CHAPTER 2 LITERATURE REVIEW

2.1 Technology in Language Learning

The history of technology development in language learning starts with the appearance of Computer-Assisted Language Learning (CALL) in the late 1950s (Warchauer, 1996). Since that time, the development of the computer has been quite rapid. Evidently, in the 1980s, there was a revolution on the existence of integrative CALL and the internet which developed the presence of multimedia such as text, graphics, sound animation, and video (Warchauer, 1996). Therefore, those appearances become the way of the computer could be used for language learning (Warchauer, 1996). This is in line with Becker (2000, p. 5) who stated that the computer is an important instructional tool in language learning in which teachers have useful access, are adequately prepared, and have some freedom in curriculum. Therefore, the computer technology can be used by the teacher in assisting them to get the appropriate media in supporting their teaching method and facilitating students in learning.

Nowadays, technology is being popular in language learning. It has been used by the teacher and students in and out of the classroom. They believe that technology can help them in the process of teaching and learning a language. According to Ahmadi (2018, p. 117), technology is an effective tool in language learning. It can support a curriculum that can facilitate students in increasing their language skills. Further, Benner et al. (2000) argued that the use of technology in language learning can lead to improvement for both teachers and students in the learning process. Teacher can improve their creativity in selecting useful technology and the way of delivering materials by using it. Hence, this change method can lead the students' engagement to the material which can help them in improving their language skills easier.

Ahmadi (2018) said that "the application of technology has considerably changed English teaching methods" (p. 118). It provides lots of alternatives to make teaching and learning interesting in order to get the learning improvement

(Patel, 2013, p. 116). The implementation of technology offers the usage of multimedia such as images, text, audio, videos, which can enhance learners' linguistic knowledge (Ahmadi, 2018, p. 118). The use of multimedia allows finding, collecting, and selecting the information from different sources. Those activities will facilitate students to improve their skills in analyzing and interpreting the language and context (Arifah, 2014). Besides, Ahmadi (2018, p. 118) pointed out that the use of multimedia such as videos can help students to understand the topic with enthusiasm and develop their knowledge. When students learn a language with technology, it helps them in developing their higher-order thinking skills (Ahmadi, 2018, p. 118). Therefore, the use of technology in language learning is very important to invite students' attention in order to students' language learning advancement.

2.1.1 The Role of Technology as Media in Language Learning

Technology can be used by the teacher as a teaching media in the classroom in order to deliver the material to the students. Lomicka & Lord (2019) believed that technology can be used as a tool or media that can potentially support, enhance, and assist language learning. As media, generally, media has two roles, there are as instructional aids and instructional system (Romiszowski (2008). At first, media is used as instructional aids, it means media is used completely to enrich teachers' presentations. The use of media can help teachers to deliver the materials which can help students to catch the messages or the contents of the materials easily. Secondly, media is used as instructional systems, it means media is used to support the instruction in both conventional and non-conventional settings.

Moreover, (Widayanto, 2015, pp. 7–8) pointed out the role of media in two main functions. First, media as a learning tool. As a learning tool media has a role to reach the learning goals. It is based on the belief that the learning process with the help of media can improve the quality of students' learning activities. Therefore, students' learning activities with the use of media are better than without the use of the

media. Second, media as a source of learning, it can help students in enriching their knowledge which can help them in understanding the material. Therefore, it is clear that media plays an important role in supporting students in learning a language. However, teachers should choose an appropriate technology that will be used as a media in the process of teaching and learning a language. This way will help the teacher in improving learning activities to gain the learning goals.

In addition, applying technological media offers advantages for the students. According to Mishra et al. (2015), the use of technology as media in the classroom can help the students to internalize information and knowledge of the external world to develop their own experiences. By using technological media, students can get real experiences that can construct their thoughts. It is in line with Drayton, Falk, Stroud, Hobbs, and Hammerman (2010) as cited in (Ahmadi, 2018, p. 118) who stated that using technology can result true learning experiences for the students. Moreover, the use of technological media in the classroom enables teachers to deliver the materials in various ways. It aims to gain the students' attention, so they can meet the learning outcomes. Nonetheless, teachers should fit the technological media with the classroom settings to make the classroom more effective.

2.1.2 The Way to Deliver Materials through Media Technology

In delivering materials through media technology, Widayanto (2015, p. 11) divided into four phases, there are:

1) Identifying students' need

Teachers should identify what the students' need to make the integration of materials and media technology use appropriately. However, the materials must be suitable with the curriculum in order to achieve the learning goals that have been explained in the curriculum.

2) Determining instructional objective

The teachers should determine the objective that will be achieved by the students. Hence, it affects the media technology that would be used by the teacher in the teaching and learning process.

3) Determining the material

The teachers should determine the part of the materials that would be included in the media technology. In this phase, the teachers may arrange the materials that would be delivered from the beginning to the end of the teaching and learning process.

4) Starting to compose the material on media technology

In this phase, the teachers put the materials that have been decided on the media technology. The media that would be used should be appropriate with the materials, hence it can support each other in order to make the students understand the materials easily.

2.1.3 Creativity in Language Learning with Media Technology

Media technology that can be used for language learning are various, it consists of the hardware and software of technology including audio, video, images, interactive media, etc. All of those can support students' language learning when the students can use it effectively. Thus, students need creativity to choose the use of those media technology. Creativity is needed for creating the media technology including the content of the language learning that would be presented on the media. In this turn, creativity can be defined as a skill to manage and modify something in a new way. Turner (2014, p.7) defined creativity as a skill that resulted from bringing together the pieces of old knowledge in new ways. Moreover, in the process of language learning, students may choose the kinds of media technology that will be used, then creating it by themselves as creatively as possible, they may use the existed media technology to be modified in a new way that is customized with the learning goals. Turner (2014, p.22) said creativity produces a new way which is different significantly. It can give the students opportunities to

express themselves in creating the media technology for their language learning. It is in line with Chao (2013, p. 512) who said that creativity is one of the important kinds of the learning experience by using digital media which allows the students to express themselves in learning a language. Hence, creativity and the use of media technology are the things that cannot be separated. Creativity may help students to get the interesting media technology that would facilitate in learning language in order to improve their language skills.

On the other hand, the use of media technology in language learning could foster students' creativity. Ahmadi (2018, p. 122) argued that the use of technology can facilitate students to develop their creativity and provide them with interesting, enjoyable, and exciting way to learn the language. Petersen et al., (2013) claimed that media technology can stimulate creativity among the students. It occurred because of the use of media technology gives students opportunity to explore the ideas from any sources. Thus, they will have imagination thoughts or ideas about something which can be connected with their past experiences to create new learning possibilities. Besides, Chao (2013, p. 512) argued that the use of media technology can motivate students to investigate, find answers, and to learn. As a result, creativity in learning with media technology can make the students have a good motivation to learn and feel interesting in learning a language. By having good motivation, it can drive students to survive in doing assignments as part of learning process. As Harmer (2001, p. 51) said that motivation is a kind of internal driving force which drives someone to do somethings in order to achieve something. Therefore, students should be creative in the learning process in order to mastering in language skills. Finally, without creativity, it would be difficult for students to choose and create media technology that can support them in learning a language.

2.2 Digital Storytelling

2.2.1 Definition of Digital Storytelling

Nowadays, students do not avoid the fact that technology is growing rapidly and affects the learning process. Based on that, the students not only learn any skills such as reading, writing, listening, and speaking, but also the skills which are needed in multimedia development related to the use of technology. However, the language skills (reading, writing, listening, and speaking) and the multimedia skills can be combined into the learning media which is being implemented in the classroom, it is digital storytelling (Robin, 2016).

In a simple word, digital storytelling is storytelling that has digitized. It is a combination between the traditional storytelling that the students generally have done in the classroom and the storytelling in the form of digital which is related to the use of technology. Robin (2016) defines digital storytelling as the combination of storytelling with multimedia components, such as pictures, audio, videos, etc. The multimedia components are used in order to present the story in an interesting way.

Another definition is explained by Norman (2011) who has the same ideas with Robin (2016). Norman (2011) defined digital storytelling as "the combination between spoken narrative, a number of the visual, soundtrack, and new technology to share a story" (p. 1). In making digital storytelling, students can combine a variety of digital media such as text, picture, audio, music, video, etc. The use of digital media can make digital storytelling different from the traditional story.

Based on the explanation of the experts above, it can be concluded that digital storytelling has the same principle as traditional storytelling, it is telling a story. However, digital storytelling is a new way of telling stories in forms of digital by using multimedia aid. It can be more interesting for the students because of the multimedia components. Besides, digital storytelling is also believed as a learning media that can

develop students' ideas, especially while the students make digital storytelling and watch it.

2.2.2 Elements of Digital Storytelling

In fact, digital storytelling is not a new idea. It has been existed in the late of 1990s by Joe Lambert as a co-founder of the Centre for Digital Storytelling (CDS) in Berkeley, California (Lambert, 2010). CDS is a non-profit community arts organization which was conducted training for people who are interesting in personal narratives. It also known as the author of the seven elements of digital storytelling which becomes the useful points in creating a digital story (Robin, 2006; Lambert 2010). The seven elements of digital storytelling that was proposed by the Centre for Digital Storytelling as cited in Robin (2006) are:

- 1) Point of view. It shows the main point of the story and the perspective of the author about the story.
- 2) A dramatic question. It is the key questions that take the audience's attention and it will be answered at the end of the story.
- 3) Emotional content. It shows the serious issues which delivered in a personal and powerful way and connect the story to the audience.
- 4) The give of your voice. It is a way to personalize the story to make the audience understand the context of the story.
- 5) The power of the soundtrack. It consists of the music and other songs that support the storyline.
- 6) Economy. It means the story is using just enough content without overloading the audience with too much information.
- 7) Pacing. It relates to the rhythm of the story and how slowly and quickly the story progresses.

Those seven elements of digital storytelling may become a reference, particularly for the students and teachers in creating digital storytelling.

2.2.3 Types of Digital Storytelling

According to Robin (2008) there are three major categories of digital storytelling as follows:

1) Personal narratives

Conceivably it is the most popular type of digital story. A personal narrative is a story in which the authors tell their personal stories or experiences. Lambert (2010) said that personal narratives have several subcategories related to the authors' life, including the story that honor the memory of particular people and places, deal with life's adventures, achievements, challenges, etc.

2) Stories that inform and construct

This type of digital story is generally used to convey the instructional material in many different content areas. In the educational field, teachers can use this type of digital story to present the lessons and information to their students.

3) Stories that examine historical events

This type of digital story consists of the story that was happened in the past. The historical story should be delivered chronologically, from the beginning until the end, which has been customized by the time.

2.2.4 The Steps of Making Digital Storytelling

In creating good digital storytelling there are several steps that students have to do. It is starting from choosing the topic until publishing or uploading it to the public. According to Robin (2016) there are several steps in making digital storytelling as follows:

1) Choosing a topic

It is a starting step when the students should begin to think about the purpose of the story. In deciding a topic, the students can ask some questions, such as: Is it for convincing, provoking, questioning, etc.? Who is the audience? These questions can help the students in choosing a topic that can be interesting.

2) Conducting research on the topic

In this step, the students can find the related topic in order to get more information and develop their ideas.

3) Writing the first draft or script

In writing a script, the students should consider the content of the story, regarding the short duration of the digital storytelling, the story should be specific, using personal perspectives to make the story unique, and understandable. Robin (2008) argued that in a script of the story there should consist of three parts, there are beginning, middle, and end. In the beginning, the students should set the scene and the plot. In the middle, the students should provide more details about the topic or the story that would be delivered. It should be building a climax or resolution. In the end, the story problems or the questions in the story are resolved. These parts of the story can make the audiences understand the story easily.

4) Receiving feedback of the script

Share a transcript with others and ask them to give feedback on the script. The feedback might make the story clearer and more useful.

5) Revising the script

Use the feedback to improve the story to be better.

6) Finding, creating, and adding images

This step is starting to use digital media, such as images. The images should relate to the topic. The students can find the images from the internet or using their own images.

7) Respecting copyright

The story should be originally made by the students by themselves. If the students use any citation or take from any sources, it should be written in the story.

8) Creating a storyboard

A storyboard is a written or an overview of all of the elements that would be included in the digital story. It serves as a design to construct the digital story. Storyboards can help the students in visualizing the story before it is created, so it is easier to make changes and add new content.

9) Recording audio narration

In this step, the student can start to record the audio to be inserted into the digital story. Before recording the audio, the students should practice reading the script with the appropriate intonation.

10) Adding background or music (optional)

The students can add music that is appropriate to the narration in order to make the story more interesting.

11) Building the digital storytelling

In this step, the students start to create digital stories by using the technological tool. Students can choose the application freely as long as they can create a creative and good digital story.

12) Publishing the digital story

It is the last step in making digital storytelling, after the digital story has been completed it can be published on the internet, etc.

2.2.5 Digital Storytelling in the Classroom

Digital storytelling has numerous benefits for both teachers and students in the teaching and learning process in the classroom. Teachers and students have the same opportunity to use digital storytelling in the teaching and learning process. Robin (2016) said that digital storytelling can be a tool by the teacher to introduce content, present

new ideas, and capture students' attention in the classroom. It is clear that a teacher can use digital storytelling to present a learning material, for instance, a teacher can teach about Narrative text by showing the digital story of Cinderella. Moreover, teachers who are able to create their own story can be helpful not only in engaging students to the content materials (Burmark, 2004; Ormrod, 2004; Robin, 2016), but in facilitating the discussion about the topics which are presented in the story that can make the students more understand to the content (Robin, 2016). Besides, some researchers argued that the use of multimedia in the teaching process can help students in getting new information as well as comprehending the difficult materials (Boster et al., 2002; Hibbing & Ranking-Erikson, 2003). Therefore, digital storytelling can be a powerful tool in teaching a language in the classroom.

On the other hand, students can create their own stories in digital form. It can be part of students' method of learning a language in an interesting way. After watching the digital story from the teacher, students can start to create their own story by following the elements of digital storytelling proposed by the Center of Digital Storytelling. Robin (2006) said that the "activities in creating digital storytelling can generate interest, attention, and motivation for the digital generation students in today's classroom". Further, students who create digital stories can develop their communication skills by learning to manage their ideas, express opinions, ask questions, and make narratives (Robin, 2006). It can examine students to present their ideas and knowledge in a meaningful way. Additionally, when the students share their digital stories with others, they can gain valuable experience in critiquing their own work and other students' work. Moreover, students are able to create a digital story in groups which provides benefits for students not only in improving communication skills but also enhancing emotional intelligence and social learning (Robin, 2006). Thus, skills

gained from creating digital storytelling will improve students' learning.

2.2.6 The Advantages of Digital Storytelling

Digital storytelling has numerous benefits in the context of teaching and learning, specifically for the students. According to Yuksel et al. (2010), the benefits of digital storytelling are:

- Digital storytelling can make the students more interested and motivated in learning a language since it involves the use of a variety of multimedia.
- 2) Digital storytelling allows students to work collaboratively with other students.
- 3) Digital storytelling allows students to understand the content of the lesson easier.
- 4) Digital storytelling allows students to improve their language skills, including writing, reading, speaking, and listening.
- 5) Digital storytelling allows students to improve their academic performance.

Moreover, it is clear that the use of digital storytelling has many benefits for students especially in improving students' language skills. Thus, the language skills that can be gained by using digital storytelling will be specifically explained below.

1) Reading

This language skill can be improved by the students when they use digital storytelling, particularly when they want to create digital story they will read several stories as references to develop their ideas. As Nassim (2018, p.24) argued that students have read the stories several times to get the story for summarizing it. This case affect to practice the students to comprehend a text, conclude a text, and get main idea from a text, and summary a text in their own word. Further, Nassim (2018) showed that digital storytelling can improve students' reading skill, he said that "the

students have improved their language skills specifically reading and writing. Their reading has improved their vocabulary, sentence structure, and spelling mistakes" (p.24).

2) Writing

To create digital story, students should prepare the story by writing their own story. To develop their ideas, they could find any references from reading others' stories, then starting to write their own ideas. Nassim (2018) showed that digital storytelling can improve students' writing skill, he said that the students "improved in using simple past tense in practice by writing the story board in tense. The students got the skill of paraphrasing stories into short texts" (p.24).

3) Speaking

This skills can be gained when the students tell the stories orally to become a narration in their digital story. This activity will practice them to use correct pronunciation and improve their fluency. Syafryadin et al. (2019, p. 3.147) pointed out that by implementing digital storytelling students are change from passive students into active students and it could help them in improving their speaking skills.

4) Listening

This skill can be improved by the students when they listen the digital story that was shown by the teacher or other students. In the activity, students will watch the digital story and listen it automatically from the beginning until the end of the story. Ciğerci & Gultekin (2017) claimed that students are enjoyed listening activities by using digital storytelling and they can engage with the activities. Further, they stated that "students watching of the digital stories, instead of only listening, is an important factor in helping the development of the listening

skills" (p. 264). Moreover, the use of digital storytelling can help them to comprehend a text or story in form of audio.

Besides, digital storytelling also has benefits in improving 21st century skills since it involves the use of technology. Adapted from Robin (2008), the skills that can be gained by using digital storytelling are:

- 1) Digital literacy. It is the ability to communicate with the expanding community to discuss topics, gather information, and pursue assistance.
- 2) Global literacy. It is the capability to read, interpret, respond, and contextualize messages from a global viewpoint.
- 3) Technology literacy. It is the capacity to use computers and other technology to improve learning.
- 4) Visual literacy. It is the ability to comprehend, produce, and communicate through visual images.
- 5) Information literacy. It is the capability to find, evaluate, and produce information.

2.2.7 The Disadvantages of Digital Storytelling

Digital storytelling not only offers numerous benefits for students but it also provides several disadvantages. Duveskog et al. (2012) stated that digital storytelling is a media that takes a longer process rather than the traditional way. Students should learn new digital tools, for example how to use the application in supporting creating a digital story. Moreover, to get the best quality of the video, students should take a long time in the editing process. Even though most of the students have already capable of using technology such as computers, but some of them still do not have the ability to edit the video.

2.2.8 Challenges in Creating Digital Storytelling

Digital storytelling gives challenges for students and some educators. Teachers who implement digital storytelling in their classroom has challenges related to time issues, technological issues, and curriculum integration (Dogan & Robin, 2014; Banzato, 2016; Moradi & Chen, 2019). As already explained that creating digital storytelling needs a long process which takes a long time including preparing the content, selecting the digital media, until finishing the video. Besides, in technological issues, some schools do not have enough facility in supporting the use of digital storytelling. The lack of the number of computers and the internet may be a challenge. Further, teachers who do not have the capability in using technology also become challenges in creating and implementing digital storytelling in the classroom (Dogan & Robin, 2014; Banzato, 2016; Moradi & Chen, 2019). In curriculum integration, teachers should be capable in appropriating the content of the lesson and the digital media that will be used on the digital story in order to make the students interest and engage in the materials, hence the aim of the lesson can be achieved.

According to Nguyen (2011), in creating a digital story students usually face challenges in working with technology. Hence, the use of technology becomes a concern, it makes the students only focus on the technological skills rather than the language skills in the classroom (Ohler, 2009; Lambert, 2010). This concern is conveyed as Robin (2008) pointed out that the inappropriate digital media that is used in a digital story may lead to bad digital storytelling. The other challenges are regarding to the process of selecting the topic and the digital media that would be used on the digital story (Nguyen, 2011). She stated that students who would create digital story usually negotiate with themselves about the most relevant digital media with the topic of the story. This is in line with Nelson & Hull (2008) who argued that selecting the multimedia from several sources is a challenge for the students in creating digital story. Davidson & Porter (2005) in Nguyen (2011) argued that in creating digital story students should have a reason why they select to put a certain image in the story and how the

messages can be accepted by the audience. Thus, these processes need considerations which takes a long process in a long time.

The other challenges is stated by Robin (2008) regarding to respect for copyright and the intellectual property of others. This challenge can be happened when the sources are coming from the internet. When the students take the sources from the internet, they must enclose the original author of the media that is used. Thus, to avoid plagiarism, the students can take the media by themselves, for example, they use their sound as the narration and take a picture by themselves.

In sum, it can be concluded that the challenges that usually occur in creating digital storytelling are regarding to time issues, technological issues, curriculum issues, negotiations with multimedia used, and respect to copyright (Nelson & Hull, 2008; Robin, 2008; Nguyen, 2011; Dogan & Robin, 2014; Banzato, 2016; Moradi & Chen, 2019).

2.3 Digital Storytelling Course

Digital storytelling course is a course in English Education Department in higher education in Indonesia. This course introduces storytelling with the use of digital media tools and technologies. The course is aimed at preparing the students as a future language teacher to choose digital storytelling as their teaching media and practice the students to have the capability in creating digital storytelling as part of learning a language. At the class, students conceptualize short stories and follow the development process to deliver the story in the digital format by using text, image, video, audio, video, and graphic. The course includes surveys on digital media applications, basic knowledge, and issues related to the use of digital media. This course can also be a powerful tool for students to learn to create their own stories. Additionally, by posting digital stories in the online platform, students have the opportunity to share their own and other students' work, which can promote the improvement of emotional intelligence and social learning. Digital storytelling

class appeals to students with different learning styles and can also promote collaboration when students can work in groups and provide value to enhance the students' experience through personal ownership and achievement.

Digital storytelling course is an elective course that is available in the fifth semester of English Education Department in higher education in Indonesia. This class is designed for 16 meetings with various activities and tasks such as reading the articles, finding some applications for making digital storytelling, individual reflections, and publishing digital story into youtube. Thus, the specific description about the class materials and the class activities in every meeting will be explained in the table below.

Table 2.1 Description of digital storytelling class materials and activities

Meetings	Class Materials	Class Activities
1	Introduction to the class and	Students listened to the
	syllabus	teacher's expalantion about the
		class introduction and syllabus.
2	Introduction to digital storytelling	Students and teacher were
		discussed about digital
		storytelling, as follow:
		a. What is digital storytelling
		b. How to get started
		c. Elements of the storytelling
		process
3	Introduction to digital storytelling	Students and teacher discussed
		about digital storytelling, such
		as the values and principles of
		digital storytelling.
4.	Introduction to digital storytelling	Students and teacher discussed
		about digital storytelling, such

		as Elements of the storytelling
		process.
5	Storytelling tools (ToonDo)	a. Group presentation and
		question-answer session.
		b. Analyze the application
		collaboratively in groups
6	Storytelling tools (GoAnimate)	a. Group presentation and
		question-answer session.
		b. Analyze the application
		collaboratively in groups
7	Creating your digital story	Group work to produce digital
		storytelling using application
		that has been presented in
		previous meetings.
8	Mid-test	
9	Storytelling tool (Zimmertwins)	a. Group presentation and
		question-answer session.
		b. Analyze the application
		collaboratively in groups
10	Storytelling tool (Animoto)	a. Group presentation and
		question-answer session.
		b. Analyze the application
		collaboratively in groups
11	Storytelling tool (Puppet Pals)	a. Group presentation and
		question-answer session.
		b. Analyze the application
		collaboratively in groups
12	Storytelling tool (Toontastic)	a. Group presentation and
		question-answer session.

		b. Analyze the application
		collaboratively in groups
13	Storytelling tool (Photo Story 3)	a. Group presentation and
		question-answer session.
		b. Analyze the application
		collaboratively in groups
14	Creating your digital story	Group work to produce digital
		storytelling using application
		that has been presented in
		previous meetings.
15	Review and reflection	Students wrote reflection
		during digital storytelling class
		individually
16	Final project	Students created digital story
		individually and submitted into
		Youtube.

Based on the description of the class materials and activities in digital storytelling class that stated from the class syllabus, students who enroll in the class are expected to achieve the learning outcomes. The learning outcomes that should be achieved by students after following the class are:

1) Knowledge

- a) Students understand the concept of digital storytelling.
- b) Students can recognize and interpret basic storytelling elements

2) Skill

Students can create digital storytelling.

3) Experience

Students can share their work with their peers and gain valuable experience in critiquing their own and others.

4) Literacy

Students can operate a variety of multimedia/applications/tool, including text, image, video, audio, graphic, interactivity, and web publishing.

In addition, there is also course policies that should be obeyed by the students during the class, there are:

- 1) Work deadline. Students should finish all of the assignments punctually based on the deadline given. Thus, late assignments are unacceptable.
- 2) Academic integrity. Students should act with academic honesty, in other words, students should avoid academic dishonesty including cheating, plagiarism, and using other students' works. Thus, if students are caught in any form of academic dishonesty, students' work will not be graded. Consequently, this may cause students to fail in this class.
- 3) Use of computer and internet. Since this class is conducted in a technology-based manner, students should be familiar with basic computer skills which can help students to complete learning assignments.

Ultimately, to make the students succeed during digital storytelling course, students should follow every class activity as well, give the best effort in doing every assignment, and obey the course policies.

2.4 Study of the Relevant Research

Before the researcher decides to conduct this research, the researcher studied the previous study on the implementation of digital storytelling. The research on students' challenges during digital storytelling class is still rare, therefore the researcher studied the topic which relates to the topic. Furthermore, five related previous studies will be described by the researcher.

First, a study conducted by Dogan & Robin (2014) entitled "Implementation of Digital Storytelling in the Classroom by Teachers Trained in a Digital Storytelling Workshop". This study is conducted at the University of Houston in which a group of teachers learned to use digital storytelling through a series of summer workshops conducted by university faculty and graduate students. This study attempts to investigate the teacher's use of digital

storytelling in their classrooms, the effect on students, and the problems faced when implementing digital storytelling in the classroom. The study showed that the teachers have positive perceptions about the use of digital storytelling in the classroom after the workshops, in practice, more than half of the teachers did not continue to use digital storytelling in the classroom because of the problems relating the time issues and technological issues. Hence, in a period, teachers implement digital storytelling by using the digital story which was created by others. The implementation of digital storytelling has a positive on students' performance, it can increase students' 21st century skills, increase students' motivation and engagement levels in the classroom.

Second, a study conducted by Banzato (2016) entitled "Digital Storytelling and Key Skills: Problems and Opportunities". This study is conducted at the University Ca' Foscari, Venice, Italy, in which a group of preservice secondary school teachers explored the use of digital storytelling through workshops. The study aims to investigate the key skills that the teacher should have in creating digital storytelling and the obstacles in using digital storytelling in school. The study revealed that teachers have a positive value of implementing digital storytelling in the school, however, teachers have challenges in using it in the classroom, for instance, time constraints, access to technology equipment, and curriculum demands.

Third, a study conducted by Moradi & Chen (2019) entitled "Digital Storytelling in Language Education". This study highlighted the significance of the use of modern technology, specifically digital storytelling in education. This study has shown that teachers who implemented digital storytelling in the classroom still found many challenges due to the integration of the use of technology and the school curriculum.

Fourth, a study conducted by Norkutė et al., (2020) entitled "The Effect of Digital Storytelling on Teacher Education: Experiences of Pre-Service Teacher". This study showed that digital storytelling contributes to revealing students' insight into future work, familiarizes students with future profession peculiarities, enhances students' ability to cooperate, teamwork skills, and

facilitates students' ICT skills. However, pre-service teachers face challenges in the process of creating digital storytelling related to technological issues.

Fifth, a study conducted by Yiğit (2020) entitled "Digital Storytelling Experiences of Social Studies Pre-Service Teachers". The study revealed that pre-service social studies teachers have some difficulties with technological issues and time issues in implementing digital storytelling in the classroom.

This present study has some differences and similarities with those previous studies. The similarity is this research tries to gain understanding related to the challenges in implementing digital storytelling in the classroom. While the differences of this research are: this present study tries to disclose the students' challenges in creating digital story during digital storytelling class and the students' way of coping with those challenges.