

Teachers' Views about the Use of Digital Stories in Language Teaching Courses of Primary Schools in Turkey*

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To Cite: Kaya, M. F. (2023). Teachers' views about the use of digital stories in language teaching courses of primary schools in Turkey. *Malaysian Online Journal of Educational Technology*, 11(2), 127-146.

<http://dx.doi.org/10.52380/mojet.2023.11.2.475>

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* The study was carried out within the scope of the project of European Union Comenius Regio 2013-1-DE3-COM13-35845-2 FaMe-Fatih Meets Mediacompetence@Primary. At the same time, some part of the study was presented orally at the "International Conference on ICT in Language Teaching" held in the city of Eskisehir in Turkey.

ABSTRACT

The aim of this study was to determine the views of primary school teachers who gave language courses (mother tongue and foreign language) at the primary school level, about the use of information technologies, digital story preparation, and its use in lessons in the language teaching process. In the study, the phenomenology design, one of the qualitative research methods, was used. The participants were primary school teachers and English teachers who took part in the Digital Story Preparation training given within the scope of the European Union Comenius Regio. Among the 30 teachers who joined the training, 14 voluntarily participated in the study. At the end of the training, a written form prepared to consult the written views of the teachers was used as a data collection tool in the study. According to the research results, the teachers had positive attitudes and thoughts about the use of information technologies in the language teaching process and used them in the preparation, teaching-learning process, and evaluation stages of their lessons. However, their tendency to use ready-made e-learning content was found to be high. In addition, it was concluded that the practice-based Digital Story Preparation training they attended was beneficial and that the training contributed positively to their own professional development as well as to their thoughts and attitudes regarding technology integration into education.

Keywords: *Information technologies, digital stories, Turkish language teaching, mother language teaching, foreign language teaching*

Article History:

Received: 27 October 2022

Received in revised form: 20 Dec. 2022

Accepted: 15 March 2023

Article type: Research Article

INTRODUCTION

In recent years, technology has been one of the most important areas that has affected, changed, and transformed individual and social life most. It not only affected the functioning and mechanisms in different areas of life but also transformed almost all relevant stakeholders in various aspects. In this respect, education processes and internal and external stakeholders were heavily affected as well. Technology is seen as an indispensable part of life, even as a need, especially for the generation that was born and grew up in the period when technology started to be intensely used. As this situation changes the educational characteristics of students, who are the most important stakeholders in education, parallel transformation and change in teaching-learning processes are necessary. Today, the new generation's competence in using the relevant technologies is more developed than that of their parents and teachers (Sylvester & Greenidge, 2009), which makes it compulsory to accelerate the necessary transformation and change. Good-quality development of teachers, who are practitioners of educational processes, is an important area of need due to the related reasons. It is important that teachers, who spend one-on-one time with students, who plan,

implement, and evaluate the teaching-learning processes, who are aware of their needs, and who direct students to useful areas with their power to explore developmental and potential areas, be equipped in terms of relevant qualifications and competence (Göçen, Eral, & Bücük, 2020).

Effective use of technology in mother tongue teaching lessons, which are the basis of life and other academic lessons, and in foreign language lessons that will open the person to the wider world can be seen as one of the elements for increasing the success and quality of these lessons. The reason is that e-learning contents developed in line with technology make learning easier, faster, and more permanent on the basis of pedagogical knowledge, learning theories, and teaching principles (Alassaf, 2014). In the most basic sense, technology played a role in increasing the attitudes, motivation, and attention levels of students by bringing multiple inputs into the learning process; in other words, it brought together multiple stimuli and content (Akin & Çeçen, 2015), making it the main learning resource of the growing generations in the current era. So, it is important to make education processes based on multiple sources, methods, and contents by removing them from uniformity and by diversifying and enriching learning resources in learning environments.

Digital Stories and Their Use in Education

One of the relevant types of e-learning content is digital stories. Its application became widespread in the fields of education, advertising, information, and commerce. Digital story can be defined as a short video-narrative created by combining recorded audio, still or moving images, and music or other sounds with traditional storytelling (Rule, 2010). In another saying, a digital story includes elements such as image(s), audio narration, music, dimension, and perspective in terms of technique, while with respect to content, it includes the story and/or scenario elements as well as the stages of consistent gathering and revision these elements and the production of the digital story. In this way, the digital story presents a structure that appeals to some technological skills on the one hand and all sensory organs (LaFrance & Blizzard, 2013) and all language skills on the other (Collier, 2013; Peterson-Karlan, 2011). Hathorn (2005) describes the digital story as a program innovation that combines communication, language and literacy skills with technology. At the same time, it supports the active participation of teachers and students in the process as well as having the potential to enrich student-centered and active learning activities (Barrett, 2006; Dockter, Haug, & Lewis, 2010; Saritepeci & Çakır, 2017).

There are many ways and methods to prepare a digital story. The fact that, especially with the widespread use of smart phones and tablet computers, the process of combining the function of taking photos and videos with other multimedia components can be done easily and at low cost, facilitates the effective inclusion of digital stories in the teaching-learning process, together with the creative and innovative skills of the individual (Smeda, Dakich & Sharda, 2014; LaFrance & Blizzard, 2013). At the same time, many software, programs and applications have been developed. Most are easy-to-use software with ready-made templates. Therefore, it is possible for teachers and students to prepare digital stories in the form of instructional/informative content, storytelling, projects or assignments for different lessons.

In the literature, there are various studies on the use of digital stories in educational processes. These studies show that the use of digital stories contributes to the teaching-learning process and stakeholders in different respects. Smeda, Dakich, and Sharda (2014) state that digital stories are helpful in creating a constructivist e-learning environment for teachers, while Ulu (2021) points to the use of digital storytelling in various fields in Turkey. When the related studies are examined, it is seen that digital stories are used in different courses and grade levels. In this regard, according to the opinions of teachers and students, digital stories can be used within the scope of courses such as Science and Technology (Uslupehlivan, Erden, & Cebesoy, 2017), Mathematics (Büyükkarcı & Müldür, 2022), Physics (Kahraman, 2013), Social studies (Kirikci, Cigerci, & Arıkan, 2020; Saritepeci, 2017; Şeker-Sezginsoy, 2016) as well as in various other courses (Karakoyun, 2014). At the same time, it is seen that it contributes to the development of various skills such as 21st century literacy skills, various thinking skills, creativity, problem solving and technology literacy (Barrett, 2006; Ohler, 2008; Hung, Hwang & Huang, 2012; Robin, 2016; Saritepeci, 2017; Şeker-Sezginsoy, 2016).

Digital stories support the teaching-learning process as well as cognitive and affective processes such as academic success, learning, a positive attitude, active participation, attention, motivation, permanent learning, making the lesson fun, developing a positive attitude, and reflecting what has been learned (Barrett, 2006; Dakich, 2008; Yang & Wu, 2012; Baki and Feyzioğlu, 2017a). In addition, there are studies in which digital stories are used in mother tongue and foreign language teaching. Studies show that it develops basic language skills in both fields (Dupain & Maguire, 2005; Meadows, 2003). Moreover, there are several other studies showing that besides developing language skills (Girmen & Kaya, 2019; Nassim, 2018; Wu & Chen, 2020; Yang & Wu, 2012), it helps develop listening (Cigerci & Gultekin, 2017; Sandaran & Kia, 2013); speaking (Demirer, 2013; Wijayanti, 2020; Nair & Yunus, 2021); reading (Alshaye, 2021); writing (Girmen, Özkanal & Dayan, 2019; Dola & Aydın, 2020; Xu, Park & Baek, 2011); and visual literacy (Churchill, et al. , 2008).

Purpose of the study

It could be stated that the contents, multimedia elements and digital stories prepared with the help of information technologies have an effective area of use for language lessons (mother language and foreign language), which are based on skills and interaction. With the help of technology, teachers can present their own teaching content or texts to students, and students can present their own writings, projects, and expressions to the teacher. In this way, students' technology literacy develops, while teachers have the opportunity to develop their own skills. In this respect, desired results can be achieved when information technologies are properly integrated into education processes (Öztürk & Gökdaş, 2020). Therefore, it could be stated that teachers, who are the implementers of education, have the potential to increase the quality of language lessons by preparing content suitable for the characteristics, learning styles, and paces of their students and by using it in the classroom.

When the literature is examined, it is seen that many studies focused on researching the effect of digital stories prepared by researchers and determining the situation of their success, attitude, etc. In addition, there are studies for teachers and pre-service teachers. Anılan, Berber & Anılan (2018), Uslupehlivan, Kurtoglu Erden & Cebesoy (2017), Büyükkarcı & Müldür (2022) and Kocaman-Karoglu (2016) conducted studies on pre-service teachers' experiences of preparing digital stories and developing these skills. However, it is noteworthy that there are few studies aimed at improving the digital story preparation skills of teachers and instructors who are practitioners. Dogan & Robin (2008), Dogan & Robin (2009), Dogan (2012), and Yuksel-Arslan, Yildirim, & Robin (2016) examined teachers' digital story preparation processes. In this context, it is seen that there are few studies on teachers' digital story preparation skills. Accordingly, the aim of this study was to determine the opinions of primary school teachers, taught gave mother tongue, and English teachers who taught foreign languages, at primary school level about the use of information technologies in the language teaching process and about the preparation of digital stories. For this purpose, answers were sought to the following questions:

- What are the opinions of teachers participating in the digital story training about the use of information technologies in the language teaching process?
- To what extent do teachers include information technologies in classroom practices?
- What are the contributions of the digital story preparation training they attended to their professional lives?
- What are the views of the teachers about the usability of digital stories in other courses?

RESEARCH METHOD

Research Model

In this study, which aimed to determine the opinions of primary school and English teachers giving language classes in primary school about the use of information technologies in lessons and about the preparation of digital stories, the phenomenology design, one of qualitative research methods, was used. The phenomenology design focuses on the common meaning of experiences, perceptions, feelings, and thoughts experienced by different individuals about an event or a concept (Creswell, 2007). Within the scope of this study, the classroom teachers who taught their mother tongue, and the English teachers who gave

taught languages had, throughout their professional lives, not only experience in the usability of information technologies but also participated in the training for digital story preparation. Therefore, in this study, the phenomenology design was used, as the purpose was to reveal the parallel experiences and to determine how these experiences were perceived by different people.

Participants

The convenience sampling method, one of the purposeful sampling methods, was used to determine the participants. In this type of sampling, the researcher identifies a situation that is close and easy to access, and the cost of the research process is reduced as it becomes faster to access the study group (Patton, 2005; Yıldırım and Şimşek, 2008). Within the scope of FaMe-Fatih Meets Mediacompetence@Primary project numbered 2013-1-DE3-COM13-35845-2 carried out within the scope of European Union Comenius Regio, a five-day Digital Story Preparation training was given to the participants of the study. A total of 30 teachers from three different fields participated in this training. At the end of the training, a written form was given to identify the written opinions of the teachers. A total of 14 teachers —eight women, six men, nine primary school teachers, and five English teachers —who voluntarily filled in the relevant form —constituted the participants of this study.

Table 1. Participants

Code	Gender	Field	Code	Gender	Field	Code	Gender	Field
T1	Female	English Language Teaching	T6	Male	Primary School Teaching	T11	Male	Primary School Teaching
T2	Female	Primary School Teaching	T7	Female	English Language Teaching	T12	Female	English Language Teaching
T3	Male	Primary School Teaching	T8	Male	Primary School Teaching	T13	Female	English Language Teaching
T4	Female	Primary School Teaching	T9	Female	English Language Teaching	T14	Male	Primary School Teaching
T5	Male	Primary School Teaching	T10	Female	Primary School Teaching			

Collection of Data

Within the scope of the related project, a 5-day Digital Story Preparation training was given to 30 teachers. In this process, it was shown how to use the online platform "GoAnimate" (newly named VYOND) with the steps of preparing digital stories. The "GoAnimate" platform was preferred because it had templates for ready-made characters and environments for creating digital stories, allowed easily adding audio content such as audio-music, and made it easy to edit on issues such as size, perspective, placement of elements, and scene transitions. At the end of the training, they were asked to prepare a short digital story. Some sample images of the products are given in Appendix-1.

After the training, a form was given to the teachers, and their opinions were collected in writing. The form was prepared by the researcher, and it was finalized after receiving feedback from two academicians who were experts in teaching Turkish and English. Accordingly, the teachers were asked for their opinions about the use of information technologies in language teaching lessons. Following this, they were asked about their ways of using information technologies in the preparation phase, teaching-learning process and evaluation stage of the courses. Lastly, they were asked to report their views about digital story preparation training and the usability of digital stories in lessons.

Data Analysis

The data obtained from the teachers' opinions were analyzed using the content analysis method. Content analysis is based on the processing of information that a particular message covers and carries (Bilgin, 2006). Content analysis includes accessing codes and categories after analyzing the data and making the necessary classifications. Accordingly, various codes and categories were reached by examining the teachers' opinions collected in writing.

Credibility and Transferability

Various measures were taken by the researcher to ensure validity and reliability in this study (Table 2).

Table 2. Credibility and Transferability Studies

Credibility and Verifiability	Getting expert opinion
	Direct quote
	Supporting with visuals
	Description of data collection tool and process
	Explaining the data analysis process
Reliability and Transferability	Explaining the application processes of the participants
	Preventing data loss by using an online form
	Presenting the findings in their natural form without comment
	Checking consistency between data

Within the scope of the Credibility and Verifiability studies, expert opinions about the structured question form were taken. In addition, by using a written form, the participants were given the opportunity to review and check their answers, thus enabling them to confirm what they wrote. At the same time, the findings were supported with direct quotations, figures and product images, and the presentation of the findings was tried to be realized in the closest way to the reality. Moreover, details about the data collection process, tool, and analysis were given. In terms of reliability and transferability, the data were collected using an online form and backed up via cloud storage in order to prevent data loss. In the presentation of the findings, the teachers' statements and the product images were given as they were. The researcher presented the codes and categories together with quotations to an academician who was an expert in teaching Turkish and asked that expert to examine whether there was consistency between the data. Next, the researcher made the necessary corrections according to the feedback given. In addition, ethical precautions were taken by using the code names rather than the real names of the participants.

FINDINGS

The data collected in the context of the questions directed to the teachers about the use of information technologies in language teaching (mother language and foreign language) and about digital story creation training were analyzed. The findings obtained are presented below.

Use of information technologies in language teaching

All of the teachers reported positive views about the use of information technologies in language teaching, calling it "effective, efficient, useful, and necessary". Voluntary participation in the relevant training also supports this attitude. The teachers found information technologies important in the language teaching process in terms of accelerating and facilitating learning and making it permanent; appealing to more than one sense; concretizing abstract concepts for primary school students; and providing students with opportunities for contents that enrich the language experiences of students by having them practice a lot (Figure 1).

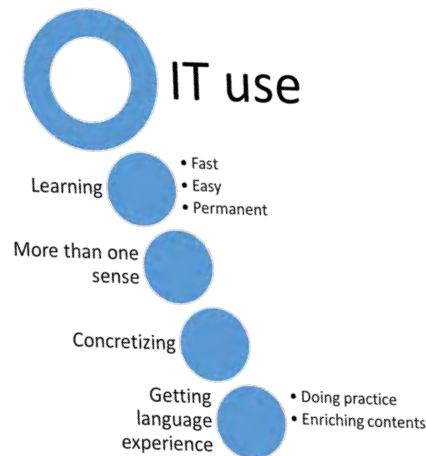


Figure 1. Opinions About the Use of Information Technologies in Language Teaching

Sample teacher opinions were as follows:

T5: When we use technology that exists in their lives in the classroom, students can find themselves in the classroom.

T6: As the age range of primary school students is in the stage of concrete operations, they learn best by doing. Using information technologies can make abstract concepts more meaningful.

T13: Using technology to teach language to students who use technology in all areas of their lives is very important and beneficial, both to attract their attention and to make permanent what they learn.

T7: I think that the use of information technologies in language teaching is very necessary because visuals, stories, videos, etc., especially in younger age groups, are important for the permanence of learning.

T3: In language teaching, visual and auditory tools are very important in terms of appealing to all sensory organs of teaching materials.

T9: Technology has great importance, especially in foreign language teaching, because in order to develop foreign language skills, it is necessary to encounter that language frequently in daily life and to enrich life. The tool that can provide this anywhere anytime is available in information technologies. Students can establish communication using the target language at any time, improve their language skills, and do plenty of activities.

When the opinions were examined, it was seen that the teachers believed information technologies could contribute to the lessons in various ways. The teachers pointed out that especially information technologies were suitable for the student structure and requirements of the age we lived in, while they had the idea that it would add diversity and richness to language teaching lessons.

Use of information technologies in classroom practices

Questions about the stages of "preparation", "teaching-learning process," and "evaluation" were used to reveal the teachers' use of information technologies in classroom practices. The findings obtained are presented in Figure 2.

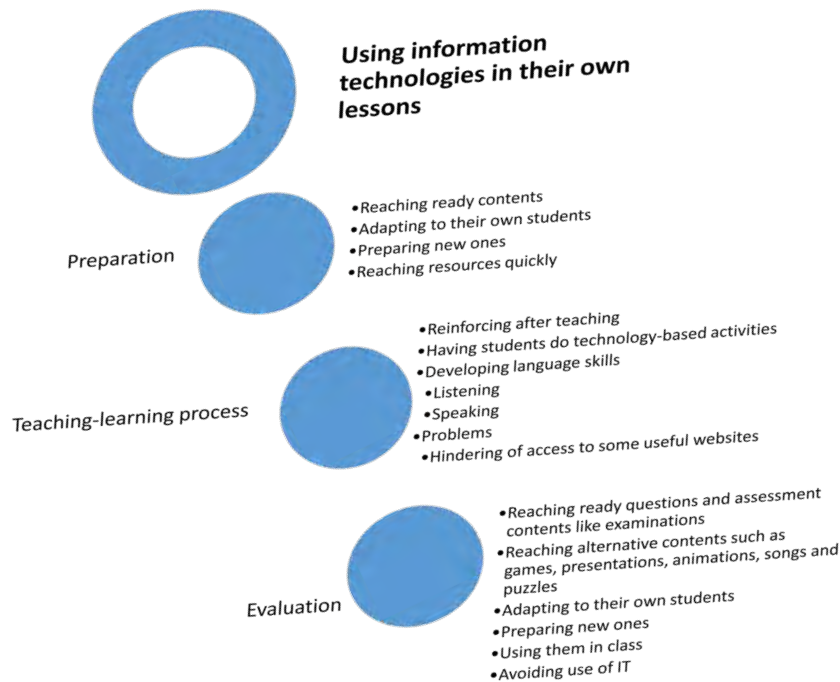


Figure 2. Teachers' Use of Information Technologies in Classroom Practices

Preparation

The teachers were asked how they made use of information technologies during the "preparation" phase of the lessons. Accordingly, the teachers reported that they benefited from information technologies in terms of "researching materials on the Internet, accessing ready-made e-learning contents, adapting them to their students, or preparing new ones, and accessing resources quickly". Sample views were as follows.

T1: It is very useful in creating materials. It allows quick access to relevant resources.

T2: I use ready-made presentations, videos, question banks on educational websites. For the last 10 years, we have not had a problem in finding resources.

T3: Before the lesson, I do search via the Internet for downloadable movies, presentations, lesson topics, etc. related to the subject to be covered in the lessons. I examine them and make them suitable for my student group. Otherwise, I myself prepare presentations, tests, etc.

T5: I use it at the beginning of my lessons in terms of attracting attention, motivation, association with life, sound, and image.

T9: As an English teacher, I use it to prepare a material that I will use in the lesson, to improve listening skills, and to search for in-class fun activities.

T13: I do research on the Internet and websites related to my field of teaching. Sometimes, I use ready information and documents, and sometimes, I prepare my own materials. If there is Internet and projector in my classroom, I have my students watch short films or videos that I consider relevant.

The teachers' opinions showed that they made good use of the speed and ease of accessing information provided by information technologies. It was seen that the teachers used the content they reached with the help of these technologies both while preparing for the lesson and when starting the lesson. Here, it was striking that the teachers had a high tendency not only to reach the content, which was mostly on the Internet and was prepared by others, but also to use it in their lessons without making any changes to it. It was also noteworthy that the number of teachers who made new content suitable for their own students or created new content was quite low. This situation points to the lack of teachers' time, knowledge,

and skills in terms of creating e-learning content. It could be stated that measures should be taken to eliminate these problems.

Teaching-learning process

The teachers were asked how they benefited from information technologies in the "teaching-learning process" phase of their lessons. The teachers reported that they used information technologies "to reinforce after teaching (reinforcing the knowledge and the letters in the first reading and writing process after the lecture), to have students study based on technology, and to do studies on some language skills (listening and speaking). In addition, while emphasizing that the technological infrastructure in their schools is sufficient, they also stated that they had problems due to access barriers to some useful sites. Sample teacher views were as follows:

T2: Thanks to the facilities of our school and classroom, we can use technology efficiently. We have a computer and a projector in our classroom, and we can access the websites permitted by the Ministry of Education, but the GoAnimate site is not accessible. Despite the problems and deficiencies, I think that the cut-and-paste activities done by the students are more efficient and permanent.

T4: I use it a lot, especially when teaching letters in first grade. It provides more effective and permanent learning, attracts the attention of children.

T5: I use it to reinforce after I teach the lesson subject.

T7: I come to classes with my computer and listen to the texts and songs in our textbook. I also try to teach the use of an audio dictionary via the Internet and help them with their pronunciation.

T9: We use it when we are going to listen during the lesson. If there is a video on the subject of that day, we watch it. I try to enable them to apply what they have learned by giving homework to them. Considering whether it is possible for students or not, I ask them to shoot their own videos in classes.

The teachers' opinions revealed that they used information technologies mainly for transferring and reinforcing the subject or information. In addition, it is considered important to include applications such as preparing their own studies and shooting videos, which can pave the way for students to become producers instead of just consumers. While these activities allow students to spend useful time thanks to technology, it is thought that such activities can also increase their skills and awareness about technology literacy and the use of technology for educational and learning purposes.

Evaluation

The teachers were asked how they benefited from information technologies during the "evaluation" phase of their lessons. Accordingly, some of the teachers stated that they made use of information technologies "to access ready-made assessment contents, including questions and exams, via educational websites, to reach different contents such as games, presentations, animations, songs, and puzzles, to adapt ready-made content to their own class, and to prepare new content for use in class." Sample views were as follows.

T2: With the help of information technology, I can easily find ready-made assessment questions shared on websites in order to reinforce the topics covered. It has quite a rich content.

T3: I measure the knowledge they have learned with various presentations, part-finding games, and animations.

T8: We use the evaluation sections of previously prepared activities from educational sites such as EBA, Vitamin, Morpa Campus,... Finding examples for an activity and accessing a lot of information make the evaluation more efficient.

T12: I have students listen to songs in a foreign language, and I have students and fill in the gaps related to a listening topic (vocabulary or grammar) on the papers I give them.

T13: I expect them to solve the questions prepared about a text they have listened to. I expect them to solve a puzzle that I have prepared about the words they have just learned on the board... During the preparation phase, I search for materials via the Internet, such as exercises, games, songs related to the topic of the day. During the lesson, I often try to make the subject understandable, especially with videos, through the computer in our classroom. Then, if possible, I would like them to act the situation in the video. Sometimes, I give them homework to construct a similar dialogue in a different way. Rarely, if they have the opportunity, I ask them to take a video at home and send it to me.

T9: I have not yet benefited from technology in the evaluation process. I rarely ask them to take a video with English content and send it to me. I use these videos for performance evaluation.

T7: I do not use information technologies in the evaluation process.

According to the opinions, most of the teachers preferred to reach ready-made content in the evaluation phase, as in the other phases of their lessons. At the same time, some of the teachers' tendencies to reach good practice examples, prepare them when necessary, and use them in in-class activities were considered important. In addition, it is noteworthy that few teachers went beyond traditional measurement and evaluation techniques and included different types of activities. It was seen that activities such as solving puzzles, having students prepare videos, and completing the words by listening to a song in a foreign language for listening skills were preferred. Especially the example given by Teacher 13 (T13) regarding the preparation, teaching-learning process, and evaluation phase of the course can be shown as an example of how technology can be integrated into the whole course. Moreover, there were teachers who did not use information technology at all during the evaluation phase.

Opinions about the training on digital story preparation and about the use of digital stories in different courses

The teachers were asked about the contributions of the application-based digital story preparation training to their teaching experiences and thoughts and about their views in relation to the use of digital stories in education. Accordingly, the teachers generally stated that "they found the training productive; their perspectives on the use of technology in education changed; and they could apply what they had learned in their lessons" (Figure 3).

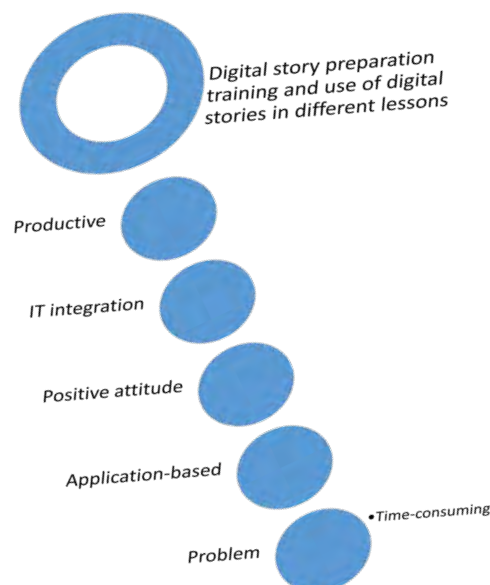


Figure 3. Digital story preparation, training, and use of digital stories in different lessons

Digital story preparation training and use of digital stories in different lessons, productive, IT integration, positive attitude, application-based, problem, time-consuming. While some teachers stated that

the digital story preparation training they attended was efficient and application-oriented, they stated that their technology skills had improved. At the same time, they emphasized the need to improve themselves and also argued that such training should be given to all teachers as a matter of course.

T7: Normally, I thought that I was not very good at technology and PC usage, but after this training, I think I can prepare tutorial videos without having too much skill.

T2: It was the most productive training I have ever attended. It is really pleasing to be able to say "I learned" because our time was not wasted; it is pleasing to see that we still have the ability to learn and apply what we have learned. After the training, my perspective on the videos I watched changed. As I have visual intelligence, it was a suitable training for me. As a person who gives importance to visual expression with applications such as cut and paste, visual scenes started to form in my mind. It will no longer be enough to tell the event on a backdrop paper.

T5: I realized that my students would challenge me in technology and that I had to prepare accordingly. I saw that I needed to increase my studies... In this training, I got an idea about how technology will be in the future.

T3: I think this training should be given to all teachers, and it should be even compulsory...

Some teachers are of the opinion that the tendency to prepare and/or use digital stories in their lessons has increased. In addition, while implementing what they have learned, they intend to perform them under the supervision of experts.

T9: I seriously plan to prepare videos and use them in classes. I am thinking of turning the songs in the textbooks into video clips in this way.

T6: Thank you very much for providing different perspectives as a result of a very different experience. I believe it is an effective training. I would like to apply this training with you in my classroom and evaluate its contributions to this age group together.

Some teachers stated that using digital stories in lessons appeals to 21st century students.

T1: I think that with the skills I acquired in this course, I can prepare educational materials which will appeal more closely to my students' developing world of interest and which will attract their attention... I think that preparing digital stories is a very suitable and useful educational material for the 21st century student generation.

In addition, the majority of teachers think that using digital stories increases the quality of learning from different aspects and can improve students' language use skills.

T4: Narrating the subjects I want to teach in the course will lead to more permanent learning.

T6: I think I have gained an important perspective to train my students as productive individuals through a more colorful, fun, and attention-grabbing learning process...

T14: I think that it will attract the attention of students in the lessons, and it will be useful with stories that are suitable for the subject. I believe that it will be beneficial for individual development and for benefiting from technological elements.

T12: As the program itself is prepared in a foreign language, the students I want to use the program will improve their foreign language while using the program. With the digital stories I will prepare, I can teach my students to use the language in different contexts.

T13: It is important for me to be able to use technology in such an interesting way and to be able to share it with our students in terms of expressing verbal and written understanding of reading and reading comprehension, which are the foundations of Turkish lessons, and being able to share this with our students is an important difference for me. It will be among my primary goals for my students to gain a qualification to see this as a part of their social life and to enjoy it.

On the other hand, some teachers stated that preparing digital stories is time-consuming.

T8: Creating this product is very enjoyable. The ready-made materials we use from the websites are sometimes not in the style we want. By applying this, we can achieve exactly what we want. But it is very difficult in terms of time. We have to produce more practical things.

Considering the opinions, most of the teachers stated that they found the education efficient and that they were happy to have encountered something they could learn and do. They thought this situation motivated both themselves and their students to prepare for the future. In addition, some teachers stated that the digital story was a learning material suitable for students and even for themselves, and they found themselves sufficient in preparing these contents for their lessons. At the same time, they emphasized that such practical training should be increased, and they wanted to work in coordination with experts in order to be able to prepare their own materials and use them in the classroom. Furthermore, some teachers reported that preparing digital stories was time-consuming, and this situation could make it difficult to use in the process. However, it was noteworthy that the teachers who mentioned this always tended to search for and use ready-made contents.

The teachers were asked about their views regarding how digital stories could be used in which lessons. In this respect, the teachers stated that they could use it in lessons related to their field of teaching, while the primary school teachers who taught in different disciplines stated that it could be used in all courses in general. They gave examples from the courses of English, Turkish, Social Studies, Science and Technology and Mathematics. Sample teacher opinions were as follows:

T1: It can be used in many fields, from foreign language teaching to mathematics teaching. We will create the videos anyway.

T2: I think it can be applied in any course. For example, I am preparing an activity on the phrase "seeing oneself in a giant mirror" for a Turkish lesson.

T3: It can be used in all classes in primary school teaching.

T6: By developing the imagination of my students, we can create experiments together in Science and Technology class. We can act a scene in the War of Independence in a Social Studies class.

T7: As an English teacher, I think of using it often in my own lesson. For example, I can ask children to have a dialogue or to practice pronunciation.

T8: I think it can be used, especially in language teaching. If we describe the places that students are not likely to see, such as the poles, in this way, it can be permanent.

T13: I can share what I learned with my friends in other fields of teaching and expect them to open a new world to their students.

According to the opinions, the teachers had positive thoughts that digital stories could not only be adapted to all courses they taught but also be used by themselves. There were even teachers who wanted to convey their thoughts to their fellow teachers in different fields of teaching. This shows that the practice-oriented training given to the teachers was quite beneficial, because the teachers who said that what they learned in the training was beneficial for them stated that they had a very high motivation about their sustainability, sharing, and dissemination. In this respect, it was seen that according to the teachers, who were also practitioners, digital stories could make positive contributions to the teaching-learning environments and that they also had a tendency to use these stories and share them with their colleagues. This situation offers positive and optimistic predictions about the future of technology integration in education in general and the preparation and use of digital stories in lessons in particular.

DISCUSSION, CONCLUSION AND SUGGESTIONS

In this study, the purpose was to determine the opinions of the primary school teachers, who gave courses of mother tongue teaching, and English teachers, who gave courses of foreign language teaching, in primary school, about the use of information technologies in teaching-learning environments, their use of information technologies in their own lessons, the digital storytelling education they attended, and the use of digital stories in educational processes.

According to the results, it was seen that the teachers had positive attitudes and thoughts regarding the use of information technologies in lessons. In this respect, they emphasized that information technologies provided fast, easy, and permanent learning, appealed to multiple senses, provided the opportunity to present information in a concrete way, and provided the students with the opportunity to increase their language experience by practicing enough with the rich opportunities offered. The fact that the teachers participating in the study had this opinion could be said to be directly proportional to their willingness to participate voluntarily in the relevant training. The result reached within the framework of the teachers' interpretations of information technologies coincides with the results obtained in various studies in the literature (Ulusoy and Gülüm, 2009; Kurt, et.al., 2013; Öztürk & Gökdaş, 2020).

Based on the teachers' use of information technologies in their lessons, it was concluded that they benefited from information technologies in accessing various resources on the Internet during the preparation stage for the lesson, in accessing ready-made e-learning contents, in adapting the contents to their own lessons and students, or in preparing new contents when necessary. In the teaching-learning process of the course, the teachers made use of information technologies at the beginning of lessons for the purpose of attracting attention, motivating students, associating with real life, reinforcing what had been learned in the process, developing language skills, and doing technology-based activities. In addition, it was a problem that the technological infrastructure of the schools was sufficient yet had barriers to accessing various useful websites due to some cyber security measures. In the evaluation phase of the course, the teachers used information technologies in order to access measurement-evaluation tools such as questions, exams and tests via educational websites, to adapt them when necessary, to prepare new assessment-evaluation tools for use in the classroom and to assign students homework. In a study conducted by Öztürk and Gökdaş (2020) in the literature, it was concluded that the teachers used information technologies mostly in the reinforcement and evaluation stages of the lessons. It was seen that it was used a lot during the evaluation phase (Çiftçi & Aydın, 2020; Timur, Yılmaz & İşseven, 2017).

In general, it was striking that the teachers used information technologies to find ready-made course materials. They accessed these resources via various educational websites. Some teachers used ready-made materials directly in their classroom, while others adapted them with various changes. Parallel results are encountered in the literature (Saritepeci, 2017). However, it is not known to what extent the content prepared and shared on websites is scientific and is prepared with the support of experts, and in some studies, it is seen that the content is not suitable for the Turkish curriculum (Iskender, 2016) and students' levels (Ateş, Çerçi, & Derman, 2015). In general, there are doubts about the scientific relevance of e-content on educational content sites such as EBA. by A study conducted by Gezer and Durdu (2020) clearly demonstrated that the number of scientific studies on this subject was low and that the contents should be systematically checked in order to be handled from an academic, scientific, and pedagogical perspective. At the same time, for example, the EBA system offers an infrastructure where teachers can prepare their own e-learning content. However, studies concluded that the teachers did not have sufficient knowledge about this system and did not produce or share any content (Kuloğlu & Bay, 2019; Kurtde Fidan, Erbasan & Kolsuz, 2016; Türker & Güven, 2016; Alabay, 2015). Therefore, the teachers' behaviors of preparing and using e-learning content should be handled in multiple ways and presented in detail with different dimensions.

In general, it was seen that the teachers had a positive approach to the use of information technologies in lessons; however, they did not use different Web 2.0 tools or technology-based teaching methods and techniques. They almost never gave place to applications where the students prepared products with the help of information technologies. In this respect, it could be stated that technology integration was limited because in order to achieve success, besides the existence of information technologies, these technologies should be combined with various teaching-learning approaches, methods and techniques that support their

planned and systematic use (Harris, Mishra & Koehler, 2009). It could be thought that this situation might be due to reasons such as a lack of knowledge and skills, a lack of time, or being unable to get rid of traditional education's understanding and habits (Ottenbreit-Leftwich, et.al., 2010; Demir and Bozkurt, 2011). In order to eliminate this problem, it could be stated that teachers should be supported in terms of awareness, knowledge, skills, and practice (Kalemkuş, 2016). In addition, the ease of access to the relevant technical and technological infrastructure, technical staff, and experts who will provide training constitute another topic in terms of solutions.

After the digital story training they received, it was seen that the teachers had a positive attitude and awareness about using information technologies and digital stories in educational processes in general, that they wanted to use them in various lessons in classroom environments, and that they enjoyed preparing such content when time was available. In parallel with this, it was seen in various studies conducted in the literature that other stakeholders, along with the teachers, had positive attitudes and thoughts. In similar application-based studies conducted with teachers (Özerbaş & Öztürk, 2017; Doğan Kahtali & Gençer, 2021), primary and secondary school students (Baki & Feyzioğlu, 2017b; Bedir Erişti, 2016; Karakoyun, 2014), secondary school students (Kaya & Tekiner Tolu, 2017) and preservice teachers (Eroğlu, 2020; Anılan, Berber, & Anılan, 2018; Uslupehlivan, Kurtoğlu Erden, & Cebesoy, 2017), it was seen that these stakeholders had positive thoughts about creating digital stories and about the use of digital stories in the teaching-learning process. Various studies in the literature regarding the usability of digital stories in different courses support this result. In addition, the teachers stated that digital stories supported the development of various cognitive (learning, thinking, academic achievement, technology literacy and language skills) and affective (motivation, interest and attention) skills and that these stories were useful in preparing a teaching-learning process based on active learning. It was seen that there were parallel results in various studies (Hung, Hwang & Huang, 2012; Kocaman-Karoğlu, 2014; Van Gils, 2005; VanderArk & Schneider, 2012).

In the context of digital story preparation training, it is clearly seen that teachers generally have a developmental attitude. Within the context of digital story preparation training, it is clearly seen that teachers generally have a developmental attitude. In order for them to use technology effectively, it could be stated that they need support during the usage process as well as the preparatory training because teachers have expanded their predictions about technology based on the digital story and have developed motivation to prepare and use it for their own lessons. However, the time-consuming nature of preparing a digital story is emphasized by teachers as a problem. Kapucu, Eren, and Avcı (2014) stated that they encountered the same problem in their study with pre-service teachers. Elimination of this problem seems possible with sufficient practice and experience. In addition, it should not be forgotten that the contents prepared using various backup solutions such as portable memory or cloud technologies, can be backed up, archived, and easily updated when necessary, and that these contents have the potential to be used for many years. Therefore, such trainings should be supported with follow-up studies related to teachers' production of content suitable for different subjects and acquisitions, implementation of such content in the classroom, and the enrichment of this process with the feedback to be given by experts and students' new products with effective use of technology.

The fact that teachers have deficiencies in technology integration in various studies (Gürol, Donmuş, & Arslan, 2012) reveals the need for them to be developed in this regard. In this respect, as a solution-oriented approach for technology integration, it could be suggested that teachers should be brought together with a variety of practice-oriented trainings; that they should then follow the process in cooperation with experts in the teaching-learning process; and that there should be people or institutions to apply to when they have difficulty. It should not be forgotten that this process started in the teacher training process (Çelik & Kahyaoglu, 2007; Önkaş, 2008). Providing the necessary knowledge, skills and experience before the

service has the potential to enrich the service process of future teachers. In this respect, the fact that the teacher, who is the most basic building block of the technology integration process, is adequately equipped in terms of knowledge, skills, and practice can be seen as the most important step toward success in technology integration. Therefore, it could be stated that real success can be achieved if teachers know methods such as digital stories well and have the competence to decide which processes to use in their lessons (Kurtoğlu Erden & Uslupehlivan, 2016; Göçen, 2014). It is important to plan such trainings and workshops on a larger scale in this way (Uslupehlivan, Kurtoğlu Erden, & Cebesoy, 2017).

It is noteworthy that there were teachers' opinions in the study about more use of technology in foreign language lessons. This situation could be interpreted as the frequent use of technology due to the need for sufficient practice of the skills in the newly learned language. From the point of view of mother tongue teaching, it could be thought that the relevant skills are learned and developed naturally throughout life. In addition, it could be stated that digital stories can be used not only in language-based lessons but also in other lessons. There were teachers' views about this as well. For this reason, studies based on supporting teachers working in other fields in the preparation and development of digital stories can be expanded (Kaya & Tekiner Tolu, 2017).

In today's world, where technology, one of the necessities of the age, has a significant impact on educational processes, it is necessary to use technology effectively rather than just obtaining it or reaching it. It is important that teachers have this awareness and that it is reinforced after the training is given. In this respect, it could be predicted that the efficiency of teachers who spend one-on-one time with students in the classroom and construct the teaching-learning process can be increased when the training is focused on practice and when they are active in the process by doing and living. Consequently, in the training of students for the future as individuals who can use technology in a productive way, not as a consumer, teachers should produce and use content suitable for their students' learning styles with a scientific point of view, under expert control; Afterwards, it could be stated that students will play an important role in the development of the country by using information technologies effectively and by making progress accordingly. Considering that teachers with a positive attitude towards technology and the ability to use it consciously and productively will train many students, it could be predicted that this positive effect will increase gradually in the future.

REFERENCES

- Akın, E. & Çeçen, M. A. (2015). Çoklu ortama dayalı Türkçe öğretime ve çoklu ortam araçlarına yönelik öğrenci görüşleri. *Turkish Studies*, 10(7), 51-72.
- Alabay, A. (2015). *Ortaöğretim öğretmenlerinin ve öğrencilerinin EBA(Eğitim Bilişim Ağı) kullanımına ilişkin görüşleri üzerine bir araştırma* [Yüksek lisans tezi]. İstanbul Aydın Üniversitesi, İstanbul.
- Alasaf, H. A. (2014). Effective strategies on using ICT for teaching and learning undergraduate level at Jordanian universities. *Significance*, 5(3), 81-89.
- Alshaye, S. (2021). Digital storytelling for improving critical reading skills, critical thinking skills, and self-regulated learning skills. *Cypriot Journal of Educational Science*, 16(4), 2049-2069.
- Anılan, B., Berber, A., & Anılan, H. (2018). The digital storytelling adventures of the teacher candidates. *Turkish Online Journal of Qualitative Inquiry*, 9(3), 262-287. DOI: [10.17569/tojqi.426308](https://doi.org/10.17569/tojqi.426308)
- Ateş, M., Çerçi, A. ve Derman, S. (2015). Eğitim bilişim ağında yer alan Türkçe dersi videoları üzerine bir inceleme. *Sakarya University Journal of Education*, 5(3), 105-117.
- Baki, Y. & Feyzioğlu, N. (2017a). Dijital öykülerin 6. sınıf öğrencilerinin yazmaya yönelik tutumlarına etkisi.

Mustafa Kemal Üniversitesi Sosyal Bilimler Enstitüsü Dergisi, 14(40), 31-58.

- Baki, Y., & Feyzioğlu, N. (2017b). Dijital öykülerin 6. sınıf öğrencilerinin öykü yazma becerilerine etkisi. *International Online Journal of Educational Sciences*, 9(3), 686-704.
- Barrett, H. (2006). *Researching and evaluating digital storytelling as a deep learning tool*. In Society for Information Technology & Teacher Education International Conference (pp. 647-654). Association for the Advancement of Computing in Education (AACE).
- Bedir Erişti, S. D. (2016). Katılımcı tasarım temelli dijital öyküleme sürecinde ilköğretim öğrencilerinin yaratıcılık göstergeleri. *Turkish Online Journal of Qualitative Inquiry*, 7(4), 462-492.
- Bilgin, N. (2006). *Sosyal bilimlerde içerik analizi: Teknikler ve örnek çalışmalar*. Siyasal.
- Büyükkaracı, A. & Müldür, M. (2022). Digital storytelling for primary school Mathematics Teaching: Product and process evaluation. *Education and Information Technologies*, 1-32. DOI: [10.1007/s10639-021-10813-8](https://doi.org/10.1007/s10639-021-10813-8)
- Churchill, N., Lim, C. P., Oakley, G. & Churchill, D. (2008). *Digital storytelling and digital literacy learning*. ICITE 2008: International Conference on Information Communication Technology in Education, Corfu: Greece, 418-430. Erişim bağlantısı (12.10.2021) www.icite.org/ICITE2008Proceedings/churchill043.pdf
- Cigerci, F. M., & Gultekin, M. (2017). Use of digital stories to develop listening comprehension skills. *Issues in Educational Research*, 27(2), 252-268.
- Collier, L. (2013). Changes in writing instruction-The challenge and the promise. *The Council Chronicle*, 6-9.
- Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. Sage.
- Çelik, H. C. & Kahyaoğlu, M. (2007). İlköğretim öğretmen adaylarının teknolojiye yönelik tutumlarının kümeleme analizi. *Türk Eğitim Bilimleri Dergisi*, 5(4), 571-586.
- Çiftçi, B. & Aydın, A. (2020). Eğitim Bilişim Ağı (EBA) platformu hakkında fen bilimleri öğretmenlerinin görüşleri. *Türkiye Kimya Derneği Dergisi, Kısım C: Kimya Eğitimi*, 5(2), 111-130. DOI: [10.37995/jotcsc.765647](https://doi.org/10.37995/jotcsc.765647)
- Dakich, E. (2008) Towards the social practice of digital pedagogies. In N. Yelland, G. Neal, and E. Dakich (Eds.), *Rethinking education with ICT* (pp. 13-30). Sense Publishers.
- Demir, S. & Bozkurt, A. (2011). İlköğretim matematik öğretmenlerinin teknoloji entegrasyonundaki öğretmen yeterliklerine ilişkin görüşleri. *İlköğretim Online*, 10(3), 850-860.
- Demirbas, I. & Sahin, A. (2020). A systemic analysis of research on digital storytelling in Turkey. *International Journal of Progressive Education*, 16(4), 45-65. doi: [10.29329/ijpe.2020.268.4](https://doi.org/10.29329/ijpe.2020.268.4)
- Demirer, V. (2013). *İlköğretimde e-öyküleme kullanımı ve etkileri* [Doktora tezi]. Necmettin Erbakan Üniversitesi, Konya.
- Dockter, J., Haug, D., & Lewis, C. (2010). Redefining rigor: Critical engagement, digital media, and the new English/language arts. *Journal of Adolescent & Adult Literacy*, 53(5), 418-420.
- Dogan, B. & Robin, B. (2008). Implementation of digital storytelling in the classroom by teachers trained in a digital storytelling workshop. In K. McFerrin, R. Weber, R. Carlsen & D. Willis (Eds.), *Proceedings of SITE 2008--Society for Information Technology & Teacher Education International Conference* (pp. 902-907). Las Vegas, Nevada, USA: Association for the Advancement of Computing in Education (AACE). Retrieved January 25, 2023 from <https://www.learntechlib.org/p/27287>
- Dogan, B. & Robin, B. (2009). Educational Uses of Digital Storytelling: Creating Digital Storytelling Contests for K-12 Students and Teachers. In I. Gibson, R. Weber, K. McFerrin, R. Carlsen & D. Willis (Eds.), *Proceedings of SITE 2009--Society for Information Technology & Teacher Education International*

Conference (pp. 633-638). Charleston, SC, USA: Association for the Advancement of Computing in Education (AACE). Retrieved January 25, 2023 from <https://www.learntechlib.org/p/30673>

- Dogan, B. (2012). Educational Uses of Digital Storytelling in K-12: Research Results of Digital Storytelling Contest (DISTCO) 2012. In P. Resta (Ed.), *Proceedings of SITE 2012--Society for Information Technology & Teacher Education International Conference* (pp. 1353-1362). Austin, Texas, USA: Association for the Advancement of Computing in Education (AACE). Retrieved January 25, 2023 from <https://www.learntechlib.org/primary/p/39770/>
- Doğan Kahtali, B., & Gençer, G. (2021). Turkish teachers' views regarding the use of digital story telling in Turkish lessons. *International Journal of Education and Literacy Studies*, 9(2), 111-118. DOI: [10.7575/aiac.ijels.v.9n.2p.111](https://doi.org/10.7575/aiac.ijels.v.9n.2p.111)
- Dola, N. & Aydın, İ. S. (2020). Dijital öykü yazarlığının çeşitli değişkenlere göre incelenmesi. *Journal of Language Education and Research*, 6(1), 17-34. DOI: [10.31464/jlere.637597](https://doi.org/10.31464/jlere.637597)
- Dupain, M. & Maguire, L. (2005). *Digital story books projects 101: How to create and implement digital storytelling into your classroom*. Proceeding in "21st Annual Conference on Distance Teaching and Learning".
- Eroğlu, A. (2020). Türkçe öğretmeni adaylarının dijital hikâyeye yönelik metaforik algıları. *RumeliDE Dil ve Edebiyat Araştırmaları Dergisi*, (18), 49-60. DOI: [10.29000/rumelide.705506](https://doi.org/10.29000/rumelide.705506)
- Gezer, M., & Durdu, L. (2020). Eğitim Bilişim Ağı (EBA) ile ilgili tezlerin sistematik analizi. *Başkent University Journal of Education*, 7(2), 393-408.
- Girmen, P., & Kaya, M. F. (2019). Using the Flipped Classroom Model in the development of basic language skills and enriching activities: Digital stories and games. *International Journal of Instruction*, 12(1), 555-572.
- Girmen, P., Özkanal, Ü., & Dayan, G. (2019). Digital storytelling in the language arts classroom. *Universal Journal of Educational Research*, 7(1), 55-65. DOI: [10.13189/ujer.2019.070108](https://doi.org/10.13189/ujer.2019.070108)
- Göçen, A., Eral, S. H., & Bücük, M. H. (2020). Teacher perceptions of a 21st century classroom. *International Journal of Contemporary Educational Research*, 7(1), 85-98. DOI: [10.33200/ijcer.638110](https://doi.org/10.33200/ijcer.638110)
- Göçen, G. (2014). *Dijital Öyküleme Yönteminin öğrencilerin akademik başarı ile öğrenme ve ders çalışma stratejilerine etkisi* [Yüksek lisans tezi]. Muğla Sıtkı Koçman Üniversitesi, Muğla.
- Gürol, M., Donmuş, V. ve Arslan, M. (2012). İlköğretim kademesinde görev yapan sınıf öğretmenlerinin Fatih projesi ile ilgili görüşleri. *Eğitim Teknolojileri Araştırmaları Dergisi*, 3(3), 1-17.
- Harris, J., Mishra, P., & Koehler, M. (2009). Teachers' technological pedagogical content knowledge and learning activity types: Curriculum-based technology integration reframed. *Journal of Research on Technology in Education*, 41(4), 393-416.
- Hathorn, P. P. (2005). Using digital storytelling as a literacy tool for the inner city middle school youth. *The Charter Schools Resource Journal*, 1(1), 32-38.
- Hung, C. M., Hwang, G. J., & Huang, I. (2012). A project-based digital storytelling approach for improving students' learning motivation, problem-solving competence and learning achievement. *Educational Technology and Society*, 15(4), 368-379.
- İskender, H. (2016). Eğitim Bilişim Ağı'nda bulunan 7. sınıf Türkçe dersi videolarının ilköğretim Türkçe Dersi (6,7, 8. Sınıflar) Öğretim Programıyla uyumu. *Adıyaman Üniversitesi Sosyal Bilimler Enstitüsü Dergisi*, 8(24), 1042-1068.
- Kahraman, Ö. (2013). *Dijital hikayecilik metoduyla hazırlanan öğretim materyallerinin öğrenme döngüsü giriş aşamasında kullanılmasının fizik dersi başarısı ve motivasyonu düzeyine etkisi*. [Doktora tezi]. Balıkesir Üniversitesi Fen Bilimleri Enstitüsü, Balıkesir.

- Kalemkuş, F. (2016). *Ortaöğretimdeki öğretmen ve öğrencilerin Eğitim Bilişim Ağı (EBA)'ya ilişkin görüşleri*. [Yüksek lisans tezi]. Afyon Kocatepe Üniversitesi, Afyonkarahisar.
- Kapucu, M. S., Eren, E., & Avcı, Z. Y. (2014). Fen Bilgisi öğretmen adaylarının animasyon oluşturmada goanimate kullanımına ilişkin görüşlerinin incelenmesi. *Turkish Online Journal of Qualitative Inquiry*, 5(4), 23-40.
- Karakoyun, F. (2014). *Çevrimiçi ortamda oluşturulan dijital öyküleme etkinliklerine ilişkin öğretmen adayları ve ilköğretim öğrencilerinin görüşlerinin incelenmesi* [Doktora tezi]. Anadolu Üniversitesi, Eskişehir.
- Kaya, O. & Tolu Tekiner, A. (2017). Investigating digital storytelling method in German as a foreign language teaching. *Dil Dergisi*, 168(1), 5-19.
- Kirikci, A. C., & Cigerci, F. M., & Arikan, I. (2020). Use of digital storytelling in the 4th grade social studies course, *International Online Journal of Educational Sciences*, 12(5), 96-113.
- Kocaman-Karoglu, A. (2016). Personal voices in higher education: A digital storytelling experience for pre-service teachers. *Education and Information Technologies*, 21(5), 1153-1168. <https://doi.org/10.1007/s10639-014-9373-1>
- Kocaman-Karoglu, A. (2014). Personal voices in higher education: A digital storytelling experience for pre-service teachers. *Education and Information Technologies*, 1-16. DOI: [10.1007/s10639-014-9373-1](https://doi.org/10.1007/s10639-014-9373-1)
- Kuloğlu, M. E. & Bay, E. (2019). İngilizce öğretmenlerinin Eğitim Bilişim Ağı (EBA) kullanım durumlarının incelenmesi. *Milli Eğitim Dergisi*, 48(224), 327-351.
- Kurt, A. A., Kuzu, A., Dursun, Ö. Ö., Güllüpınar, F. & Gültekin, M. (2013). Fatih projesinin pilot uygulama sürecinin değerlendirilmesi: Öğretmen görüşleri. *Journal of Instructional Technologies & Teacher Education*, 1(2), 1-23.
- Kurtdede Fidan, N., Erbasan, Ö., & Kolsuz, S. (2016). Sınıf öğretmenlerinin Eğitim Bilişim Ağı'ndan (EBA) yararlanmaya ilişkin görüşleri. *Journal of International Social Research*, 9(45).
- Kurtoğlu Erden, M. & Uslupehlivan, E. (2016). Eğitim Fakültesi öğrencilerinin dijital öykü kavramına yönelik algılarının incelenmesi. M. Elmas vd. (Ed.), *International Conference on Quality in Higher Education Bildiriler Kitabı* içinde (s. 244-253), Sakarya.
- LaFrance, J., & Blizzard, J. (2013). Student perceptions of digital story telling as a learning-tool for educational leaders. *NCPEA International Journal of Educational Leadership Preparation*, 8(2), 25-43.
- Meadows, D. (2003). Digital storytelling: Research-based practice in new media. *Visual Communication*, 2(2), 189-193. <http://dx.doi.org/10.1177/1470357203002002004>
- Nair, V., & Yunus, M. M. (2021). A systematic review of digital storytelling in improving speaking skills. *Sustainability*, 13(17), 9829. <https://doi.org/10.3390/su13179829>
- Nassim, S. (2018). Digital Storytelling: An active learning tool for improving students' language skills. *PUPIL: International Journal of Teaching, Education and Learning*, 2(1), 14-29.
- Ohler, J. B. (2013). *Digital storytelling in the classroom: New media pathways to literacy, learning, and creativity*. Corwin Press.
- Ottenbreit-Leftwich, A., Glazewski, K. D., Newby, T. J., & Ertmer, P. A. (2010). Teacher value beliefs associated with using technology: Addressing professional and student needs. *Computers & Education*, 55(3), 1321-1335. <https://doi.org/10.1016/j.compedu.2010.06.002>
- Önkaş, N. A. (2008). *Türkçe öğretiminde teknoloji kullanımı ve kalıcı öğrenme*. 8th. International Educational Technology Conference (ss. 811-816), Eskişehir, Anadolu Üniversitesi.
- Özerbaş, M. A. & Öztürk, Y. (2017). Türkçe dersinde dijital hikâye kullanımının akademik başarı, motivasyon ve kalıcılık üzerinde etkisi. *Türk Bilim Araştırma Vakfı*, 10(2), 102-110.
- Öztürk, E., & Gökdaş, İ. (2020). Öğrenme-öğretme ortamlarına teknoloji entegrasyonu sürecinde ilköğretim

düzeyinde dijital materyallerin kullanım durumlarının incelenmesi. *Journal of Instructional Technologies and Teacher Education*, 9(1), 65-80.

- Özudođru, G. (2021). Digital storytelling in education from teachers' perspectives. *Bartın University Journal of Faculty of Education*, 10(2), 445-454. <https://doi.org/10.1016/buefad.888658>
- Patton, M. Q. (2005). *Qualitative research*. John Wiley & Sons, Ltd.
- Peterson-Karlan, G. (2011). Technology to support writing by students with learning and academic disabilities: Resent research trends and findings. *Assistive Technology Outcomes and Benefits*, 7(1), 39-62.
- Robin, B. (2016). The power of digital storytelling to support teaching and learning. *Digital Education Review*, 30, 17-29.
- Rule, L. (2010). Digital storytelling: Never has storytelling been so easy or so powerful. *Knowledge Quest*, 38(4), 56.
- Sandaran, S. C., & Kia, L. C. (2013). The use of digital stories for listening comprehension among primary Chinese medium school pupils: some preliminary findings. *Jurnal Teknologi (Social Sciences)*, 65(2), 125-131.
- Saritepeci, M. (2017). An experimental study on the investigation of the effect of digital storytelling on reflective thinking ability at middle school level. *Bartın University Journal of Faculty of Education*, 6(3), 1367-1384. <https://doi.org/10.14686/buefad.337772>
- Saritepeci, M., & Çakır, H. (2017). *Examining perceived satisfaction related to the digital storytelling process*. Paper presented at the EdMedia 2017 Washington, DC, United States.
- Smeda, N., Dakich, E., & Sharda, N. (2014). The effectiveness of digital storytelling in the classrooms: A comprehensive study. *Smart Learning Environments*, 1(1), 6.
- Sylvester, R., & Greenidge, W. L. (2009). Digital storytelling: Extending the potential for struggling writers. *The Reading Teacher*, 63(4), 284-295.
- Şeker-Sezginsoy, B. (2016). An evaluation of digital stories created for Social Studies Teaching. *Journal of Education and Practice*, 7(29), 18-29.
- Timur, B., Yılmaz, Ş. & İşseven, A. (2017). Ortaokul öğrencilerinin eğitim bilişim ağı (EBA) sistemini kullanmalarına yönelik görüşleri. *Asian Journal of Instruction*, 5(1), 44-54.
- Türker, A. & Güven, C. (2016). Lise öğretmenlerinin Eğitim Bilişim Ağı (EBA) projesinden yararlanma düzeyleri ve proje ile ilgili görüşleri. *Eğitim ve Öğretim Araştırmaları Dergisi*, 5(1), 244-254.
- Ulu, H. (2021). Türkiye'deki dijital öyküleme çalışmalarının eğilimi. *Eğitim Teknolojisi Kuram ve Uygulama*, 11(2), 256-280. <https://doi.org/10.17943/etku.850209>
- Ulusoy, K. & Gülüm, K. (2009). Sosyal bilgiler dersinde tarih ve coğrafya konuları işlerken öğretmenlerin materyal kullanma durumları. *Ahi Evran Üniversitesi Eğitim Fakültesi Dergisi*, 10(2), 85-99.
- Uslupehlivan, E., Erden, M. K. & Cebesoy, Ü. B. (2017). Öğretmen adaylarının dijital öykü oluşturma deneyimleri. *Uşak Üniversitesi Sosyal Bilimler Dergisi*, 10(ERTE Özel Sayısı), 1-22.
- Van Gils, F. (2005). *Potential applications of digital storytelling in education*. In 3rd Twente Student Conference on IT (Vol. 7). University of Twente, Faculty of Electrical Engineering, Mathematics and Computer Science Enschede.
- VanderArk, T., & Schneider, C. (2012). *How digital learning contributes to deeper learning*. http://www.worldwideworkshop.com/pdfs/GettingSmart_DigitalLearningDeeperLearning.pdf. Erişim: 22.03.2022.
- Wijayanti, F. (2020). Digital Story Project: Using technology to foster learners' speaking skill. *Journal of English in Academic and Professional Communication*, 6(2), 19-27.

- Wu, J., & Chen, D. T. V. (2020). A systematic review of educational digital storytelling. *Computers & Education*, 147, 103786. <https://doi.org/10.1016/j.compedu.2019.103786>
- Xu, Y., Park, H., & Baek, Y. (2011). A new approach toward digital storytelling: An activity focused on writing self-efficacy in a virtual learning environment. *Educational Technology and Society*, 14(4), 181-191.
- Yang, Y. C., & Wu, W. I. (2012). Digital storytelling for enhancing student academic achievement, critical thinking and learning motivation: A yearlong experimental study. *Computers and Education*, 59, 339-352.
- Yıldırım, A. & Şimşek, H. (2008). *Sosyal bilimlerde nitel araştırma yöntemleri*. Seçkin.
- Yuksel-Arslan, P., Yildirim, S., & Robin, B. R. (2016). A phenomenological study: teachers' experiences of using digital storytelling in early childhood education. *Educational Studies*, 42(5), 427-445. <https://doi.org/10.1080/03055698.2016.1195717>

Appendix-1

Sample images from digital stories of Primary School and English teachers who attended the training.

