for things and events around them. The skills of the 21st century are categorized under three titles as learning skills (critical thinking, creative thinking, collaborating, communicating), literacy skills (information literacy, media literacy, technology literacy) and life skills (flexibility, initiative, social skills, productivity and leadership). Researchers and practitioners in this new millennium face the challenge of preparing and equipping learners with the skills required for 21st century citizenship.

Social constructivist principles highlight the importance of students' collaboration in using available tools and learning activities within an authentic environment in constructing and reconstructing ideas and beliefs (Vygotsky and Cole, 1978, cited in Ya-Ting and Wan-Chi, 2012). Knowledge is not simply transmitted from instructor to student but is actively constructed by each student or group of students through their interactions with their physical, social, and technological environment. Since technological devices are regarded as vital educational tools that can facilitate the co-construction of knowledge among students, educators have proposed information technology-integrated instruction (ITII) strategies based on social constructivist theory.

Di Blas et al. (2009) explained that, from preschool to high school, in order to develop a variety of skills, e.g., communication capability, search, or (collaborative) tasks completion, storytelling is a common and effective experience both for teachers and students. For universities, the Bologna Agreement is promoting innovation in teaching with great emphasis on technology and it is forcing faculty to rethink the curriculum in most academic disciplines in terms of content and teaching, and digital storytelling is one genre that seems to fit these demands (Signes, 2010). Some, if not most, of technological resources are unfamiliar to teachers (and parents), but today's students are using them at an ever-increasing pace and in ways that are helping to define a new generation of not just information-gathering, but information-creating as well. Today students and teachers not use technology and computer programs in a limited frame like *Word* and *PowerPoint*, but they are able to use advanced programs such as *Multimedia Builder*, *Hyperstudio*, *Movie Maker* and *iMovie*. These programs allow them to crop, edit, and create a useful movie as well as provide a good constructive tool through which to teach

students cooperation, production and project management in order to integrate technology in education (Alismail, 2015).

Digital storytelling is one of the innovative pedagogical approaches that can engage students in deep and meaningful learning (Smeda, Dakich and Sharda, 2014). Davis (2004) defines a digital story as usually a personal narrative told in the first person and presented as a short movie on screen. Digital storytelling has emerged over the last few years as a powerful teaching and learning tool that engages both teachers and their students (Robin, 2009). Digital storytelling makes the user more active in digital environment and gives her/him a chance to discover her/his own knowledge about the subject. In story telling process people go along the lines of the story during explaining the meanings in their minds. The teller uses its own voice and multi-media technics like pictures, graphics, moving graphics, images, music, text, photos, animations are also used for the aims of education, entertainment and so on (İnceelli, 2005).

Digital storytelling is a technology application that is well-positioned to take advantage of user-contributed content and to help teachers overcome some of the obstacles to productively using technology in their classrooms. It allows computer users to become creative storytellers through the traditional processes of selecting a topic, conducting some research, writing a script, and developing an interesting story (Robin, 2009). Digital storytelling has five main sections (Nora and Fiebich, 2005):

1. Using the media (Media)
2. Movement which is required for users or included in the content (Movement)
3. Potential relationship between the story and the user (Relationship)
4. General conditions provided by other materials (Context)
5. Communication potential (Communication)

There are many different types of digital stories, but it is possible to categorize them into the following three major groups: 1) personal narratives - stories that contain accounts of significant incidents in one's life; 2) historical documentaries – stories that examine dramatic events that help us understand the past, and 3) stories designed to inform or instruct the viewer on a particular concept or practice (Robin, 2006).

According to Benmayor (2008) digital storytelling is a signature pedagogy of the 'New Humanities', engaging an interdisciplinary integration of critical thought and creative practice. Students can develop intellectual discourse and critique, and they can construct a cross-cultural community for empowerment in classroom through digital stories. Besides, stories present our bias and cultural stereotypes and allow us to change them with more equalitarian discourses. In a study done by Bozdoğan (2012), ELT students highlighted "friendship" based on helping and supporting others followed by "philanthropy" while the heroes were largely characterized as male children or animals. Thus, even in multilingual classes students reflect their cultural environment and stories give us the chance to discover them. Because stories are generally told as other people have lived those events and have said that words. People felt them more comfortable to present themselves in stories without even realizing it.

In digital versions, the resources available to incorporate into a digital story are virtually limitless, giving the storyteller enormous creative latitude. Some learning theorists believe that as a pedagogical technique, storytelling can be effectively applied to nearly any subject. Constructing a narrative and communicating it effectively require the storyteller to think carefully about the topic and consider the audience's perspective (EDUCAUSE Learning Initiative, 2007). Besides, digital story telling process allows learners to write scripts and story treatments. A learner needs to think about issues to write a good script. Thus, the written component of digital story helps them to develop their writing skills that are among most important thinking skills.

Within the framework of this study, stories prepared by social studies pre-service teachers in the digital form using *iMovie* and *Moviemaker* were evaluated in the context of their positive aspects and challenges. Because, we are living in a new century and education should provide skills and mental tools related with new centuries requirements. Learning environments are changing and teachers must prepare themselves both for today and the future. Inquiry and knowledge creation skills are crucial together with creativity, analytical thinking and critical thinking skills. Besides motivation and engagement are important indicators of teaching activities. Teachers and students should be motivated to learn and develop new skills and get knowledge about the context. Social studies is an important part of this process to nurture people as active learners and knowledge creators.

In this article it is hypothesized that in the development of 21st century skills and motivated and engaged teachers to the process digital storytelling had various positive effects. Digital storytelling let learners to collaborate, share, focus on knowledge, create, design and present. Learning happens as a result of this interaction and challenges which learners encountered help them to learn more as problem solvers. These are not

only among requirements of qualified learning environments of 21st century but also skills for citizenship in 21st century. Thus, social studies teachers who have those skills not only successful in teaching social studies they also get success in raising citizens of 21st century.

## Method

The purpose of the present study is to determine the pre-service social studies teachers' opinions about digital storytelling process that they were experienced during 2018-2019 fall term. Mainly, their attitudes towards learning and teaching are tried to determine according to their opinions after their digital storytelling experiences. For this aim, pre-service teachers were encouraged to create their own digital stories by telling the story along with the pictures through programs like windows movie maker, iMovie and so on.

This paper is concerned with how digital storytelling is used in education faculties to enhance pre-service teachers' motivations both towards their courses and professions. This study employed an Interpretative Phenomenological Analysis (IPA) as a framework. Interpretative phenomenological analysis is a relatively recent qualitative methodology developed specifically for psychology (Smith and Osborn, 2003). It is concerned with the detailed examination of individual lived experience and how they make sense of that experience (Eatough and Smith, 2008). Interpretative phenomenological analysis (IPA) recognizes that different people perceive the world in very different ways, dependent on their personalities, prior life experiences and motivations. It begins with the detailed analysis of case studies and only cautiously moves to more general statements about groups of individuals (Smith and Osborn, 2003). In this study, to make sense of the subjective meanings of experiences individual participants themselves, IPA was used.

For the purposes of IPA, only short responses are allowed to pre-specified questions which are testing the researcher's pre-defined hypotheses. Instead IPA researchers usually engage in semi-structured interviews with participants where the researcher has a set of questions to ask but these are used very flexibly in the interview ((Smith and Osborn, 2003). Data were collected through a survey and with semi-structured face to face interviews. A survey developed by researcher was given to all students who were enrolled to democracy and human rights course in 2018-2019 fall term and a total of 37 students completed it. The survey consisted of one open ended question about the digital storytelling, their digital stories and their opinions towards that experience. Questions which were in draft form of the survey sent to experts who were studying on digital storytelling and according to their views original form of the survey was developed. Five questions were removed from the survey depended on the experts views and ten questions were presented at the end.

Following questions were included in the survey:

1. According to you, what are the benefits of your digital storytelling experience?
2. What are the challenges you encountered with in digital storytelling process?
3. Did it change your attitudes towards the content of the democracy and human rights course? Tell me about those changes?
4. Which skills did you need during this process and how did you use them?
5. Which skills did you have during this process and how did you benefit from them?
6. Did it motivate you to get information about the course content and present them to your classmates?
7. Do you think that this experience would helpful for you in the context of teaching proficiencies?
8. What are your opinions about using digital storytelling in education faculty?
9. What are your opinions about using digital storytelling in social studies education?
10. Do you have any suggestion about this process?

Content analysis was done to the data collected with survey questions and according to the results semi-structured interview questions were prepared. Draft questions sent to five experts again and last version was developed depended on their views.

Six pre-service social studies teachers in the group were selected for face to face interviews depended on their answers to survey questions. Three of them were who generally stated most positive views towards the digital storytelling process and other three were who generally reflected the challenges and difficulties during the process. Following questions were asked to them:

1. Could you talk about your digital storytelling process in detail?
2. How did you decide on the storyline, characters and the place?
3. What are the benefits of team work in this experience?
3. Did you have any challenges during team work?
4. How did the process motivate you in the context of the democracy and human rights course?

5. How did the process affect your creativity?
6. Could you explain, how did the process affect your empathy skill?
7. What are other skills you developed during this experience?
8. What do you think about other groups' stories?
9. What is your opinion towards digital storytelling in social studies course?
10. What is your opinion towards digital storytelling in teacher training?

Each interview was scheduled for 30 minutes. After face-to-face interviews focus group meetings were done to probe further those presented both in the survey and individual interviews. Focus group meeting was scheduled for twenty minutes and each group was initially asked to describe their digital story. All groups in the class (7 groups) joint those meetings separately to express their team work, digital stories and digital storytelling experiences. The conversation was opened and all members of the groups were invited to speak freely and discuss any other issues that arose from participation in the process.

Interviews were audio-recorded with the consent from the participants; the interviews were then transcribed verbatim. Comments were then transcribed and content analysis was done. Listed themes were then clustered in a meaningful way by looking for connections between them to develop super ordinate themes.

## Results and Discussion

### Findings towards Using Digital Stories in Teacher Training

#### *Motivation*

It was seen that digital storytelling process increased pre-service teachers' motivations both towards the course and their profession. They found it interesting and a potent tool for students who are taught to create their own stories. This type of activity generated interest, attention and motivation for the "digital generation" students in today's classrooms. A student in the focus group interviews narrated that: *"Digital storytelling motivated me to look for different sources to create better stories than other groups. When teacher lectures, that doesn't interest me. That is so boring. But, digital stories are interesting."*

Pre-service social studies teachers enjoyed democracy and human rights class using digital stories including multimedia components. They thought that it was obviously different from a traditional class, and the story line made students more motivated to both learning and teaching. One of the participants said: *"Digital stories encouraged my motivation towards learning. I like both creating and listening the stories about the course content. I want to use this technique for my future students and I think it will also encourage their motivations."*

Another participant explained her opinion as following: *"At first, I didn't feel myself motivated to this course, we had diverse and wide content like democracy, its history, other regimes, history of human rights and so on... When you talked about digital storytelling and digital stories it didn't make a sense for me. But, when we began to create our stories it influenced me and I began to research about things for the story."*

In focus group meetings pre-service teachers complained about the learning and teaching process in faculty and they said that was not motivating. During one of the focus group meeting about this issue they narrated that:

Mert: *"Our lecturer always told about constructivism and how we would make our future students active, but they don't do the same thing for us."*

Yasemin: *"Yes, I agree with him, they always lectured us but ask us to make our students more motivated, more activated. How can we do? Why don't you do it for us?"*

Dilek: *"Sorry but our courses in faculty are very boring. I don't what to come to the class and listen to the professors".*

They stated their motivation reasons about the digital storytelling process like this:

Burcu: *"I like digital storytelling it encouraged my motivation because I shared the process and you didn't teach us, we learnt it spontaneously. I came to class and did the things intentionally".*

Kemal: *"It changed my thoughts towards learning and teaching. During this term, we created about three stories for this course and listened many stories. And, when I realized that I could learn the issues I understood all constructivist things that our professors have lectured us."*

Cansu: *"We worked in groups and I observed that some of our classmates who were not enthusiastic about teaching and learning and not take responsibility for the activities have begun to work."*

Tuna: *"We learned from each other and it is very interesting and motivational".*

Their opinions about digital storytelling experiences verified that it also increased their motivation towards their career. Besides, professors in education faculties and their activities during teaching process directly affect pre-service teachers' motives. Professors are their role models and if they don't put the theoretical knowledge into practice and don't let them to experience the student-centered processes, pre-service teachers can't motivate to do it. Narrates of a focus group meeting are as following:

Burcu: *"This is my main motivation now. I want to help my students to succeed."*

Şafak: *"If you don't like your profession then you'd better not be a teacher, because the classroom is where you do your work and you should do your best there. Now, I think that I will be a good teacher and I want to use various techniques including digital storytelling in my class. I'm excited about it."*

Gökçe: *"Many students think that social sciences and its content are not enjoyable, I think the same indeed. But, now I think that I can make chances."*

It indicates that positive experiences in teacher training process make positive changes in pre-service teachers' minds in the context of their profession and motivate them to use various techniques to help their students to succeed.

### Skills

Digital Storytelling by pre-service social studies teachers provided them a strong foundation in many different types of literacy, such as information literacy, visual literacy, technology literacy, and media literacy which are called as "Twenty-First Century Literacy". In digital storytelling process, social studies pre-service teachers combined a variety of multimedia tools including working with text, images, audio and video and improved their skills through this. They also learned to create a narration and soundtrack for the story and their research, writing, organization, presentation, interview, interpersonal, problem solving and decision making skills were increased too. Some of the participants narrated that:

Buse: *"Actually, I learned to use technological devices like IMovie, and also learned to working with the images and videos and creating stories about the course content."*

Berke: *"Technology is all around the world. I use it in a daily routine. Especially the cell phones are always in our lives. I use for various aims like talking to my friends, chatting with them, texting something to someone, watching videos from YouTube or something like this, sharing photos or something. But I now, I'm using it to learn and teach. Yes, I have done it before, I have used technology for the course, I created PowerPoint presentation and I searched something in websites. But it was different."*

Duru: *"When you talked about digital storytelling and how could we create digital stories I was loath to do it. Yes, I use technology but it was difficult to connect it with the course content. But, now I learned to use it in learning and teaching process. And, it is not just for this aim, I like to create something digitally in my daily routine for different aims and teach it to my friends."*

They found and analyzed necessary information about given content, formulated a point of view and developed a script, managed the materials used and the time it took to complete the task, decided how they present the story in best way to the audiences, worked within a group and determined and performed individual roles as a group member, made decisions, overcame the obstacles during the process and at the end how they could critique their own and others' work. . Narrates of a focus group meeting are as following:

Doruk: *"We learned to working together in this process. Before, during team works in the courses, actually I didn't want to do it because there was always someone who finished the work. I used to unenthusiastic, it is not something enthusiastic. My teammates were surprised in this process when they witnessed that I wanted to do something for the story."*

Merve: *"This process was difficult at the beginning but after two or three stories we began to understand the process and adapt to the team work. We began to understand each other in same group. And, other groups stories... After watched them and saw that they became better in each week, it was like a competition. We wanted to create stories better than other groups and began to discuss things, sent contents to each other in the group."*

Burak: *"We encountered with some obstacles, some members of our team didn't want to participate in the process, but we became a team over time."*

Aslı: *"You made an effort as a team and share your stories with the class. It was not desirable to hearing negative things about your work. But, in this process I learned to listen to them with patience. Yes, it is still not good to hear negative things but I try to challenge with it."*

Defne: *"We discussed about things, made decisions, had some problems sometimes technologically or based on the course content or because of team work, because everyone in the group wanted to push others about something. But, now I think we learned to be a group."*

Özge: *"I think, the most useful skill I gained during this process was about the time. If you wait till the last day of the task, you can not complete it."*

The process capitalized on the creative talents of students as they began to research and tell stories of their own as they learned to use the Internet to research while analyzing and synthesizing the content. In addition, students who participated in the creation of digital stories developed enhanced communication skills by learning to organize their ideas, asked questions, expressed opinions, and constructed narratives. It also helped students as they learned to create stories for an audience, and presented their ideas and knowledge in an individual and meaningful way. Some of the participants narrated that:

Bilge: *"I learned to narrate the content, now I consider the audiences, what they like, how can they understand it better."*

Sude: *"It helped me to express my feelings and I learned how I can do this. I combined things together to create a story and presented it to others in the class."*

Gökhan: *"It was a creative task, because you create something."*

Yaman: *"As teams in the class, we create the course content one again. Sometimes we simplified it for the audiences, I mean our classmates. They were our stories and we created them"*.

Begüm: *"Digital storytelling has made my thoughts and feelings come alive in the story. This process confirmed my belief that everyone has a story and everyone can express herself or himself through stories"*.

Irmak: *"Each story was also contained feelings of the creators. And, there were different characters and characteristics; I think I learned what empathy is."*

Active engagement in the class helped the students construct their knowledge and organized information into meaningful learning. Thus, they got more involved in the lesson using digital storytelling in the class and made them gain self-confidence, lowering down anxiety in learning democracy and human rights course.

Mete: *"Everyone has original things to narrate and everyone is talented to talk about the people, events and issues."*

Gül: *"We were really active in this process and got the responsibility of learning, I mean learning not only in the context of others in the class, I also mean the responsibility of my own understanding about the course content. I believe in myself that I can do it."*

Müge: *"Sharing our teams' stories and seeing my classmates watching and interested in, made me excited. I feel myself more ready to teach something to my future students."*

Nazlı: *"This experience helped me to break down my prejudices towards courses in university. I thought some courses were more boring but now I saw that I can make every course and every issue interesting."*

Melisa: *"I wrote my narrative, got pictures and videos, worked with my friends, and created stories with them. I was an active participant in the process. Being active in all of the parts made me more confident. I definitely like it."*

Umut: *"Discussions after each story, I asked questions to my friends about their stories and criticized them. It helped me to feel myself confident. This process made me feel that can learn and teach about different things."*

It indicates that they had the opportunity to have a meaningful contribution in all the learning processes instead of being a passive listener and developed skills which were necessary not only in school, also in real life situations.

### *Permanent Learning*

Pre-service social studies teachers stated that, instead of memorizing facts, they wanted to retain the information for a long time. Interviewed participants expressed their opinions towards digital storytelling made helped them to learn the content and remember it even after the process. According to them the story line helped them to recall the facts and while they were thinking that was difficult to memorize the names, events and dates included in democracy and human rights education, at the end of the process they saw that it was easy with stories which they created. Some participants explained their opinion as following

Ebru: *"When we criticized other teams' stories and thought about what they might say about our work, we began to talk about course content and learned it."*

Burcu: *"If you asked me something about the course content, I could express them. Because I remembered lots of things about the course. I remembered them because I remembered the stories."*

It was seen that digital storytelling experiences gave to the pre-service social studies teachers the chance towards an attitude for self-directed learning. Besides they expressed their opinions towards preferences directed for active participation in tasks and using various technological devices which they owned such as cell phones and computers. They also described that they wanted to use media sharing sites and social networking sites in for educational aims, because they were already in their daily lives and with technology integrated experiences in learning they felt themselves more involved in the process and it helped them to remember the content even after a while.

Mete: *“Technology is already in our lives and may be it is in the first place. We use it for various aims. When you integrated it into learning and teaching it makes the process more interesting for us. If you make a course interesting, you can also attract students’ attention and I think that, students will never forget the things during the process.”*

Ayşe: *“I still remember the course content and when I think about the stories both we and other groups created, I remember concepts, dates, characters and events of the course.”*

Büşra: *“Stories make the content meaningful I think it is same as the real life. We remember movies, books, tv serials because they tell us stories. We don’t expend more energy on a book, a film or any other things that are included stories. It is easy to remember them even after long time. You learn without even realizing it. Our digital storytelling experience was like this.”*

Pre-service social studies teachers created their own digital stories during this experience and the data showed us that they adopted both their stories and the learning and teaching process together with it. Thus, it made the process easier than traditional classes. Some participants narrated this as following:

Ada: *“I have never forget the stories because we have created them. They are our stories and if you adopted something you never forget”.*

Efe: *“How could you forget things you worked for it? Digital stories that we have created were our products. We created our stories and watched the stories of other groups. You asked us to criticize them and we began to work harder because we didn’t want to criticize negatively. I think this was more instructional for us”.*

Almost all of the participants who were interviewed mentioned the digital storytelling experiences as giving them better understanding in learning. For example Deniz stated that; *“replace the dull presentations and expressions, digital storytelling gave me a real sense of understanding and have become more confident.”* Besides, Can expressed his opinions as following: *“I didn’t memorize anything and I didn’t need more effort for the exams, I learned during the process and I still remember.”*

Participants felt that their perceptions and experiences about the courses in education faculty were rather passive before. In this process they used various materials and media tools like videos, texts, pictures, music and they created their own product and this made them more active in their own learning. Thus, the majority of the participants mentioned their opinions towards learning through experience and this made the process more memorable. Some participants in focus group discussions narrated this as following:

Burcu: *“We were really active in this process and I saw that if you lived something it was difficult to forget that.”*

Nazlı: *“In all courses our lecturers said us that learning through experiments and active participation of students were important and essential but they sometimes did it. They waited from us to memorize the content and generally they narrated. So, it was difficult to listen about fifty minutes and learn it. But, storytelling made us more active and if you were active you could learn and remember it easily. It is permanent learning.”*

Those quotations from the views of the pre-service social studies teachers show us that active participations during the process made this experience more meaningful and memorable for them.

### Challenges

Although participants of this study were technology natives this experiences was still challenging. First of all, they had problems in mastering the skills of creating digital stories. In this study, pre-service social studies teachers had some difficulties because of their incompetence towards technology. It was hard for them using new programs, findings videos, creating sketches, integrated whole materials together. Some participants narrated this as following:

Mert: *“It is a new thing for us, yes, I use technology in my daily life frequently but I haven’t use it to create a story or for an aim like this. It was same for other group members, it was very difficult for us*



*and when we created our first story we had many difficulties. We gave an effort to learn the digital story programs. But, after we learned it, now we can create stories easily.”*

*Burcu: “In our group work we encountered with some difficulties because of technology and we needed to learn how we could use the programs and put the videos and images together.”*

*Mete: “Finding proper music, video and images was a problem. They should match the content of the story and it was not easy.”*

Second challenge in this experience was about time. Digital storytelling could be very time consuming. It also might take students several attempts at creating digital stories. Students would need time to learn what was expected of them as they begin using digital storytelling.

*Ela: “We need more time than our traditional classes. It requires more attempts. You need to do lots of thing to create a digital story”.*

*Berke: “Creating a digital story required to much more time. You have to get knowledge about to concept, find proper images and music, write a text and vocalize it, think about the critics of the other groups and so on.”*

Challenges mentioned above were mainly related to the knowledge of technology usages. To use digital storytelling effectively, both educators and the students should be well-prepared technically. Although all those challenges it is encouraging to seeing that once students were experiences it was easy to solve.

### **Findings towards Using Digital Stories in Social Studies**

Using digital storytelling in class can be developed in two different ways. Teacher can create stories before teaching and learning process and in second way ask students to create their own stories. Pre-service social studies teachers participated in this research thought that it could be difficult to ask primary and secondary school students to create their own digital stories.

*Burcu: “Digital stories .... I think it is not easy to create for elementary school students. Even though they use technological devices like cellphones, iPad and something else; we should create stories instead of them.”*

*Mert: “I am not sure about young children can create their own digital stories. Because we need many things in our digital storytelling projects, you must design a story and use technology to present it. We encountered with various problems during this process. So, I think young students can't handle with them.”*

*Berke: “Our future students will be very young to create stories that kind.”*

Participants of this study generally presented their positive opinions about digital storytelling. They mentioned their efforts and desires towards creating new digital stories for other courses in faculty, for their presentations and social studies activities in their future classes.

*Ela: “After the digital storytelling process, I felt I could create many for other courses. I decided to do it for many presentations. In my future career as a teacher, I want to tell my students how to craft digital storytelling.”*

*Begüm: “I like this experience. When I start to work as a social studies teacher, I want to use it in my classes with my students.”*

*Melisa: “I developed another digital story for another lesson. Digital storytelling is an attractive alternative that shows all of my efforts in the process. After we learned about it, I taught it my roommates in other departments and they found it very attractive. So, I am planning to use it in my future classes.”*

*Burcu: “Students are now growing up in a digital world. Thus, I think using technology and digital storytelling in teaching process is important because they are already familiar with it. They watch various contents through media and share their stories through social media. If you use it in education, you make it real the principle of bring the life in class.”*

*Berke: “If you ask someone to learn something and behave like some way, s/he don't want to do it. But, in digital storytelling process you just tell stories of others and wait for its' influence and if your story is interesting students impressed by characters of the story.”*

*Mete: “Using this tool introduced me to a wide arrange of possibilities for future use in the classroom”.*

After all, we concluded that even though their suspicions towards young children's inadequacies in creating digital stories pre-service social studies teachers which were participants of this research were enthusiastic about using digital storytelling both in their learning and teaching process.

## Discussion and Conclusion

Growing up with technology has changed the way young people communicate, interact and learn. This group of people has grown up with a variety of new technologies as an important and integral part of their daily life. They called as digital natives and 21<sup>st</sup> century classrooms should be ready for them. In 21<sup>st</sup> century not only students are digital natives teachers are also digital natives and thus, digital natives are teaching digital natives (Prensky, 2001). They prefer multimedia rich environments and have high ownership of mobile phones, media sharing sites and social media profiles. Thus, 21<sup>st</sup> century teachers should translate those experiments to their teaching.

Young people (both teachers and students) use technology in their daily lives but they need to develop a systematic understanding of integrating technology to their subject matter. Digital storytelling is an art of combining narrative with digital media (Robin, 2009). A story has a point of view, identifies issues to be resolved, engages the audience through common emotions and themes (love, pain, humor), helps the audience make meaning of images, use the power of the soundtrack, balances the auditory and visual tracks of meaning, sustains the attention of the audience by establishing and modifying the rhythm of the story (Lambert, 2013).

In education faculties preservice teachers should be trained to use the power of technology in their classes. While the instructional technology course helps pre-service teachers develop technological skills and an understanding of technology integration, other classes help technology integration in content areas (Dreon, Kerper and Landis, 2011). Teachers and learners motivations may be increased together with this. This study was done depending on motivation problems of pre-service teachers and according to the views of participants, digital storytelling process made them motivated to learning the course. Similar with this, findings of another research showed that digital stories have a positive effect on the academic achievement, motivation and retention in the experimental group (Aktaş and Uzuner-Yurt, 2017).

Motivation is a common and fundamental concern among teachers because if you can motivate students it arouses the interest, creates the want to achieve both in and outside the school. Especially the intrinsic motivation is important to make an effort in learning and teaching process and try to do the best. Teachers and educators search for solutions for motivation problems and try to find that what motivates their students. Using various techniques and materials is among these solutions. Motivation is not just a concern of teachers who educate students from pre-school to high school; it is also a problem for university professors. It is impossible to achieve the goals of courses and programs with unmotivated students. In education faculties it is more important because students are the teachers of the future and their motivation would affect not only their academic successes in university but also their success as a teacher. Participants of this research stated their views towards positive effects of digital storytelling process on their motivation. These findings are similar with the results of other studies about this content. Yoon (2013) also concluded its study on digital story using to provide motivation for ELLs as following: It made Korean 5<sup>th</sup> grade ELL learners engaged in the content, promoted their motivation, interest and provided satisfaction and confidence in learning English. It helped students to have a deeper understanding of the lesson and this led their voluntarily active class participation. Same results were found by Karataş, Bozkurt and Hava, (2016) and the participants stated that digital storytelling had positive effects/contributions on enhancing their motivation and creative thinking skills. According to the findings of another research, it was determined that the use of digital story in the teaching of the unit of information technologies had a significant effect on the students' motivation towards the course. Accordingly, the use of digital storytelling in the teaching of theoretical content can make students more willing to learn about these topics (Saritepeci and Durak, 2016).

After a three years digital storytelling project with pupils aged between 4 and 18, Di Blas et al. (2009) concluded that, the introduction of well supported digital storytelling in schools could be an extraordinary facilitator for a wide range of substantial educational benefits, e.g., acquisition and consolidation of knowledge and skills, heightened engagement, motivation towards learning activities, and also acquisition of digital literacy skills. Students improved their teamwork capabilities more than normal school activities do. Kieler (2010) used digital storytelling with gifted students to motivate and challenge them and concluded that students became active learners, while creating a memorable learning experience for themselves and others. It also helped them to become better communicators through the use of a variety of digital tools. However, as Ohler (2005) stated, many students unfortunately focus the power of technology rather than the power of their studies. In this research it was also seen that some pre-service teachers engaged in the medium and technology rather than their stories. It is an important challenge for teachers or educators who ask their students to create digital stories to teach them how to be good storytellers first.

The findings from the study done by Smeda, Dakich and Sharda (2014) suggested that digital storytelling was a

powerful tool to integrate instructional messages with learning activities to create more engaging and exciting learning environments. It was a meaningful approach for creating a constructivist learning environment based on novel principles of teaching and learning. Thus, this approach had the potential to enhance student engagement and provide better educational outcomes for learners. Raven and O'Donnel (2010) demonstrated how perceptions of national identity and pride can be supported and nurtured in middle eastern, second language educational context through the construction of digital stories. Videos obtained from Digital Storytelling technique affect more physical senses and this result in the active participation of students in Storytelling process and the positive contribution in group studies of students in the context of values (Balaman, 2015; Balaman, 2016).

In this research, interviewed participants expressed their opinions towards digital storytelling made helped them to learn the content and remember it even after the process. This result is similar with results of other research in this area. For example, digital stories developed by using Toondoo increased students' academic achievement and affected their attitudes positively towards Information and Communication Technologies course. It was also determined that digital stories caused students participate the course actively, increased retention and motivation towards the course (Gömleksiz and Pullu, 2017). In another example, the teacher candidates stated that the digital stories should be included in the science lessons, that the digital stories paid attention to the subject, and were fun and avocatory, and that permanent learning was provided (Anılan, Berber and Anılan, 2018).

21. Century Skills are important for today's students, teachers, educators and citizens. Data collected during this research showed that, digital storytelling process motivated and improved pre-service social studies teachers in the context of these skills. Same results were found by Niemi and Multisilta (2016). Based on socio-cultural theories, they created a model called Global Sharing Pedagogy and found that digital storytelling process was very successful in teaching twenty first century skills. In this study it was found that when pre-service social studies teachers participated in the multiple steps of the digital storytelling process, they increased some literacy skills including research skills, writing skills, organization skills, technology skills, presentation skills, interview skills, problem solving skills and assessment skills. In another research, the use of digital narration in open university system developed learners skills in many areas from motivation to collaborative working skill and helps their permanent (Yüzer and Kılınc, 2015). Digital storytelling process also increased pre-service teachers' self-confidence scores (Sancar-Tokmak and Yanpar-Yelken, 2015). Baki and Fevzioglu (2017) analyzed the effects of digital stories on writing skills of 6<sup>th</sup> graders and found that writing skills of the students increased after that process. The gifted students' writing skills were also affected positively by Digital Storytelling Application (Demir and Kılıçkiran, 2018). After an experiment students stated that during this process they searched for topics and gathered data and thus improve their learning and innovation skills, they combined multimedia materials such as video, sound, music and visuals etc. with the data that they gathered and thus improve their ICT skills and they highlighted that they were actively engaged in activities like commenting, evaluating and voiceover and thus improve their life skills (Kotluk and Kocakaya, 2015). Based on the findings (Gözen and Cırık, 2017), we can say that digital storytelling has important implications for children's social-emotional learning. It also increased creativity levels of students (Bedir Erişti, 2016). Besides, digital stories give voice to quiet students and to students whose skills don't fit the usual academic environment (Ohler, 2006).

In digital storytelling process social studies pre-service teachers encountered with various challenges like copyright issues, technological incompetency, time and team working problems and so on. In Sadik (2008)'s research, participants were encouraged to produce their own stories and shared them with other students in the class. Despite the problems and challenges of this process, they believed that the digital storytelling projects could increase students' understanding of curricular content and they were willing to transform their pedagogy and curriculum to include digital storytelling.

Pre-service social studies teachers thought that it could be difficult to ask primary and secondary school students to create their own digital stories but Kwang-Yeol, Jeong-Beom and Tae-Wuk (2009) mentioned that elementary school students were more interested in programming and attended actively and their motivation and achievement was improved. Especially the language classes may be used to help students more capable to writing functional narratives (Dayan and Girmen, 2018). Some of the participant social studies pre-service teachers decided to create their own stories and show them to their students as a new teaching material. They want to use it to enhance their units and as a way of making abstract content more understandable. Even though their opinions towards difficulties of the process, some of the participants of the study still see digital storytelling as a potent tool for their future students who are taught to create their own stories. They thought that after examples students even youngers may be given assignments. It is similar with the results of another research (Karataş, Bozkurt and Hava, 2016) concluded that all of the participants state that they will use digital storytelling activities in educational environments when they are in-service. According to the results of the study

of Kocaman-Karoğlu (2016), the teachers found digital storytelling applications useful as it supports students' active participation, contribute achieving concrete experiences and technological development. It is valid for students whose success and interest levels are low. Ulum and Ercan Yalmani (2018) found that students mostly enjoyed digital storytelling, as well as learning the course while having fun and enhancing their interest in the Science and Technology course.

## Recommendations

Digital storytelling should be used in teacher education to motivate student teachers and make their learning more permanent. But, researches should be done to investigate how does it provide evidence to deep learning and how does it differ from paper-based stories in the context of their qualities and effects on students. Student teachers should be motivated to use digital storytelling in their school experiences processes and teacher educators should help them to solve the problems about digital stories which they encounter in classroom.

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### Author Information

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#### Emine Özlem Yiğit

Social Studies Education Department  
Bolu Abant İzzet Baysal University  
Turkey  
Contact e-mail: [yiğit\\_o@ibu.edu.tr](mailto:yiğit_o@ibu.edu.tr)

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